



DCUSA Change Report

DCP 206 - Removal of Charge 1 from the EDCM

1 PURPOSE

- 1.1 This document is issued in accordance with Clause 11.20 of the Distribution Connection Use of System Agreement (DCUSA) and details DCP 206 'Removal of Charge 1 from the EDCM'.
- 1.2 The voting process for the proposed variation and the timetable of the progression of the Change Proposal (CP) through the DCUSA Change Control Process is set out in this document.
- 1.3 Parties are invited to consider the proposed amendments provided as Attachment 2 and submit votes using the form provided as Attachment 6 to dcusa@electralink.co.uk by **14 April 2015**.

2 BACKGROUND AND SUMMARY OF DCP 206 'REMOVAL OF CHARGE 1 FROM THE EDCM'

- 2.1 DCP 206 has been raised by E.ON following discussions in the Distribution Charging Methodologies Forum (DCMF) Methodologies Issues Group (MIG). DCP 206 seeks to remove Charge 1 from the calculation of import charges under Schedule 17 "EHV charging methodology (FCP model)" and under Schedule 18 "EHV charging methodology (LRIC model)".
- 2.2 The CP form explains that this Change Proposal seeks to address a perceived defect in the Extra high voltage Distribution Charging Methodology (EDCM). The CP form states that the defect is that the Charge 1 elements of the EDCM could impose charges that reflect future hypothetical investments needed to meet the growth in demand of other customers. It is further explained that these Charge 1 elements could require a current EDCM customer to pay for some of the costs to the Distribution Network Operator (DNO) of supplying future EDCM or Common Distribution Charging Methodology (CDCM) customers.
- 2.3 According to the CP form, the application of Charge 1 is not cost reflective, which may lead to unfair charges in cases where the costs underpinning Charge 1 are not needed or used to distribute electricity, now or in the future, to an EDCM demand customer who would be paying Charge 1.

- 2.4 The proposed solution under DCP 206 of removing Charge 1 from the calculation of EDCM import tariffs is, according to the CP form, a targeted, simple and effective way of addressing the perceived defect.
- 2.5 It was noted in the CP form that the omission of Charge 2 from the EDCM for generation (which came into effect on 1 April 2013) has already addressed the corresponding issue for EDCM export tariffs. This change proposal would apply the same principle to EDCM import tariffs.

3 PROPOSED LEGAL DRAFTING

- 3.1 The draft legal text for DCP 206 has been reviewed by the DCUSA legal advisors and is provided as Attachment 2.
- 3.2 The legal drafting will amend clauses within DCUSA Schedules 17 and 18 in order to remove Charge 1 from the EDCM.

4 WORKING GROUP ASSESSMENT OF DCP 206

- 4.1 The DCP 206 Working Group met on seven occasions. The Working Group was comprised of Distribution Network Operators (DNOs), Suppliers, and another interested Party, as well as Ofgem representation. It is noted that all DCUSA Parties were invited to join the Working Group. Meetings are held in open session and the documents of each meeting are available on the DCUSA website – www.dcusa.co.uk.
- 4.2 The Working Group issued one Request for Information (RFI) and one consultation. These documents are included as Attachments 3 and 4 respectively.

5 REQUEST FOR INFORMATION – MAY 2014

- 5.1 The RFI was issued on 2 May 2014 and requested information from DNOs which would enable the Working Group to complete their impact assessment of the potential solutions to address the issues of DCP 206.
- 5.2 The DNOs provided the calculation of the impact of the change on tariffs using the 2014/15 data. Additional information was provided to Ofgem for analysis and the aggregated results were circulated to the Working Group, these results are included within Attachment 5.

5.3 The RFI and responses from the DNOs are included as Attachment 3.

6 WORKING GROUP CONSULTATION – JUNE 2014

6.1 The Working Group carried out a consultation to give parties an opportunity to review and comment on DCP 206.

6.2 There were nine responses received to the consultation from DNOs, Suppliers and other interested parties. The Working Group discussed each response and its comments are summarised alongside the collated Consultation responses in Attachment 4.

6.3 A summary of the responses received, and the Working Group's conclusions are set out below:

Question One - Do you agree with the intent of DCP 206?

