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| **DCUSA DCP 266 Consultation** | | At what stage is this document in the process? |
| DCP 266  The calculation and application of IDNO discounts  Date Raised: 9 March 2016  CP Status: Standard Change | | |  | | --- | | **01 – Change Proposal** | | **02 – Consultation** | | **03 – Change Report** | | **04 – Change Declaration** | |
| **Purpose of Change Proposal:** DCP 266 Seeks to change the way in which DNO tariffs to LDNOs are calculated in the CDCM. Instead of calculating an LDNO percentage discount by comparing the avoided total cost (p/kWh) with the total cost (p/kWh) in the CDCM “Price Control Disaggregation Model” (PCDM), the intent of this change proposal is that the avoided total cost (p/kWh) calculated in the PCDM is compared with the average p/kWh figure for each All The Way (ATW) CDCM tariff in order to determine the LDNO % discount factor to be applied to each of the tariff components of the CDCM ATW tariff.This consultation is seeking views including a modification to the intent of the change to include the EDCM, from Parties regarding the proposal. Parties are invited to provide their responses by **DATE 2017.** | | |
|  | The Workgroup recommends that this Change Proposal (CP) should:   * Proceed to consultation  Parties are invited to consider the questions set in section 9 and submit comments using the form attached as Attachment 1 to dcusa@electralink.co.uk by **DATE 2017.** The Working Group will consider the consultation responses and determine the appropriate next steps for the progression of the CP. | |
|  | Impacted Parties: DNOs, IDNOs, Suppliers | |
|  | Impacted Clauses: Schedule 16, para 52. Schedule x, various Clauses[[1]](#footnote-1) | |

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| Contents  1. Summary 3  2 Governance 3  3 Why Change? 4  4 DCP 266 Working Group Assessment 6  5 Relevant Objectives 15  6 Impacts & other considerations 16  7 Implementation 18  8 Legal Text 18  9 Consultation Questions 19    Timetable  The timetable for the progression of the CP is as follows:   |  |  | | --- | --- | | **Change Proposal timetable:** | | | Activity | Date | | Initial Assessment Report Approved by Panel | 09 March 2016 | | Consultation issued to Parties | 14 October 2017 | | Change Report issued to Panel | 10 January 2018 | | Change Report issued for Voting | 19 January 2018 | | Party Voting Ends | 09 February 2018 | | [Change Declaration issued to Authority] | 13 February 2018 | | [Authority Decision] | 20 March 2018 | | **Any questions?** |
| Contact:  **Code Administrator** |
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1. Summary

#### What?

## 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.

## DCP 266 was raised by British Gas and seeks to change the way in which DNO tariffs to LDNOs are calculated in the CDCM. The Price Control Disaggregation Model (PCDM) calculates, on a p/kWh basis, the avoided costs of LDNOs serving end customers when connecting to the host DNO at a particular voltage level. The PCDM then converts these to a percentage of total costs within the PCDM and this percentage is applied to CDCM all-the-way (ATW) tariffs as a discount.

#### Why?

## The intent of this change proposal is to change the way the discount factor is calculated by comparing the total avoided cost (p/kWh) calculated in the PCDM with the average p/kWh figure for each ATW CDCM tariff in order to determine the LDNO % discount factor to be applied to each of the tariff components of the CDCM ATW tariff.

## In order to ensure that the total avoided cost (p/kWh) and the ATW CDCM cost are on an equivalent basis, it will be necessary to calculate the avoided total cost (p/kWh) using the allowed revenue and forecast total kWh included within the CDCM for the relevant charging year.

#### How?

## The CP solution will need to be consulted upon by the Working Group with industry parties.

## The legal text will be developed by the Working Group once the final solution is agreed upon.

1. Governance

#### Justification for Part 1 Or Part 2 Matter

## DCP 266 is classified as a Part 1 matter as it is likely to have a significant impact on competition in the distribution of electricity – see clause 9.4.2 (B).

#### Requested Next Steps

## Following a review of the Consultation responses, the Working Group will determine the next steps for DCP 266.

1. Why Change?

## The CDCM model is an incremental cost model by design. It is intended to provide forward looking cost reflective incremental cost signals to users of the network. LDNO % discounts are calculated in the PCDM and input to the CDCM model to calculate the discounted CDCM tariffs to be applied to LDNOs. The PCDM is a total cost model by design. It is intended to calculate the total avoided cost associated with the provision of the final section of network by LDNOs.

## The fact that the CDCM is an incremental cost model and the PCDM is a total cost model is intentional. Ofgem stated in their October 2009 consultation[[2]](#footnote-2) document on the CDCM that:

## *“2.70 Regarding the high level approach to IDNO charging, the two separate allocation methods are consistent with the view held by Ofgem that end user charges should, as far as is possible, provide end users with incremental cost signals, whilst for IDNO charging the charges should be based on a reasonable allocation of total costs to the elements of the DNOs business that are being undertaken by the IDNO.”*

## The proposer considers that the allocation methods of both models seem appropriate given their respective intentions, but that the way in which the LDNO discounts are calculated in the PCDM and applied within the CDCM could be improved to better reconcile the two approaches.

