



DCUSA Change Report

DCP 228 - Revenue Matching in the CDCM

Executive Summary

DCP 228 seeks to amend the approach to revenue matching (scaling) in the CDCM. This document presents the Change Report for DCP 228 and invites respondents to vote on the proposed change.

1 PURPOSE

- 1.1 This document is issued in accordance with Clause 11.20 of the DCUSA and details DCP 228 'Revenue Matching in the CDCM'.
- 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 legal drafting amendments (Attachment 1) and submit their votes using the voting form (Attachment 2) to dcusa@electralink.co.uk no later than **7 August 2015**.

2 BACKGROUND

- 2.1 DCP 228 has been raised by British Gas. The CP seeks to change the way revenue matching (scaling) is achieved within the CDCM so that the price differentials produced between the pre-scaled yardstick tariff unit rates are maintained in the post-scaled final tariff unit rates that are set to enable recovery of the DNO's allowed revenue. Currently this revenue matching is achieved in a manner which primarily affects only the day/red unit prices which distorts the unit rate differential. This change proposal seeks to replace the current method of revenue matching such that all unit rates face the same absolute p/kWh adjustment (except where any unit rates are subject to a floor price).
- 2.2 The proposed DCP 228 solution is to remove the fixed £/kW/year adder currently applied at the transmission exit level, as detailed in paragraphs 92 to 93 of Schedule 16, and replace this with a fixed p/kWh applied to the calculated pre-scaled unit rates. The current CDCM does not apply scaling to generation tariffs and applies a floor price to demand tariffs of 0.000p/kWh. Under DCP 228 both of these rules will be maintained.
- 2.3 Additional information on the CP is contained within the CP form provided as Attachment 3.

3 DCP 228 WORKING GROUP

- 3.1 The DCUSA Panel established a Working Group to assess DCP 228. The group consists of Distributor, Supplier 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. The topics discussed by the Working Group are detailed below.

Related Change DCP 123

- 3.2 The DCP 228 Working Group noted that DCP 123 'Revenue Matching Methodology Change' also sought to change the method of scaling in the CDCM to one which better maintained the incremental cost signals of the CDCM. This CP was rejected by the Authority on 12 August 2014. The DCP 123 Authority Decision letter and Change Report are provided as Attachment 4.
- 3.3 In rejecting DCP 123 the Authority felt the change failed to demonstrate that scaling has been spread in a more cost reflective way, and that without a detailed comparison of costs determined through the 500MW model and costs allowed for in the price control it wasn't possible for the Authority to be sufficiently satisfied that the change was more cost reflective. The Authority did, however, recommend that the industry develop the proposal further.
- 3.4 It is the view of the proposer of DCP 228 that, in retrospect, DCP 123 failed to adequately explain the purpose of scaling applied to the incremental cost signals. For instance the DCP 123 change proposal form explained scaling as a shortfall or excess which is *"to a large extent unidentified and therefore unallocated allowed income within the CDCM"* and that, *"as such, it has not been identified that these costs relate to peak time band consumption"*. This implies that DCP 123 was attempting to 're-allocate' costs away from peak time and, in this context, more evidence would be required if considering cost allocation. However, DCP 228 is not seeking to allocate overall costs, as this is not appropriate or possible within an incremental model, and so Ofgem's reason for rejecting DCP 123 should not apply to this proposal.
- 3.5 DCP 228 is intended to be clearer in explaining that the shortfall or excess of revenue recovered from pre-scaled yardstick tariffs is a natural consequence of the incremental design of the CDCM. As the accompanying spreadsheet (Attachment 5) demonstrates, the CDCM recovers significantly more in peak charges than DNOs expect to spend on network reinforcement for the foreseeable future. This is because

the CDCM provides incremental cost signals rather than total cost signals. Similarly, there are DNO costs which are not included in the CDCM (such as replacement costs and a portion of indirect costs), however these are not 'unidentified' as the DCP 123 form suggested, but rather they are **intentionally** excluded from the CDCM for the purpose of deriving the desired incremental cost signals. This change proposal is therefore clear in its intent that scaling should not be used to allocate any cost not included within the CDCM, but should rather be applied in a way which maintains the incremental cost signals produced by the pre-scaled tariffs.