6.4 The Working Group noted that the majority of respondents did not agree with the intent and felt that the CP should be included within the DCMF MIG EDCM Review Group.

6.5 A DNO Respondent noted that although they understand that there is a good case for overhauling and simplifying the EDCM, they believe that the removal of a fundamental building block of the methodology should only be considered as part of a wider review of the whole methodology, rather than be considered in isolation under this Change Proposal.

6.6 An interested party explained that they do not agree with the intent of DCP 206 to remove locational charges from EDCM for demand and to keep the use of system credits for generators. It was further explained that this would be an asymmetrical charging arrangement that would encourage economic inefficiency by treating generation and demand differently.

6.7 The Working Group noted that the intent of the change is to introduce this difference. The Working Group discussed the reasons why this should or should not be kept symmetrical. One member of the Working Group felt that this argument was not valid; whilst other members did not agree and felt they should be treated symmetrically.

Question Two - Do you agree with the principles of DCP 206?

- 6.8 The Working Group noted that the majority of respondents did not agree with the principles of DCP 206.
- 6.9 One Supplier Party felt that the CP presents a well-argued case for the removal of Charge 1.
- 6.10 A DNO Party respondent explained that they are supportive; however the Working Group has not considered an alternative approach as part of the change. Under this proposal the costs are simply moved to be allocated by scaling. This respondent felt that this should be further reviewed by the Working Group.
- 6.11 Another DNO Party noted that they do not agree with the principles of DCP 206 and also do not agree that a customer should be “protected” from changes in the network configuration that affect modelled investment needs. They also do not agree that it is prudent to remove signals that are intended to drive demand away from congested areas of the network.
- 6.12 This respondent further explained that it is difficult to agree with the principles of this change as the methodology was always intended to include the forecast of future investments in the networks to address the growth of demand. If this element of the charge is removed there is a need to develop an alternative approach to demonstrate the locational impact on customers connecting to the networks.

Question Three - Do you have any comments on the proposed solution?

- 6.13 One DNO respondent noted that they do not think the proposed solution is effective without considering an alternative; unfortunately this DCP does not propose any alternative to locational charging. They did note paragraph 5.2 refers to a future change proposal that would identify a replacement for FCP and/or LRIC which would be charged in a similar manner. They explained that it would be their preference that any changes to the EDCM were not addressed piecemeal but as part of the wider EDCM review.
- 6.14 The Working Group noted that this DNO would prefer to have this CP included within the wider EDCM review. It was also agreed that it was suggested within the response that piecemeal responses could lead to volatility in the EDCM charges.

- 6.15 An interested party explained that in their view, the consultation does not provide enough information to answer this question.
- 6.16 It was further noted that the main issue is that they do not know whether DCP 206 would drive the fixed adder and asset scaler elements up to levels that exceed what would reasonably cover depreciation and return on capital. If not, then the proposed solution is acceptable and is a clear improvement on the existing EDCM. If the fixed adder or asset scaler elements are driven to unreasonably high levels by DCP 206, then the proposed solution needs to be complemented with a revision to the EDCM demand pot calculation or a change in the approach to demand scaling.
- 6.17 The Working Group noted that the respondent thought that an alternative change may be required, but did not have enough information to determine whether this was necessary.
- 6.18 A DNO Party respondent noted that they believe that this solution, which would remove the unit rate charge, is detrimental to the 'peak time' cost signal component of the methodology.
- 6.19 They further explained that they are not convinced that there is a 'defect' in providing a price signal through the allocation of charges, that are based on reflecting future hypothetical investments to meet the growth (or decline) in demand caused by users.
- 6.20 The Working Group questioned how much of the peak time cost signal would be removed as the peak time signals would still be part of DCP 206. The Working Group does not know the effects of the removal of the unit rates, but it was highlighted that the visibility would be removed.
- 6.21 The Working Group noted that this DNO agrees with the current EDCM methodology, and does not agree with the removal of one element of this in isolation.
- 6.22 A further interested party noted that the charging framework implemented pursuant to Ofgem's May 2011 consultation introduced a three part charge in the EDCM. The cost reflectivity principle in the Licence is effectively delivered by the signal for investment efficiency in Charge 1, and the revelation of the economic drivers of Charge 2 in the chosen allocation methodology. Deleting Charge 1, or even setting it to zero, must therefore be a retrograde step in pursuing the charging principles

enshrined in the Licence. If there are shortcomings in the manner in which the LRIC or FCP methodologies calculate Charge 1, then it is these that should be addressed rather than simply abandoning Charge 1 altogether.