## It is the view of the proposer that it would seem to be more appropriate to use the p/kWh avoided cost from the PCDM and then convert this absolute p/kWh to a percentage discount based on the ATW CDCM tariffs. Such an approach would help to ensure that the absolute p/kWh discount received by LDNOs remains aligned with the absolute p/kWh total cost avoided calculated in the PCDM and is not distorted by the incremental cost allocation approach applied in the CDCM for ATW tariffs.

## The advantages of the proposed approach would be that the absolute level (p/kWh) of avoided cost discount received by LDNOs would not be affected by the CDCM methodology for ATW tariffs or by changes to it i.e. currently an x% change in a particular ATW CDCM tariff resulting from a methodology change results in a x% change in the absolute discount, or margin, received by the LDNO. Under the proposed approach any change in the CDCM methodology for ATW tariffs would have little, if any, impact on the absolute p/kWh discount received by the LDNO – instead the proposed approach would recalculate the % discount to ensure the p/kWh discount received remained aligned with the avoided p/kWh total cost calculated in PCDM.

## It is noted that some DNOs may not update the PCDM annually. This may be acceptable under the current approach to LDNO discounts, but under the proposed approach DNOs would, at a minimum, need to update their allowed revenues in the PCDM to reflect the current charging year and it would also seem appropriate to update the unit (MWh) data in the PCDM to reflect the current charging year.

## **DCP 266 scope:**

## The proposer clarified that the intent and scope of DCP 266 is limited to the correction of the perceived defect identified above i.e. to change the way in which DNO tariffs to LDNOs are calculated in the CDCM/EDCM. Instead of calculating an LDNO percentage discount by comparing the avoided total cost (p/kWh) with the total cost (p/kWh) in the PCDM, the intent is that the avoided total cost (p/kWh) calculated in the PCDM is compared with the average p/kWh figure for each ATW CDCM tariff to determine the LDNO % discount factor to be applied to each of the tariff components of the CDCM ATW tariff.

## The proposer believes that by doing this the resultant LDNO tariffs will better reflect *“a reasonable allocation of total costs to the elements of the DNOs business that are being undertaken by the IDNO”* as demonstrated by the illustrative example above.

## The proposer believes that by ensuring that the p/kWh discounts received by LDNOs better reflect, and remain aligned with, the absolute level of avoided costs calculated in the PCDM, this change will promote competition in the distribution of electricity. The absolute level of discount (p/kWh) received by LDNOs is also likely to be more stable and predictable since it will be protected from the impact of any changes to the methodology for ATW CDCM tariffs – which will also promote competition in the distribution of electricity.

**In Scope of DCP 266:**

## It is the view of the proposer that in order to correct the perceived defect identified above it is important that the total avoided cost (p/kWh) and the ATW CDCM cost (p/kWh) are on equivalent terms. Therefore, it is necessary to calculate the total avoided cost (p/kWh) using the allowed revenue and forecast total kWh included within the CDCM for the relevant charging year i.e. in the illustrative example above where it is assumed that the avoided costs are 0.5p/kWh, the ‘0.5p’ should be expressed in the same money of the day as the CDCM for the relevant charging year and the and ‘kWh’ should reflect the forecast of units distributed for the relevant charging year.

**Out of Scope of DCP 266:**

## The PCDM uses a range of historic data in order to determine the percentages which allocate price control revenues to network levels. At a high level, the approach is as follows:

## Using DPCR4 price control data, allowed revenue for 2005/06 – 2009/10 is split between (1) operating expenditure (for 2007/08), (2) depreciation and (3) return on regulatory asset value

## Each of these components of revenue is allocated across network levels using a number of cost drivers determined using data sources ranging from 2005/06 – 2014/15

## The allocations are aggregated by network level to obtain a percentage per network level of total price control allowed revenue.

## The proposer argues that the use of such historical data to determine the percentages which are used to allocate price control revenues to network levels is due a review. However, such a review is outside of the scope of DCP 266 and, as highlighted earlier, is being considered as part of a wider review of the CDCM taking place outside of this CP.

## The logical defect which DCP 266 seeks to correct is entirely unrelated to the PCDM method of calculating the percentages used to allocate price control revenues to network levels. The defect does not affect these calculations and manifests after the percentages have been determined. Therefore, any review of the method of calculating these percentages would need to be the subject of a separate and unrelated change proposal.

## It is the proposer’s view that DCP 266 assumes the method of allocating price control revenue to network levels remains as appropriate as it is currently accepted to be. However, it should be noted that once the DCP 266 methodology is in place it will provide the benefit of ensuring that any future change to the allocation of price control revenue to network levels is properly reflected in the CDCM discounts received by LDNOs. By contrast, under the current methodology, any change in the PDCM allocation of price control revenue to network levels will not be properly reflected in the CDCM discounts received by LDNOs unless the same change in allocation to network levels is also made in the CDCM incremental cost methodology.

1. DCP 266 Working Group Assessment

## The DCUSA Panel established a Working Group to assess DCP 266. The group is comprised of Distributor, Supplier and Ofgem representatives. It is noted that all DCUSA Parties were invited to attend. Meetings were held in open session and the minutes and papers of each meeting are available on the DCUSA website - [www.dcusa.co.uk](http://www.dcusa.co.uk/)

## The Working Group noted that the intent of the CP appeared to limit the solution to the PCDM (the price control disaggregation model applicable to the CDCM model) and did not include any reference to the EDCM “Price Control Disaggregation” model (extended Method M), which is applicable to the EDCM model. The Working Group considered that it was logical that any solution implemented as part of DCP 266 should also apply to the extended Method M. The proposer acknowledged that the omission of any reference to the extended Method M was not intentional and that applying the solution to that model was fully in line with the spirit of the original intent of the CP.