- 3.6 DCP 228 also follows on from the final DCP 123 solution in maintaining the fixed adder approach to scaling unit rates. The options for this were discussed in the course of DCP 123, with the alternative being a percentage scalar on unit rates. The DCP 228 Working Group discussed this, and agreed that the fixed adder approach agreed in DCP 123 remains appropriate. This is because of the incremental nature of the CDCM, with the absolute difference between pre-scaled unit rates representing the cost differential of distributing at different times. A fixed adder would maintain this cost signal ~~differential~~ **differential** in the resulting scaled tariff's unit rates, whilst a percentage scalar could potentially distort the differential in the unit rates.
- 3.7 For example, pre-scaled tariffs of 2 p/kWh for consumption in a peak time band compared to 1 p/kWh for consumption in an off-peak time band could either be scaled to 5 p/kWh and 4 p/kWh under a fixed adder approach, or potentially 6 p/kWh and 3 p/kWh under a percentage scalar approach. The first of these maintains the 1 p/kWh absolute differential between pre-scaled tariffs, maintaining the intended signal that it costs the DNO 1 p/kWh more to distribute in the peak band than the off-peak, whilst the second would distort this cost signal by implying that the cost to the DNO of distributing in the peak band is 3 p/kWh higher than in the off-peak band.

Interaction with DCP 179

- 3.8 The DCP 228 Working Group noted that approved Change Proposal DCP 179 'Amending the CDCM tariff structure' will result in Time of Use signals being more widely used within the CDCM. This increases the importance of ensuring that the economic signal of the incremental models are not distorted by scaling, as this could lead to inefficient actions being taken by users.

The CDCM Floor Price

- 3.9 The Working Group noted that industry parties were consulted on whether there should be a floor price during the progression of DCP 123. The DCP 123 Working Group observed that if prices were permitted to be negative then it might imply that putting energy onto the network at that point in time is benefiting the Distributor. The DCP 123 Working Group was concerned that this might not be the appropriate signal to give as the negative price would be the result of the scaling rather than because this was the cost signal produced by the model. Counter to this, it was noted that a floor price of 0.000 p/kWh means that the pre-scaled differential between tariffs would not be maintained which would work against the principle of the proposal.
- 3.10 Amongst respondents to the DCP 123 industry consultation there was a slight majority in favour of not having negative prices. Although at the time Ofgem indicated a preference for there not to be negative prices, they are open to re-evaluating this, in light of any evidence presented by industry. The responses to the DCP 123 consultation are included within the DCP 123 Change Report, which is provided as Attachment 4.
- 3.11 The DCP 228 Working Group has agreed that this area should not be re-opened under DCP 228 and that the decision of the DCP 123 Working Group to retain the floor price of 0.000 p/kWh should stand.
- 3.12 When making this decision the DCP 228 Working Group carried out analysis using data from London Power Network's [CDCM](#) model to check that even with a floor price of 0.000p/kWh, DCP 228 tariffs better maintain the pre-scaled differential than the current baseline approach. This analysis is provided as Attachment 6. Note, the baseline (pre-scaled) charges are taken from the final 2015/16 CDCM model and so have not been updated to reflect the changes to some input values under DCP 161, this explains some of the unexpected small differences to other tariff elements (e.g. fixed charge).

4 UPDATED CDCM MODEL

- 4.1 The Working Group updated the CDCM model to reflect the proposed solution. The updated model is provided as Attachment 7 along with a description of the changes made.
- 4.2 When applying the DCP 228 solution to the CDCM, the Working Group used a baseline model which incorporated both of the following approved DCUSA CPs:
- DCP 179 'Amending the CDCM tariff structure' – this CP was implemented on 1 April 2015
 - DCP 161 'Excess Capacity Charges' - this CP has been approved for implementation on 1 April 2016
- 4.3 The reason for this is that the earliest that DCP 228 could be implemented is 1 April 2016, by which time both DCP 179 and DCP 161 will have been implemented.