6.23 They further explained that the key merit of the LRIC or FCP charging methodologies is their ability to reflect the future network investment cost from a relatively simple input matrix of load growth and network spare capacity. This enables the future costs of network reinforcement to accumulate gradually rather than presenting network users with a price shock when the need for network reinforcement does materialise.

6.24 The Working Group considers that this response agrees with the current EDCM methodology.

6.25 The Working Group also noted that this respondent would prefer to have this CP included within the wider EDCM review. It was also agreed that it was suggested within the response that piecemeal responses could lead to volatility within EDCM charges.

Question Four - Do you have any comments on the proposed legal drafting?

6.26 The Working Group noted that the majority of respondents did not have any further comments on the proposed legal drafting.

6.27 A DNO respondent did not agree with the proposal taken by the Working Group to leave the numerous references to Charge 1 which exist throughout DCUSA schedules 17 & 18 following this proposal to remove locational charging. They believe that if Charge 1 (or in fact any element of the methodology) is removed, then references throughout should also be removed.

6.28 The Working Group noted the comments within this response.

Question Five - Would you prefer the implementation date to be 1 April 2015 or 1 April 2016?

6.29 The overall majority of the responses preferred an April 2016 implementation date.

Question Six - Are you aware of any wider industry developments that may impact upon or be impacted by this change proposal? If so, please give details.

6.30 A DNO respondent highlighted that there are a number of EDCM related DCUSA change proposals currently being progressed. Further, issues have also been raised at the DCMF & MIG. The outputs from these groups may impact on DCP 206.

- 6.31 A different DNO respondent explained that in their opinion the EDCM review would be the appropriate platform where all aspects of the EDCM could be reviewed concurrently.
- 6.32 They further explained that in their view one of the drawbacks of developing singular changes is that the full impact of all changes cannot be drawn out; they feel that the EDCM review could potentially draw out these differences and look to propose a change that would address the removal of Charge 1 and identify an alternative locational signal.

Question Seven - Has the Working Group correctly identified the benefits and drawbacks of DCP 206? If not, please explain how the analysis should be improved.

- 6.33 A Supplier Party respondent noted that in their view the Working Group have identified the benefits and drawbacks; however they noted that one must be careful that no customers are unduly disadvantaged by the modified charges.
- 6.34 An interested party explained that in their view the list of benefits and drawbacks is good in principle. It was further noted that they agree with the benefits identified in the consultation document.
- 6.35 It was highlighted by this respondent that unfortunately, in their view, there is not enough information to form a view on whether the drawbacks are significant. In particular, without knowing the aggregated input data mentioned at paragraph 7.9, they cannot determine how much is being charged through the asset scaler and fixed adder before and after DCP 206, and they cannot do any scenario analysis of how plausible future changes in costs, volumes or price controls might affect these charges. Therefore, they cannot form a view on whether the rates of return implied by the demand scaling charge would be driven to excessive levels by DCP 206. If they would, then that would be a drawback of the DCP 206 solution, which could warrant delaying implementation and/or developing an alternative solution.
- 6.36 This respondent also explained that the reasons for non-disclosure given at paragraphs 7.9 and 8.15 of the consultation document are inoperative given that as the data in question relate to each DNO area as a whole rather than any customer.
- 6.37 DNOs on the working group would have been happy to share this data if the issues regarding confidentiality had been resolved. However, at this point in time they have

not and they do not feel it appropriate to make it available to one interested party in isolation, if it was to be made public it would have to be published and available to all. The respondent agreed that the information should be published and made available to all.