## The Working Group unanimously agreed that the intent of the CP should be refined to include changes to the EDCM “Price Control Disaggregation” model (extended Method M). The Working Group therefore sought permission from the DCUSA Panel to refine the intent of the change proposal to include the extended Method M and the DCUSA Panel approved this request on 29th April 2016. It is noted that the Proposer agreed to the modification to the intent of the change.

## Throughout this document the terms “Price Control Disaggregation Model”, “PDCM” and “Method M” may be used interchangeably. Also, references to these terms can also be assumed to apply equally to the “EDCM Price Control Disaggregation Model” or “Extended Method M”. However it should be noted that [DCP 234 ‘Merging the PCDM and extended PCDM'](https://www.dcusa.co.uk/Lists/Change%20Proposal%20Register/DispForm.aspx?ID=259&Source=https%3A%2F%2Fwww%2Edcusa%2Eco%2Euk%2FSitePages%2FActivities%2FChange%2DProposal%2DRegister%5FUSL2%2Easpx%23InplviewHasheedde852%2D0231%2D4b85%2D87ff%2D0f14d79826f5%3DPaged%253DTRUE%2DPagedPrev%253DTRUE%2Dp%5FDCP%253D181%2Dp%5FID%253D146%2DPageFirstRow%253D21&ContentTypeId=0x0100684A1DE09E1F9740A444434CF581D435) has now been approved and so from 1 April 2018 there will only be one model to consider.

## In the CP form the Proposer noted that in order to ensure that the avoided total cost (p/kWh) and the ATW CDCM cost are on an equivalent basis, it is likely to be necessary to calculate the avoided total cost (p/kWh) using the allowed revenue and forecast total kWh included within the CDCM for the relevant charging year. The Working Group considered whether the scope of the CP should include other various cost input values to the PCDM (over and above that of updated allowed revenue). It was noted that it is not the intent of the CP to have a review of all data sources in PCDM, rather the intent is to correct how the LDNO discount is calculated and applied. It was highlighted that a wider review of the CDCM was taking place outside of this CP which is looking at whether the PCDM should be incorporated into the CDCM, and how the data sources should be updated. It was agreed that widening the scope of the CP would be difficult considering the CP does not propose to update the data sources in the PCDM.

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| **QUESTION 1: Do you understand the intent of DCP 266?** |

**Overview of proposed change**

## The Proposer set out that at a high level, the calculation of LDNO discounts follows the following steps:

* 1. Price control allowed revenue is broken down between operating expenditure, depreciation and return on regulatory asset value.
  2. Each of these components of price control allowed revenue is then allocated to network levels using specified drivers.
  3. Determination of a percentage allocation of total revenue per unit to network levels.
  4. Determination of the proportion of the LV mains deemed to be used by LV- connected embedded networks.
  5. Determination of the proportion of the HV network deemed to be provided by HV-connected embedded networks.
  6. Calculation of the discount percentage for each combination of boundary network level and end user network level.

## The Proposer noted that DCP 266 is limited in scope to the final step (f) above. It seeks to change the perceived defect in the way the outputs of the prior steps are used to calculate the discount percentages that are applied to All-the-way tariffs in order to determine the LDNO tariffs.

## The current methodology uses allowed revenue from 2007/08 in the final step (f) above. The working group questioned whether it was appropriate, as proposed by the DCP 266 solution, to use updated allowed revenue (in nominal terms) for the upcoming charging year in the final step above whilst not updating the other data in the PCDM which is expressed in 2007/08 prices.

## The proposer’s view was that whilst the PCDM currently expresses all monetary values in 2007/08 prices, the inputs should not be locked into using 2007/08 data. The PCDM already uses data from a range of years for the purposes of determining an appropriate percentage allocation of total revenue per unit to network levels (i.e. step c above). Therefore, since the derivation of these percentage allocations to network levels is not limited to the use of 2007/08 data, they can be deemed to represent an appropriate split of allowed revenue to network levels which can be applied to allowed revenue, expressed in nominal terms, for any year.

The table below shows the data sources for the derivation for LDNO discounts:

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| **Step** | **Data and years used** | |
| 1. Breakdown of price control allowed revenue between operating expenditure, depreciation and return on regulatory asset value. | Allowed Revenue data: **2005/06 – 2009/10** | |
| 1. Allocation of each of these components of price control allowed revenue to network levels. | Operating Expenditure | Operating expenditure from **2007/08** if network level data available, otherwise MEAV by network level using **2009/10** volumesand **DPCR5** unit costs |
| Depreciation | Net Capital expenditure by network level: **2005/06 – 2014/15** |
| Return on Regulatory Asset Value | Net Capital expenditure by network level: **2005/06 – 2014/15** |
| 1. Determination of a percentage allocation of total revenue per unit to network levels. | Combines the above analysis, **2005/06 – 2014/15**  **(note: DCP266 does not propose to change these percentage allocations)** | |
| 1. Determination of the proportion of the LV mains deemed to be used by LV- connected embedded networks. | Performed by the Nominated Calculation Agent based on **latest available data** | |
| 1. Determination of the proportion of the HV network deemed to be provided by HV-connected embedded networks. | Performed by the Nominated Calculation Agent based on **latest available data** | |
| 1. Calculation of the discount percentage for each combination of boundary network level and end user network level. | Currently uses **2007/08** allowed revenue  **(note: DCP266 proposes to use allowed revenue for the upcoming charging year expressed in nominal terms)** | |

## The Working Group welcomes views from Parties on whether the proposed solution is better than the current approach and if using revenue from the relevant charging year is better than then hat of the current 2007/08 charging year.