5 IMPACT ASSESSMENT

- 5.1 The Working Group noted that the CDCM tariffs for the 2015/16 charging year do not incorporate DCP 161. It would therefore not be appropriate to compare the results of the DCP 228 updated CDCM model with the tariffs for the 2015/16 charging year. The Working Group instead prepared the impact assessment on a 2016/17 tariff basis. The impact assessment includes the following tariffs:
- Baseline 2016/17 tariffs (calculated using a CDCM model that includes DCP 179 and DCP 161)
 - DCP 228 2016/17 tariffs (calculated using a CDCM model that includes DCP 179, DCP 161 and the proposed DCP 228 solution)
- 5.2 This impact assessment is provided as Attachment 8 and shows the impact on revenue, tariffs and an average bill.
- 5.3 The Working Group notes the impact of DCP 228 is broadly similar across all DNO areas with the exception of where the scaling is negative. When negative scaling occurs, it can result in Unit Rate prices of 0.000 p/kWh. This occurs because in areas

with negative scaling the unit rates are scaled downwards. Those rates that are relatively low to begin with are scaled by an amount which is large enough to take them to zero or below. The CDCM model does not permit negative demand tariffs and therefore the rates are capped at a floor price of 0.000 p/kWh.

- 5.4 In the DCP 228 impact assessment UK Power Networks' London Power Networks is the only DNO area that currently has negative scaling. However, the Working Group noted that future CDCM changes (for instance, if asset replacement were to be included within the CDCM) may increase the likelihood of negative scaling occurring. Therefore, if DCP 228 is implemented there may be other DNO areas also affected in the future.

6 DCP 228 CONSULTATION

- 6.1 Following its discussions on the CP, the Working Group developed a consultation document (Attachment 9) to gather information and feedback from market participants.
- 6.2 The DCP 228 consultation was issued on 27 April 2015 and there were nine responses received.
- 6.3 A summary of the responses received, and the Working Group's conclusions are set out below. The full set of responses and the Working Group's comments are provided in Attachment 9.

Question 1 - Do you understand the intent of the CP?

- 6.4 The Working Group noted that all consultation respondents understood the intent of the CP.

Question 2 - Are you supportive of the principles of DCP 228?

- 6.5 The Working Group noted that eight of the nine respondents were supportive of the principles of the CP.
- 6.6 One of these respondents highlighted that, whilst they were supportive, they had concerns that a number of customer groups would experience significant tariff disturbance. The Working Group noted that they were aware of this impact but considered that the proposed solution is still more cost reflective than the current approach.

- 6.7 The only respondent not to support the principles of the CP voiced concerns that the CP will disproportionality impact base-load industrial and commercial consumers. The Working Group discussed the respondents concerns and noted that cost allocation should be applied before scaling and that DCP 228 does not seek to allocate costs but rather better maintain the pre-scaled cost profiles. It was also noted by the group that the spreadsheet prepared by the Proposer of DCP 228 and submitted along-side the CP when it was raised (Attachment 5) shows that the amount of revenue being recovered from peak related charges is significantly greater than the expected peak related reinforcement costs of the network.

Question 3 - Do you agree with the proposal to not allow negative demand tariffs, by setting a floor price of zero p/KWh?

- 6.8 The Working Group noted that responses to this question were mixed. The following table provides a summary of the responses received.

Do you agree with the proposal to not allow negative demand tariffs, by setting a floor price of zero p/KWh?				
Respondent type	Yes	No	Further consideration needed	Total
DNO	5	1		6
Supplier	1	1	1	3
Total	6	2	1	9

- 6.9 Those respondents that agreed with the proposal that there should be a floor price of zero p/KWh raised a number of points in support of this proposal, including:

- A negative unit rate for demand customers is counter intuitive: it implies (a) the customer is providing a benefit to the network and no costs; and (b) if one customer group has benefits from negative tariffs, others may be subsidising these payments.
- The pre-scaled tariffs resulted in a charge not a credit for the affected tariffs. Allowing scaling to change a charge to a credit rate conflicts with the intent of the model (had scaling not been required a credit would never have been calculated for the tariffs affected).
- To allow tariffs to become negative would potentially incentivise consumers to increase consumption rather than move consumption away from peak. This would conflict with the move to a low carbon economy.

- 6.10 Those respondents that disagreed with the proposal not to ~~not~~ allow negative demand tariffs noted the following points:

- Where a floor price of zero is imposed, the absolute differential between unit rates of pre-scaled and scaled tariffs is not maintained; hence the guiding principle of the change is lost. By imposing the floor price of zero to (for example) the green unit

rate only, the amber and red unit rates would be moved closer to the green rate, and hence the price signal generated by the pre-scaled tariffs would be reduced.