- 6.38 This respondent does not think that removing a Charge 1-based unit rate is a drawback of the DCP 206 solution, even if a unit rate was to be reintroduced in the future.
- 6.39 A DNO Party respondent explained that they feel the Working Group have explained the benefits and drawbacks of DCP 206.
- 6.40 However, they do not agree that business investment is held back or reduced by the current EDCM charging arrangements as they are aware of businesses making changes to their operating arrangements to avoid the unit charges and where possible export in that period (for which a non-intermittent customer will earn credits for all units exported), which supports the view that the current methodology is working.
- 6.41 They further noted that in paragraph 8.25 of the consultation the suggestion is made that a separate DCP could be raised to re-introduce unit charges if that was felt to be appropriate. However, the respondent believes that this should be considered as part of DCP 206 and not separately. Removing a significant element of the charge without any consideration as to whether it should be replaced by an alternative approach, even if it is agreed that locational charging is not appropriate, would appear to be an incomplete solution.
- 6.42 A separate DNO Party respondent explained that under this CP future reinforcement costs will be recovered through scaling. However, allocating more of these costs to nodes which are close to reinforcement provides a price signal that discourages future demand growth in these areas and allows for lower reinforcement costs to the benefit of all customers. They are concerned that this CP may address an issue for some individual customers, but changes a fundamental principle for the majority of customers without sufficient consideration of alternatives.
- 6.43 The representative from this DNO explained that what was meant by their response was that consideration needs to be given to the locational element, and where growth could take place with less investment on the network.

Question Eight - Do you feel that DCP 206 will better facilitate any of the DCUSA General or Charging Objectives? Please provide supporting comments or evidence that might help the Working Group improve its assessment.

- 6.44 The Working Group noted that the majority of respondents did not believe that DCP 206 would better facilitate the DCUSA General or Charging Objectives.
- 6.45 One DNO Party Respondent noted that in their view DCP 206 better facilitates Charging Objectives 2 & 3 and General Objective 2 in line with the change proposal.
- 6.46 Another DNO Party Respondent explained that in their view this proposal changes the way in which costs are allocated, using scaling to allocate even more costs than the current model. Identifying specific costs to be allocated would better meet the objectives than the proposed solution.
- 6.47 The Working Group noted the comments contained within this response and surmised that this DNO believes that there is too much contained within the scaling elements already, and would like to see this level reduced.
- 6.48 A different DNO Party Respondent explained that they do not feel that DCP 206 better facilitates the DCUSA Objectives.
- 6.49 They further explained that by removing the locational 'super red' charge they believe that the cost reflective nature of the EDCM charges will be reduced, which does not better facilitate any of the general or charging objectives. In addition (as a result of removing the unit charge) they believe that there will be a detrimental impact on General Objectives 1 & 3 should this change be implemented in its current state as the DNO will be less able to encourage Customers to reduce (or at least limit) their consumption at peak times.
- 6.50 The Working Group felt that there was not sufficient evidence provided to explain how General Objectives 1 and 3 would be detrimentally impacted by the implementation of DCP 206 within the response and agreed to seek clarification from the DNO.
- 6.51 The DNO responded with further clarification and noted that: They felt, and continue to feel, that having a 'unit charge' which the customer can clearly see and understand provides them with a clear ability to reduce their charge by either NOT consuming or reducing their consumption within a defined period (when the Super Red rate

applies). If the unit charge was to be removed (in line with DCP 206) from the charge which the customer sees, then we believe this has a detrimental impact upon some of the DCUSA Objectives, as the customer will have a reduced ability to influence the charges which they incur when using the network.

Question Nine - Do you have any further comments on DCP 206?

- 6.52 The majority of respondents had no further comments on DCP 206.
- 6.53 A DNO Party Respondent explained that they believe this change is premature and, as it impacts on a fundamental principle of the EDCM demand charges, should be considered as part of the wider EDCM review. In addition, the structure of charges will be impacted by this change and this should be more widely considered.
- 6.54 The Working Group agreed to seek clarification from this DNO regarding their point of the change not being considered widely enough.
- 6.55 The DNO responded with further clarification about this point and noted that they believe the structure of charges should also be considered as part of the wider EDCM review that is currently underway.
- 6.56 Another DNO Party explained that they believe that any consideration of removing the LRIC/FCP element of charges requires a more comprehensive review of the EDCM, in particular to consider wider cost-allocation issues, such as the impact on generation credits; and the effects on tariff structure, such as the super red unit rate.