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| **QUESTION 2: Do you agree with the approach to use current charging year data in place of 2007/08 data?** |

**Proposer’s views**

## As noted in paragraph 3.5, the CDCM and PCDM intentionally use fundamentally different charging approaches.

**CDCM: Incremental cost model**

• Provides forward looking cost reflective incremental cost signals to end users of the network

• Does not reflect total costs

**PCDM: Total cost model**

• Calculates the avoided total cost associated with the provision of the final section of network by LDNOs.

• Does reflect total costs

## The view of the proposer is that the DCP 266 seeks to address a perceived defect in the logic of the current approach to calculating and applying LDNO discounts which results in LDNO charges which do not reflect *“a reasonable allocation of total costs to the elements of the DNOs business that are being undertaken by the IDNO”.*

## **Simple illustration**

## Consider the following example for a particular end user:

Incremental cost signal (tariff) calculated in the CDCM: 1.5p/kWh

Total cost calculated in the PCDM: 2.5p/kWh

Avoided cost calculated in the PCDM: 0.5p/kWh

## In this example, and referring back to the Ofgem quote in paragraph 3.7 above:

“*end user charges should, as far as is possible, provide end users with incremental cost signals*”

* the end user tariff should be 1.5p/kWh

“*for IDNO charging the charges should be based on a reasonable allocation of total costs to the elements of the DNOs business that are being undertaken by the IDNO*”

* the LDNO discount should be 0.5p/kWh *(“a reasonable allocation of total costs to the elements of the DNOs business that are being undertaken by the IDNO”*).

## Therefore, the LDNO tariff should be 1p/kWh (1.5p/kWh – 0.5p/kWh). However due to the perceived defect in the current methodology this outcome does not materialise.

**Current approach:**

LDNO tariff = ATW tariff x (1 - LDNO discount (%))

Where: LDNO discount (%) = PCDM avoided cost (p/kWh) / **PCDM total cost (p/kWh)**

e.g LDNO discount = 0.5p/kWh / 2.5 p/kWh = 20%

LDNO tariff = 1.5p/kWh x (1- 20%) = 1.2p/kWh

## In this simple illustration, the costs avoided by the LDNO are 0.5p/kWh, but the margin received by the LDNO is only 0.3p/kWh (1.5p/kWh – 1.2p/kWh). Obviously, different assumptions could be used to produce an outcome where the LDNO margin is higher than the calculated avoided cost – the important point is to illustrate that they will be different.

## The proposer believes that the reason that the expected outcome does not materialise is because of a flawed mathematical logic being used to calculate LDNO tariffs. A discount % using total costs in the PCDM applied to an incremental cost tariff calculated in the CDCM will not produce LDNO tariffs which reflect *“a reasonable allocation of total costs to the elements of the DNOs business that are being undertaken by the IDNO”* unless, by pure chance, the total cost and incremental cost are identical.

## DCP 266 seeks to correct this perceived defect to better reconcile the total cost approach in the PCDM with the incremental cost approach in the CDCM.

**Proposed approach:**

LDNO tariff = ATW tariff x (1 - LDNO discount (%))

Where LDNO discount (%) = PCDM avoided cost (p/kWh) / **ATW tariff (p/kWh)**

e.g LDNO discount = 0.5p/kWh / 1.5 p/kWh = 33%

LDNO tariff = 1.5p/kWh x (1- 33%) = 1p/kWh

## In this simple illustration, the costs avoided by the LDNO are 0.5p/kWh and the margin received by the LDNO is also 0.5p/kWh (1.5p/kWh – 1p/kWh).

## **Working Group Views**

## Some Working Group members are not convinced that a logical defect exists. It is noted that paragraph 2.70 of the Ofgem CDCM Consultation[[3]](#footnote-3) issued in 2009 might be interpreted as supporting the existing methodology. The quote:

## was in the context of a consultation document which included full tariffs Impact Assessments of the existing methodology, which was approved by the Authority

## states the methodology should be based on a reasonable allocation of total costs. Some Working Group members suggest the percentage allocation within the existing methodology achieves this.

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| **QUESTION 3: Do you agree that there is a defect in the logic as set out by DCP 266? If so:**   * **Do you believe the DCP 266 solution correctly addresses this defect? Please provide your rationale** * **Are there any alternative solutions for addressing the perceived defect?** |

## This change introduces a CDCM ATW p/kwh into the calculations in order to derive the LDNO discount. This results in a potential iteration/loop issue with the CDCM and PCDM. An initial set of modelling, designed to resolve the iteration/loop issue, was produced at the request of the Working Group. The Working Group were provided with a 4th model, labelled Method G (In addition to the CDCM, EDCM and PCDM) for the purpose of setting charges.