- Setting a floor price to tariffs would mean that scaling is being applied selectively.
- The fully delivered costs of supplying energy at off peak times will remain positive inclusive of wholesale energy costs and the wider industry charges.

6.11 One respondent suggested that further consideration should be given to this area. For instance, with the growth in embedded generation might the most cost reflective response to this be to encourage demand at certain times.

6.12 The Working Group observed that while responses to this consultation question are mixed the majority of respondents are comfortable with the decision made during the progression of DCP 123 that the floor price should be maintained. The group noted that there may be merit in keeping this area under review, as at present negative scaling is not a common occurrence.

Question 4 - Do you consider that the proposal better facilitates the DCUSA ~~general~~ objectives?

6.13 The Working Group noted that eight of the nine consultation respondents agreed that the proposal better facilitates the DCUSA objectives. The following table outlines which DCUSA ~~Charging~~ Objectives respondents ~~specifically~~ stated as being better facilitated by the CP:

DCUSA Charging General Objectives	No. Of Respondents that agree it is better facilitated
Objective 1	0
Objective 2	0
Objective 3	86
Objective 4	0
Objective 5	0

6.14 The Working group noted that the majority view of consultation respondents was that the CP better facilitates the DUCSA Objectives. It was noted that the concerns of the one respondent that did not agree that the proposal better facilitates the DCUSA objectives had been discussed during the review of earlier consultation questions.

Question 5 - Do you have any comments on the proposed legal text?

6.15 Eight of the respondents had no comments on the legal text.

6.16 One respondent suggested that in Clause 94 'tariff component' should be replaced by

'unit rate' and 'target revenues' should be changed to 'relevant revenues' for consistency with other Clauses in Schedule 16. [The Working Group](#) noted that there are different ways in which revenues are described (e.g. "target revenue", "allowed revenue" and "relevant revenue"). It was agreed that these descriptions should not be amended in the DCP 228 legal text as they have been in place since 2010 without issue.

Question 6 - Are you supportive of the proposed implementation date of April 2016?

6.17 The Working Group noted that responses to this question were mixed. The following table provides a summary of the responses received.

Are you supportive of the proposed implementation date of April 2016?			
Respondent type	Yes	No	Total
DNO	5	1	6
Supplier		3	3
Total	5	4	9

6.18 The Working Group noted that a majority of respondents supported April 2016. However, it was observed that several other respondents had raised concerns about this date not providing sufficient notice for impacted customers, particularly given the material impact of the Change. The group discussed the responses received and agreed that the proposed implementation date for DCP 228 should be [revised to](#) April 2017 to give customers sufficient notice.

Question 7 - Are there any alternative solutions or matters that should be considered by the Working Group?

6.19 Six respondents did not identify any alternative solutions or matters.

6.20 One respondent explained that they would not mind the application of a scaling factor that shifted all the costs up/down proportionally. However, DCP 228 as it stands shifts the balance around customer groups without any justification. The Working Group noted the respondent's view.

6.21 Another respondent questioned whether the intent of DCP 228 to '*accurately reflect the price differentials produced by the cost-reflective incremental 500MW model.....such that all unit rates face the same absolute p/kWh adjustment*' given that the floor price will prevent tariffs becoming negative in instances where there is negative scaling. The Working Group discussed this comment and noted that the

intent of the CP is being met as the intent expressly states *“except where subject to a floor price”*.

- 6.22 Another respondent suggested that whilst the DCP 228 approach to scaling maintains the absolute differences between the pre scaled prices it means that when scaling is high the original cost signal is lost. The respondent suggested that an even more cost reflective way to apply scaling is to increase the pre scaled tariffs by a percentage of the pre scaled tariffs. The Working Group noted the respondent’s suggestion, but point to the justification given in paragraphs 3.6 and 3.7 of this Change Report, demonstrating that a percentage scalar will distort the pre-scaled cost differential generated by the CDCM. The Group noted the respondent’s suggestion.