7 ASSESSMENT AGAINST THE DCUSA OBJECTIVES

- 7.1 The Working Group has assessed DCP 206 against the DCUSA Objectives. The only DCUSA Objectives which the Working Group considered to be affected were General Objective 2, Charging Objective 2 and Charging Objective 3:

Charging Objective 2¹ and General Objective 2² – The CP form says that these objectives are better facilitated because:

¹ 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)

²The 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

- This change proposal removes distortions to competition in the distribution of electricity by eliminating the incentive for customers to build their own infrastructure to avoid non-cost-based charge 1 which is currently levied for use of some spare capacity on the DNOs' network.
- The change eliminates a non-cost-reflective element of the import charges levied on EDCM generators in respect of station demand. (This change has no impact on generation credits paid to generators in respect of avoided or deferred DNO costs.)
- The change eliminates a particularly opaque and unpredictable element of the distribution charges which is a barrier to competition as it makes the charging methodology unpredictable and reduces transparency.

7.2 The majority of consultation respondents felt that Charging Objective 2 and General Objective 2 are not better facilitated because:

- Customers can choose where to connect based upon published nodal prices and the charge is therefore not anti-competitive. However, some members of the Working Group highlighted that the action of publishing nodal prices does not justify the levy of non-cost-reflective prices. A further counter-argument is that many of the EHV customers are already connected and cannot move location simply because their electricity DUoS charge has changed.
- Charge 1 may be unpredictable, but the locational element of this charge is intrinsic to the methodology and the regulator held the position that a locational element is required in the EDCM. However, it was noted by some Working Group members that the removal of Charge 1 would not remove the locational element of the charge, only the forward looking locational element. The Network Use Factors will continue to provide a locational element based on the existing assets that are serving a customer. Furthermore, any position that the regulator may have held during the development of the methodology may no longer be relevant going forward in relation to the relevant DCUSA Objectives.

7.3 Having considered these arguments and counter-arguments, the Working Group concluded, by a majority of 4 to 3, that Charging Objective 2 and General Objective 2 would not be better facilitated by the implementation of DCP 206.

Charging Objective 3³ – Some Working Group members argued that Objective 3 is better facilitated because:

- The change removes Charge 1, which is an element of the calculation of charges to an EDCM demand customer that does not reflect the costs incurred, or reasonably expected to be incurred, by the DNO in maintaining the supply to that EDCM demand customer. If this Change Proposal is implemented, then the revenue no longer collected through Charge 1 will instead be recovered through scaling within the EDCM model. EDCM scaling is based on capacity, consumption, and assets notionally used to maintain the supply to the customer; compared to Charge 1, EDCM scaling better reflects the costs incurred or reasonably expected to be incurred by the DNO in providing distribution services to EDCM demand customers.
- The justification behind the removal of locational generation charges was that generation is often sized to the capacity of the connection. This meant that any forward looking charging methodology immediately drove reinforcement and led to excessive DUoS charges. The same principle can be applied to the EDCM import charges. Where a large EHV customer is connected to a network that is close to reinforcement they will incur higher DUoS charges. Where no additional customers connect to the same node for a long period of time, the existing customer will continue to contribute towards the future reinforcement even though the DNO is not incurring any additional costs as a result of this customer. Consequently, the DUoS charge could be considered non-cost reflective as a result and it would be more appropriate to collect future reinforcement charges through a scaling element which socialises the charge across all customers.
- If an EHV customer has been paying DUoS with a high locational element and a new customer connects to the same node, the new customer may drive reinforcement. Where this is the case the new customer will fund a large portion of the reinforcement through a customer contribution and this will be in addition to the contributions made by the existing customer through their DUoS charge. Alternatively, if the existing EHV customer increases their import capacity they will drive the reinforcement and pay a customer contribution. At higher network levels it is likely that the customer contribution will pay for all or most of the

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

reinforcement costs. This will be in addition to the reinforcement costs that the customer has already paid for through their use of system charge and consequently the customer could pay for the same reinforcement twice.