## The Working Group agreed that adding another model to the existing suite of models was undesirable and introduced the possibility for duplication/error within population and the production of charges. The Working Group liaised with the modelling consultant to understand if there were any alternative modelling options available. The modelling consultant provided a prototype model which included an amended PCDM, (Method GM), which replicates the CDCM inputs to carry out the calculation.

## Prior to requesting the complete modelling Working Group requested confirmation that the modelling consultant was able to update PCDM Table 1315 (Analysis of allowed revenue (£/year)) to be automatically calculated based on the inputs to CDCM Table 1001 (CDCM Target Revenue) if the working group confirm which of the Table 1001 items should be classified as incentives that are to be excluded from the ‘revenue to share’. The modelling consultant confirmed that they would be able to accommodate this request and to do so would need the “Net incentive revenue” for table 1315.

## One Working Group member pointed out that for Table 1001, the 2017/18 format is different to that of 2018/19. As such, the group was asked to consider aligning the methodology for what is classed as an incentive. The Working Group reviewed Table 1001 and formed a view as to which input items they believed should be treated as revenue, innovation or incentives. It was agreed that anything that is clearly labelled as an “incentive/penalty” in the “incentives” pot that is to be excluded from the ‘revenue to share’.

## For the purpose of this, the Working Group agreed the items highlighted in yellow below are deemed as incentives/penalties:



The complete version of this table is contained within Schedule 15 of DCUSA and may be subject to change in the future.

## The Working Group agreed that it would be beneficial to obtain views from industry as to their views on what is classed as an incentive in Table 1001 via a consultation question.

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| **QUESTION 4: Do you believe that the Working Group has correctly identified the incentives/penalties that are to be excluded from the ‘revenue to share’?** |

## The Working Group agreed to proceed with a request for a full set of modelling based on the outcomes from their discussions. Upon review of the completed impact assessment, the Working Group noted three issues that required further investigation.

## **‘0 volumes’**

## One Working Group member had informed the Secretariat that he had noticed some inconsistencies in the tariff spreadsheet provided as part of the initial impact assessment. The inconsistency was noted across at least two distribution areas between LV Network Domestic and LDNO LV: LV Network Domestic. It was noted that the price does not change between to the two cells and thus there is no discount coming through.

## The Working Group discussed the concern and that it may be due to there being no customers currently on that tariff. It was noted that under the current methodology where there are no volumes or forecast volumes for a specific tariff then that tariff would not be accurate but the discount will come through as a percentage. Changing to a p/kwh figure results in no discount coming through and the group considered if providing a fix for this issue could be in scope of DCP 266.

## This issue was put to the modelling consultant, to which it was noted that the analysis of the Working Group was correct. The modelling consultant noted that the proposed DCP 266 methodology does not allow the calculation of LDNO discounts for tariffs with zero volumes and that it may be possible to change the methodology to address this. Two solutions (outlined below) were put to the Working Group for agreement on the best way forward.

## The method could explicitly allow the user to input notional volumes that are only used to calculate an average ATW p/kWh figure (and not for anything else). However, this is would introduce additional complexity to the model and methodology.

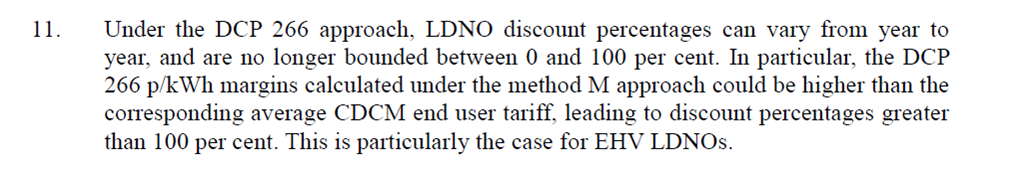
## If it is believed that the issue of zero volumes (for LV Network Domestic) may go away by the time DCP 266 is implemented. A pragmatic approach for now may be to use notional data in table CDCM Table 1053 (Volume forecasts for the charging year) for tariffs with zero volumes (as some DNOs seem to do) for the impact assessment. It was noted that no model change is required if this approach is taken.

## The Working Group agreed to use a pragmatic approach by inserting notional data and providing feedback in consultation on the suggested issue falling away (on the basis that customers will eventually migrate to these tariffs over time) by the time this change is implemented. The Working Group agreed amend the legal text to align to the solution and noted that paragraph 52 of Schedule 16 has been amended to, ‘In doing so, the DNO Party will assume a minimum of one customer will exist in the charging year for each tariff.’

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| **QUESTION 5: Do you agree with the approach that the Working Group has used to resolve the issue of ‘0 volumes’ out of the options noted in the bullet points under paragraph 4.28? If not, then please provide your rational for the other option or set out any other options that you believe should be considered.** |

## **‘discounts in excess of 100 percent’**

## At an early stage, concerns were raised regarding a scenario of an LDNO receiving discount in excess of 100%. The group discussed whether there should be a limiting factor within the model. Convergence between the models when iterated could also raise an issue in the case of negative scaling and the impact this will have on tariffs. This Issue was highlighted by the DCUSA modelling consultant in their commentary from the first impact assessment that was carried out.

