



DCUSA Change Report

DCP 160 – ‘Non-Half Hourly (NHH) Notional Capacity’

Executive Summary

DCP 160 seeks to revise Schedule 16 (along with appropriate CDCM and ARP Modelling changes) to introduce a notional spare capacity requirement to be applied to the average maximum demand when calculating NHH tariffs.

This document presents the Change Report for DCP 160 and invites all Parties to vote on the following:

- the DCP 160 proposed legal text;
- whether DCP 160 better facilitates the DCUSA Charging Objectives; and
- the implementation date for DCP 160.

The voting deadline for DCP 160 is **12 September 2016**.

1 PURPOSE

- 1.1 This document is issued in accordance with Clause 11.20 of the DCUSA and details DCP 160 – *‘Non-Half Hourly (NHH) Notional Capacity’*.
- 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 (Attachment 2) and submit their votes using the form attached as Attachment 1 to dcusa@electralink.co.uk no later than **12 September 2016**.

2 BACKGROUND TO THE DCP 160 CHANGE PROPOSAL

- 2.1 This change was initially derived from discussions at the Methodology Issues Group (MIG) sub-group that was set up to consider the differences in the cost allocation mechanisms for HH and NHH tariffs in the Common Distribution Charging Methodology (CDCM) in 2011.
- 2.2 There was a number of other CPs which were also submitted as a result of the work of the MIG sub-group:
 - DCP 130: *‘Remove the discrepancy between Non Half Hourly (NHH) and Half Hourly (HH) Un-metered Supplies (UMS) tariffs’*. This DCP was implemented on 1 April 2013.
 - DCP 165: *‘Voltage Level Approach to Unit Charges in the CDCM’*. This DCP was withdrawn.
 - DCP 179: *‘Amending the CDCM Tariff Structure’*. This DCP was implemented on 1 April 2015.
- 2.3 It is considered that the implementation of DCP 130 and DCP 179 has resulted in a charging methodology which has significantly reduced any differences in the cost allocation mechanisms that are applied to any individual customer, regardless of whether that customer is settled on a HH or NHH basis i.e. the methodology should result (on average) in the same level of charges for the *same* customer regardless of whether that customer is settled HH or NHH.
- 2.4 DCP 160 seeks to go further than DCP 130 and DCP 179 by removing the differences in cost

allocation mechanisms between HH and NHH charges for *different* customers with respect to the treatment of capacity.

- 2.5 The majority of the costs in the CDCM are converted to p/kWh unit rates by reference to a tariff groups' load characteristics (coincidence factor and load factor). However, at network levels at or close to the voltage of connection, costs are converted to either capacity charges or fixed charges which are derived using aggregate capacity. In deriving these aggregate capacities, the CDCM treats NHH and HH customers differently.

3 INTENT OF DCP 160 CHANGE PROPOSAL

- 3.1 DCP 160 has been raised by UK Power Networks to revise Schedule 16 (along with appropriate CDCM and ARP Modelling changes) to introduce a notional spare capacity requirement to be applied to the average maximum demand when calculating NHH tariffs. The notional spare capacity should align with the same proportions which are calculated and allocated to Half Hourly (HH) tariffs.
- 3.2 The solution to this change recommends that for each NHH tariff group the average maximum demand used in the calculation of charges should be increased by a factor to allow for spare capacity. The factor proposed is the ratio between the average maximum demand and capacity from a similar HH tariff.
- 3.3 This CP has been designated as a Part 1 Matter as the proposed change impacts the calculation of NHH tariffs (not inclusive of unmetered supplies (UMS) tariffs) under the CDCM.

4 DCP 160 WORKING GROUP

- 4.1 The DCUSA Panel established a Working Group to assess DCP 160. The Working Group met on thirteen occasions and were comprised of Supplier, DNO 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.

5 WORKING GROUP ANALYSIS OF THE TREATMENT OF CAPACITY IN THE CDCM

- 5.1 There are three categories of costs allocated in the CDCM – these are Network Costs, Transmission Exit costs and Other costs. Network Costs apply to all distribution network

levels, Transmission Exit costs apply only to the transmission level¹ whilst Other Costs apply partly to each distribution network level and partly to dedicated assets (by reference to the applicable service model) for each type of user.

- 5.2 Network costs at each network level are converted to a £/kW/yr by dividing the cost of the network level assets (£) by the exit flow (kW) at the time of system simultaneous maximum demand (SMD) to produce a network level asset cost in £/kW, and then multiplying this by an annuity factor. Capacity is not relevant to this calculation.
- 5.3 Other Costs are allocated to each network level on the basis of 'notional asset value'². For the purpose of calculating a notional asset value for each network level, the network level asset cost in £/kW is multiplied by an estimated demand. The estimated demand is not the pure SMD, but rather the 'SMD adjusted for standing charge factors'³.
- 5.4 The 'SMD adjusted for standing charge factors' differs from the pure SMD by replacing, for each network level, the pure SMD with a diversified aggregate capacity calculated as follows:
- Start with the pure SMD.
 - Remove the portion of SMD at each network level which is subject to standing charge factors for each tariff.
 - Add, at each network level which is subject to standing charge factors, the diversified aggregate capacity. For NHH customers the aggregate capacity is the total annual kWh/load factor (i.e. max demand), whereas for HH customers the aggregate capacity is the total agreed capacities of the HH customers (i.e. agreed capacities). The diversity factors applied to these aggregate capacities are determined by reference to the diversity factors input to the CDCM by the DNO, or in the case of LV where no such diversity factor is input, calculated within the CDCM⁴.
- 5.5 Having allocated Other Costs (£/yr) to each network level as described above, these costs are

¹ Transmission exit costs apply only to transmission level which is unaffected by the treatment of capacity for any CDCM tariff and so is not explained further in this change report.