7.4 The majority of consultation respondents felt that Charging Objective 3 is not better facilitated because:

- One of the economic principles of the EDCM and CDCM is to provide a forward looking cost signal based on future reinforcement. However, the CP form's argument is that this economic principle was, and is, erroneous. There is nothing in Charging Objective 3 which suggests that a forward looking cost signal based on future reinforcement is appropriate. No economic theory has been put forward to establish benefits of a forward looking cost signal based on future reinforcement. Ordinary economic theories suggest that efficiency prevails when customers pay for the cost of providing services to them, not for the future cost of expanding the network to serve other customers.
- A forward looking cost signal based on future reinforcement provides the appropriate price incentive on customers to adjust their behaviour and minimise DNO investment to the benefit of all customers. However, no reasoning or case study or other material has been presented to the group to establish that the incentive from EDCM charge 1 was "appropriate". Ordinary economic theories suggest that what is appropriate is for customers to pay for the cost of providing services to them, not for the future cost of expanding the network to serve other customers. Furthermore, it has not been established that minimising DNO investment is to the benefit of all customers; some members of the Working Group thought that deterring investment in electricity network was detrimental to customers. One Working Group member observed that whilst forward looking pricing can be implemented successfully in an averaged methodology, such as the CDCM, when it is applied to site specific methodologies it can result in charges that are difficult to justify in some circumstances.
- This change will result in the removal of the unit based charge (the "super-red" rate) for EHV customers. This charge provides a targeted price signal which incentivises customers to reduce demand at system peak. The removal of this charge will reduce the cost reflectivity of the pricing signal and therefore result in less cost reflective prices. However, the price signal of a super-red rate based on charge 1 is not

correctly targeted, because charge 1 does not relate to the costs of accommodating today's power flow to which the super-red charge is applied. Furthermore, many EHV networks are planned on the basis of the maximum demand of individual EHV customer (rather than merely their demand at the time of peak), because the maximum load on the relevant EHV assets might not be at the time of overall system peak; therefore the application of unit rates based on charge 1 to a narrow super-red time band means that, even in cases where charging for demand might be appropriate, the EDCM unit rate is likely to be avoidable by customers using on-site generation during the super-red time band only, which would make the EDCM unit rate ineffective at reducing the need for network reinforcement to ensure resilience outside the super-red time band.

- 7.5 Having considered these arguments and counter-arguments, the Working Group concluded, by a majority of 6 to 1, that Charging Objective 3 would be better facilitated by the implementation of DCP 206.

8 IMPLEMENTATION

- 8.1 This CP is classified as a Part 1 matter in accordance with Clause 9.4.5 of the DCUSA and therefore will require Authority consent.
- 8.2 The proposed implementation date for DCP 206 is 1 April 2018. This date is later than the original date proposed within the CP form. The reason for the later implementation date is to accommodate DCP 178 which provides 15 months' notice of charges from 2016 and to allow any interested party wishing to raise a proposal to introduce unit rates back into the EDCM; this way both CPs could be implemented on the same date.

9 FINAL CONCLUSIONS ON DCP 206

- 9.1 The Working Group's conclusion, reflecting Party opinion as presented in the Consultation responses, is that the proposed drafting meets the intent of DCP 206.

10 ENGAGEMENT WITH THE AUTHORITY

10.1 Ofgem has been engaged in the progression of DCP 206 as an Observer of the Working Group.

11 IMPACT ON GREENHOUSE GAS OMISSIONS

11.1 No material impacts on greenhouse gas emissions from the implementation of this CP have been identified.

12 PANEL RECOMMENDATION

12.1 The DCUSA Panel approved the DCP 206 Change Report at its meeting on 18 March 2015.

12.2 The timetable for the progression of the Change Proposal is set out below:

Activity	Date
Change Report approved by DCUSA Panel	18 March 2015
Change Report Issued for Voting	20 March 2015
Party Voting Closes	14 April 2015
Change Declaration Issued	16 April 2015
Authority Approval	22 May 2015
Implementation	1 April 2018

12.3 Parties are invited to vote using the form provided as Attachment 6.

13 ATTACHMENTS:

- Attachment 1 – DCP 206 Change Proposal
- Attachment 2 - DCP 206 Draft Legal Text
- Attachment 3 – DCP 206 Request for Information
- Attachment 4 – DCP 206 Consultation
- Attachment 5 – Ofgem Aggregated Impact Analysis
- Attachment 6 – DCP 206 Voting Form