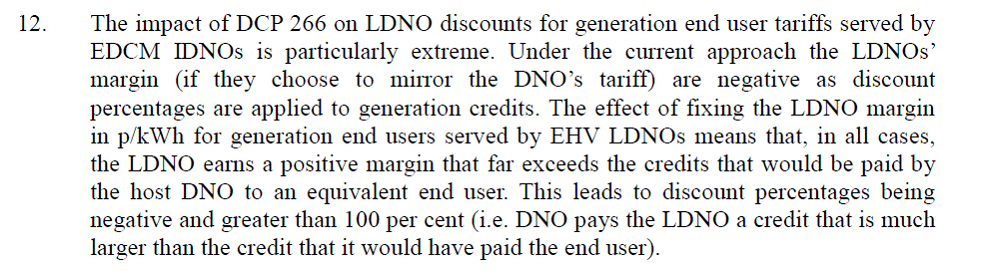


## The Working Group proposed a fix for this issue which was to cap all discounts at a maximum value of 100%. The modelling consultant was asked to confirm if the proposed solution could be produced to which it was confirmed that it could. The Working Group agreed to amend the legal text to align to the solution to cap all discounts to 100% and requested the modelling consultant

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| **QUESTION 6: Do you agree that all discounts should be capped to a maximum of 100 percent? Please provide your rationale.** |

**‘LDNO EHV generation discounts’**

## An issue was raised in the commentary provided by the modelling consultant from the first impact assessment around disproportionate discounts for generation served by EHV LDNOs.



## The Working Groups response to this issue was to confirm that they are not looking to change the principle being applied for LDNO discounts with respect to generation end user tariffs i.e. where the current methodology (whether CDCM or EDCM) reduces the credit by a % for LDNO generation end users, then under DCP 266 the credit should be reduced by a p/kWh – calculated in a manner consistent with the way in which the % discount is calculated. It was noted that the intent of DCP 266 was clear in seeking to move from applying the credits as a % to applying them as a p/kWh, not to reverse the way they were also applied to generation.

## The modelling consultant was asked to confirm if the proposed solution could be produced to which it was noted that it is possible to apply the calculated discounts in p/kWh as negative discounts, so that any CDCM generation credits would be reduced by the discount percentages. The Working Group agreed amend the legal text to align to the solution and noted that paragraph 46 of Schedule XX has been amended to incorporate the proposed solution.

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| **QUESTION 7: Do you agree with the approach used by the Working Group to address ‘LDNO EHV generation discounts’ which is to apply the calculated discounts in p/kWh as negative discounts, so that any CDCM generation credits would be reduced by the discount percentages? Please provide any rationale with your response.** |

**Other Considerations**

## During a review of the legal text, references to IDNO were updated to LDNO and the Working Group noted that if DCP 252 ‘Clarification And Extension Of The Application Of Portfolio Tariffs Under The EDCM’ was not approved and as such a housekeeping change is being raised to correct the references.

## The Working Group also noted that the below sentence from paragraph 46A of the legal text may be impacted should DCP 268 ‘DUoS Charging Using HH settlement data’ be approved due to tariff name changes being introduced by DCP 268.

## *“For this purposed the Domestic Two Rate and Domestic Restricted tariffs will be aggregated and the Small Non-Domestic Two Rate and Small Non-Domestic Restricted tariffs will be aggregated.”*

## The Working Group agreed that a comment should be added to the consultation to explain the potential impact that DCP 268 may have on this change proposal.

## Following on from the Working Groups decisions on the areas noted above (paragraphs 4.26 to 4.34) the group requested amended modelling be completed to incorporate the changes. The Working Group also requested a refreshed impact assessment as a result, the detail of which is located in Section 6 below.

1. Relevant Objectives

## **Assessment against the DCUSA Charging Objectives**

## The proposer believes that DCP 266 better facilitates DCUSA Charging Objective 2 and General Objective 2

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| **Impact of the Change Proposal on the Relevant Objectives:** |
| **Relevant Objective** |
| Charging Objective 2: that compliance by each DNO Party with the Charging Methodologies facilitates competition in the generation and supply of electricity and will not restrict, distort, or prevent competition in the transmission or distribution of electricity or in participation in the operation of an Interconnector (as defined in the Distribution Licences) |
| DCUSA General Objective 2: The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent therewith) the promotion of such competition in the sale, distribution and purchase of electricity |

## The proposer believes that the DCUSA General Objective 2 and DCUSA Charging Objective 2 will be better facilitated by reducing or removing the current distortion in the absolute level of total avoided cost discount received by LDNOs by ensuring that the absolute total cost discount calculated in the PCDM is not affected by the CDCM methodology for ATW tariffs or changes to it. There is currently a logical defect in the approach to calculating and applying LDNO discounts which results in LDNO charges which do not reflect *“a reasonable allocation of total costs to the elements of the DNOs business that are being undertaken by the IDNO”*. DCP 266 removes this defect and by ensuring that the p/kWh discounts received by LDNOs remains aligned with the absolute level of avoided costs calculated in the PCDM, this change will promote competition in the distribution of electricity. The absolute level of discount (p/kWh) received by LDNOs is also likely to be more stable and predictable since it will be protected from the impact of any changes to the methodology for ATW CDCM tariffs, which will also promote competition in the distribution of electricity.