7 PROPOSED LEGAL TEXT

- 7.1 The proposed legal drafting of DCP 228 has been considered by the Working Group, and reviewed by Wragge & Co, and is provided as Attachment 1.

- 7.2 This text amends the revenue matching approach as set out in Schedule 16 in line with the DCP 228 proposed solution.

- 7.2.3 Should DCP 228 be approved then it will be included in a pre-release version of Schedule 16 alongside other CPs with a 2017 implementation date. This pre-release legal text will be made available alongside the pre-release April 2017 CDCM model which will be published in November 2015. This approach has been discussed with the DCUSA Panel and legal advisor.

Comment [RT1]: CO to cross check this wording with PW.

8 EVALUATION AGAINST THE DCUSA OBJECTIVES

- 8.1 For a DCUSA Change Proposal to be approved it must be demonstrated that it better meets the DCUSA Objectives. There are five General DCUSA Objectives and five Charging Objectives. The full list of objectives is documented in the CP form provided as Attachment 2.
- 8.2 The Working Group has assessed the CP against the DCUSA objectives and the Working Group members agree that the following DCUSA Objectives are better facilitated by DCP 228.

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

8.3 The Working Group has identified that DCP 228 better ~~facilities~~ facilitates DCUSA Charging Objective Three. The incremental cost signals produced by the pre-scaled tariffs in the CDCM are currently distorted by applying scaling primarily into one time band. By allocating unallocated allowed revenue across each of the unit rates on a fixed adder basis, this change improves cost reflectivity by maintaining the incremental cost differential between unit rates across all tariffs and all time bands. The change also ensures that the unit costs in peak time bands (day or Red unit rates) will better reflect the underlying cost message by virtue of being distorted less than the current method of scaling.

9 IMPLEMENTATION

9.1 The proposed implementation date DCP 228 is 1 April 2017. The Working Group has selected this date to ensure that there is a sufficient notice period for customers. It is noted that the tariffs for April 2017 will be published in December 2015, in line with the publication timescales introduced by DCP 178¹.

9.2 DCP 228 is classified as a Part 1 matter and therefore will go to the Authority for determination after the voting process has completed.

10 WORKING GROUP CONCLUSIONS

10.1 The DCP 228 Working Group has discussed the proposed amendment to DCUSA. The Working Group unanimously agrees that the legal text developed better facilitates the DCUSA Objectives. The Working Group agrees that the CP should be issued for industry voting.

11 ENGAGEMENT WITH THE AUTHORITY

11.1 Ofgem has been fully engaged throughout the development of DCP 228 as a member of the Working Group.

¹ DCP 178 - Notification Period for Change to use of System Charges

12 ENVIRONMENTAL IMPACT

12.1 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 228 were implemented. The Working Group did not identify any material impact on greenhouse gas emissions from the implementation of this Change Proposal.

13 PANEL RECOMMENDATION

13.1 The Panel approved this Change Report on 15 July 2015. The Panel considered that the Working Group had carried out the level of analysis required to enable Parties to understand the impact of the proposed amendment and to vote on DCP 228.

13.2 The timetable for the progression of the Change Proposals is set out below:

Activity	Date
Change Report approved by DCUSA Panel	15 July 2015
Change Report issued for voting	17 July 2015
Voting closes	7 August 2015
Change Declaration	11 August 2015
Authority Decision	16 September 2015
DCP 228 Implemented	1 April 2017

14 NEXT STEPS

14.1 Parties are invited to consider the proposed amendment (Attachment 1) and submit their votes using the Voting form (Attachment 2) to DCUSA@electralink.co.uk by **7 August 2015**.

14.2 If you have any questions about this paper or the DCUSA Change Process please contact the DCUSA by email DCUSA@electralink.co.uk to or telephone 020 7432 2842.

ATTACHMENTS:

- Attachment 1 – DCP 228 Legal Text
- Attachment 2 – Voting Form
- Attachment 3 – DCP 228 CP Form
- Attachment 4 – DCP 123 Authority Decision and Change Report
- Attachment 5 – Example Spreadsheet
- Attachment 6 – Floor Price Analysis
- Attachment 7 – DCP 228 Updated CDCM Model

- Attachment 8 – DCP 228 Impact Assessment
- Attachment 9 – DCP 228 Consultation Documents