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| **QUESTION 8: Do you consider that the proposal better facilitates the DCUSA Charging Objectives? If you do, please detail which of the Charging Objectives is better facilitated by DCP 266 and provide your rationale.** |

1. Impacts & other considerations

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

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

## The Working Group discussed whether it would be better if the intent of this change is reviewed as part of Ofgem’s SCR or the wider CDCM/EDCM Review.

## The CDCM/EDCM review was split into two stages. Stage One captured the issues and prioritised the areas that could be taken forward into Stage Two. These were:

a) Type of Costing Model.

b) Tariff Structures.

c) LDNO Charging Arrangements.

d) New Products (e.g. Storage).

e) Combining the CDCM and EDCM Methodologies.

## Alongside launching the SCR, Ofgem announced that it is setting up a Charging Futures Forum (CFF), previously known as the Charging Coordination Group. The CFF will provide some guidance on how to progress the CDCM/EDCM Review, with work potentially recommencing later in 2017.

## The Working Group view at this stage is that the CDCM review is at high level at this stage and it is too early to determine whether this change will be impacted by it.

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| QUESTION 9: Do you anticipate any associated impacts on the SCR or the CDCM/EDCM review by continuing to progress DCP 266? If so, what is the impact? |

#### Consumer Impacts

## The Working Group considered that this change would benefit from Parties being able to understand its impact in a modified CDCM/EDCM/PCDM model with impact estimates. The DCP 266 Modelling documentation acts as Attachment 4. The CDCM/EDCM/PCDM models have been modified to incorporate the proposed solution.

## DNO Working Group members have successfully populated the DCP 266 CDCM/EDCM/PCDM models and replicated the expected resulting outputs from this modified model.

**Impact Assessment**

## The Impact Assessment documentation acts as Attachment 5 to this consultation. The analysis compared, LDNO discount percentages before and after DCP 266, and also looked at the impact of changing LDNO discounts on end user tariffs.

## The full results of the analysis are set out in the following set of documents:

## (a) The file labelled Appendix 1 sets out the impact of DCP 266 on LDNO discount percentages for all combinations of boundary and end user tariffs. This includes both CDCM (method M) and EDCM (extended method M) discounts.

## (b) The file labelled Appendix 2 sets out the impact on LDNO discount percentages in a map form, showing differences in the impact between DNO areas (excluding SPEN).

## (c) The folder labelled Appendix 3 contains three spreadsheets setting out the impact of DCP 266 on CDCM tariffs. This covers the impact on tariff components (unit rates, fixed charges, capacity charges etc), the impact on aggregate revenue by tariff and the impact on average revenue per tariff expressed in p/kWh.

## Under the DCP 266 approach, the p/kWh margins calculated under the method M approach could be higher than the corresponding average CDCM end user tariff, which in turn could lead to discount percentages greater than 100 per cent. In such cases, the discount percentages are capped at 100 per cent.

## The DCP 266 approach does not allow the calculation of discount percentages in cases where forecast volumes for the corresponding all the way tariff in CDCM table 1053 are zero. In such cases, the model defaults to a discount percentage of 100 per cent. The legal text mandates that a value will need to be populated

## The following tables set out a summary of the impact of DCP 266 on DNO Revenues and LDNO discount percentages for LV Domestic Unrestricted tariffs in each DNO licence area.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Domestic Unrestricted - by DNO licence area** | **Baseline revenue (£/year)** | **Revenue on new basis (£/year)** | **Change (£/year)** | **Percentage change** |
| Electricity North West | 161,795,547 | 162,009,035 | + 213,488 | + 0.13% |
| Northern Powergrid Northeast | 126,410,958 | 126,679,568 | + 268,610 | + 0.21% |
| Northern Powergrid Yorkshire | 156,945,364 | 157,226,084 | + 280,720 | + 0.18% |
| Southern Electric Power Distribution | 227,198,336 | 227,360,884 | + 162,548 | + 0.07% |
| Scottish Hydro Electric Power Distribution | 92,221,750 | 92,232,334 | + 10,585 | + 0.01% |
| Eastern Power Networks | 194,605,461 | 194,796,897 | + 191,436 | + 0.10% |
| London Power Networks | 124,822,585 | 124,995,005 | + 172,421 | + 0.14% |
| South Eastern Power Networks | 144,058,505 | 144,148,881 | + 90,376 | + 0.06% |
| WPD East Midlands | 130,223,181 | 130,287,690 | + 64,509 | + 0.05% |
| WPD South Wales | 103,714,874 | 103,768,762 | + 53,888 | + 0.05% |
| WPD South West | 140,488,748 | 140,578,833 | + 90,085 | + 0.06% |
| WPD West Midlands | 183,584,367 | 183,720,141 | + 135,774 | + 0.07% |

Table : Summary of the impact of DCP 266 (excluding SPEN SPM and SPEN SPD) on DNO Revenues

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | | | |  |
| **DNO Licence Area** | **Without DCP 266** | | **With DCP 266** | **Change** |  |
| Electricity North West | 35.73% | 30.63% | | - 5.10% |  |
| Northern Powergrid Northeast | 39.76% | 33.69% | | - 6.08% |  |
| Northern Powergrid Yorkshire | 39.22% | 35.45% | | - 3.76% |  |
| Southern Electric Power Distribution | 34.13% | 31.73% | | - 2.40% |  |
| Scottish Hydro Electric Power Distribution | 28.74% | 24.58% | | - 4.16% |  |
| Eastern Power Networks | 30.84% | 22.06% | | - 8.78% |  |
| London Power Networks | 26.90% | 21.25% | | - 5.65% |  |
| South Eastern Power Networks | 31.26% | 23.78% | | - 7.48% |  |
| WPD East Midlands | 30.14% | 28.83% | | - 1.32% |  |
| WPD South Wales | 32.65% | 27.48% | | - 5.17% |  |
| WPD South West | 37.27% | 33.04% | | - 4.23% |  |
| WPD West Midlands | 33.30% | 31.82% | | - 1.48% |  |
|  |  | **Average =** | | - 4.63% |  |

Table 2: Summary of the impact of DCP 266 (excluding SPEN SPM and SPEN SPD) on LDNO Discounts percentages (ignoring fixed charges)

#### Environmental Impacts

## 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 266 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

## Ofgem has been fully engaged throughout the development of DCP 266 as an Observing member of the Working Group.

1. Implementation

## The proposed implementation date for DCP 266 is 1 April 2020.

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| **QUESTION 10: If DCP 266 were to be approved are you supportive of the proposed implementation date of 01 April 2020?** |

1. Legal Text

## The proposed DCP 266 Legal Text has been provided as Attachment 2.

## The legal text seeks to change the calculation of an LDNO percentage discount so that the avoided total cost (p/kWh) calculated in the PCDM is compared with the average p/kWh figure for each All The Way (ATW) CDCM tariff in order to determine the LDNO % discount factor to be applied to each of the tariff components of the CDCM ATW tariff. The legal text also addresses the issues set out in paragraphs 4.26 to 4.34.

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| **QUESTION 11: Do you have any comments on the proposed legal text?** |

1. Consultation Questions

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

|  |  |
| --- | --- |
| **Question Number** | **Questions** |
|  | Do you understand the intent of DCP 266? |
|  | Do you agree with the approach to use current charging year data in place of 2007/08 data? |
|  | Do you agree that there is a defect in the logic as set out by DCP 266? If so:   1. Do you believe the DCP 266 solution correctly addresses this defect? Please provide your rationale   Are there any alternative solutions for addressing the perceived defect? |
|  | Do you believe that the Working Group has correctly identified the incentives/penalties that are to be excluded from the ‘revenue to share’? |
|  | Do you agree with the approach that the Working Group has used to resolve the issue of ‘0 volumes’ out of the options noted in the bullet points under paragraph 4.28? If not, then please provide your rational for the other option or set out any other options that you believe should be considered. |
|  | Do you agree that all discounts should be capped to a maximum of 100 percent? Please provide your rationale. |
|  | Do you agree with the approach used by the Working Group to address ‘LDNO EHV generation discounts’ which is to apply the calculated discounts in p/kWh as negative discounts, so that any CDCM generation credits would be reduced by the discount percentages? Please provide any rationale with your response. |
|  | Do you consider that the proposal better facilitates the DCUSA Charging Objectives? If you do, please detail which of the Charging Objectives is better facilitated by DCP 266 and provide your rationale. |
|  | Do you anticipate any associated impacts on the SCR or the CDCM/EDCM review by continuing to progress DCP 266? If so, what is the impact? |
|  | If DCP 266 were to be approved are you supportive of the proposed implementation date of 01 April 2020? |
|  | Do you have any comments on the proposed legal text? |
|  | Are there any alternative solutions or unintended consequences that should be considered by the Working Group? |
|  | Do you have any other comments on DCP 266? |

## Responses should be submitted using Attachment 1 to [dcusa@electralink.co.uk](mailto:dcusa@electralink.co.uk) no later than **DATE 2017.**

## 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.

#### Next Steps

## Responses to the Consultation will be reviewed by the DCP 266 Working Group. The Working Group will then determine the progression route for the CP.

## If you have any questions about this paper or the DCUSA Change Process, please contact the DCUSA helpdesk by email to [dcusa@electralink.co.uk](mailto:dcusa@electralink.co.uk) or telephone 020 7432 3008.

#### Attachments

* Attachment 1 – DCP 266 Response Form
* Attachment 2 – DCP 266 Proposed Legal Text
* Attachment 3 – Change Proposal Form
* Attachment 4 - Modelling Documentation
* Attachment 5 - Impact Assessment

1. To be inserted by DCP 234 on 01 April 2018 [↑](#footnote-ref-1)
2. [http://webarchive.nationalarchives.gov.uk/20130402174434/http://ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/Ofgem\_CDCM\_consultation%20280909\_1.pdf](http://webarchive.nationalarchives.gov.uk/20130402174434/http:/ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/Ofgem_CDCM_consultation%20280909_1.pdf) [↑](#footnote-ref-2)
3. <http://webarchive.nationalarchives.gov.uk/20130402174434/http://ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/Ofgem_CDCM_consultation%20280909_1.pdf> [↑](#footnote-ref-3)