² A portion of Other Costs is also allocated to the Customer level by reference to the aggregate value of service models but this is not relevant to this Change Proposal and is not explained further.

³ Standing charge factors in the CDCM represent the extent to which the network design and planning process takes account of the capacity of a particular customer.

⁴ Diversity factor for LV circuit is calculated as the sum of: [(aggregate capacity for NHH (max demand) + aggregate capacity for HH (agreed capacities))/SMD (NHH & HH)]

converted to a £/kW/yr at each network level by dividing by the SMD adjusted for standing charge factors.

5.6 The CDCM at this point has therefore calculated a £/kW/yr by network level for both Network Costs and Other Costs. For network levels more remote from the tariff groups' voltage of connection these £/kW/yr costs are converted to network level p/kWh rates to apply to each tariff primarily by reference to the tariff groups' load characteristics (coincidence factor and load factor). For network levels close to the voltage of connection the methodology converts these £/kW/yr costs to capacity rates (p/kVA/day) by reference to the network level diversity factor and an assumed power factor of 0.95⁵. In deriving capacity and fixed charges the relevant voltage levels for each tariff are defined by their standing charge factors.

5.7 The standing charge factors for NHH settled users are:

- a) 100 per cent for the network level at which the end user is supplied; and
- b) Zero for any further network level.

5.8 The standing charge factors for half hourly settled users at LV Sub are:

- a) 100 per cent for the transformation level at which the supply is made to the end user;
- b) 100 per cent for circuits at the next voltage level; and
- c) Zero for any further network level.

5.9 The standing charge factors for other half hourly settled users are:

- a) 100 per cent for the voltage level of supply of the end user;
- b) 100 per cent for the next transformation level;
- c) 20 per cent for circuits at the next voltage level (including 132kV for HV users to the extent that 132kV/HV transformation is used); and
- d) Zero for any further network level.

⁵ For each network level: $[p/kVA/day \text{ from network model assets}] = 100 * [\text{standing charge factor}] * [\text{network level } £/kW/year] * [\text{user loss factor}] / [\text{network level loss factor}] * (1 - [\text{contribution proportion}]) / [\text{days in year}] / (1 + [\text{diversity allowance}]) * [\text{power factor in network model}]$

- 5.10 For HH demand users, except unmetered users, the p/kVA/day unit costs are allocated to the capacity charge rate. For NHH demand users, again except unmetered users, the p/kVA/day unit costs are allocated to the fixed charge by multiplying the p/kVA/day rates by the average kVA/customer⁶.

6 WORKING GROUP ANALYSIS OF DCP 160 – NON-HALF HOURLY (NHH) NOTIONAL CAPACITY

- 6.1 The Working Group considered the concept of ‘spare capacity’ for HH customers as being implicitly defined by the proposal as:

*where the sum of HH agreed capacity is x ; and
the sum of the HH maximum demand capacity is y ;
then the HH Spare Capacity is x/y .*

- 6.2 The intent of DCP 160 is to uplift the capacity allocated to NHH customers in the CDCM by this ‘spare capacity’ factor.
- 6.3 The Working Group queried whether the concept of spare capacity described above for HH customers was appropriate. A HH customer will request an agreed capacity from the DNO and the DNO will consider whether the network requires any reinforcement on the basis of this agreed capacity. The connection agreement will then formalise this agreed capacity and oblige the DNO to make it available to the customer. To the extent that a HH customer may not utilise the full amount of their agreed capacity, there is a question as to whether this unused element of agreed capacity is ‘spare’ capacity or whether it might be better described as ‘reserved’ capacity.
- 6.4 Currently for NHH tariffs a value for such ‘spare’ or ‘reserved’ capacity is not calculated as part of the charges, whereas HH tariffs are calculated based on the average capacity required. The CP states that this means that HH users are paying for spare network capacity while NHH users are not.
- 6.5 Part of the justification provided by the proposer of DCP 160 included the statement that “*all tariffs need to be derived on a consistent cost reflective basis for both existing as well as new tariffs*”.
- 6.6 The Working Group agrees that tariffs should be cost reflective, and also agrees that tariffs

⁶ For this purpose, demand users in PC 1-4 are taken as a single group

should ideally be derived on a consistent basis. However, there may be instances where cost reflectivity may require that different approaches be used to derive tariffs. In such circumstances the question arises whether the tariffs should be derived in a manner that maintains cost reflectivity where there is a known inconsistency in the derivation of tariffs, or whether they should be derived on a basis which aligns the approach, but may result in a reduction in overall cost reflectivity of the end tariff.

- 6.7 The Working Group considered the treatment of capacity in the CDCM, as above and tracked the calculation used in the model for NHH customers and concluded that NHH customers were paying for capacity within a NHH customers fixed charge.
- 6.8 The Working Group agreed to consult on whether the elements of capacity allocated to HH and NHH customers through the application of the Standing Charge Factors is sufficient and whether a change is justified for NHH calculations in order to bring them in line with the treatment of HH calculations.

7 DCP 160 CONSULTATION ONE

- 7.1 The Working Group carried out a consultation (Attachment 5) on the principles of the change to give DCUSA Parties and other interested organisations an opportunity to review and comment on the proposed DCP 160 solution. There were eight responses received to the consultation. Five respondents were Distributors, two respondents were Suppliers and one consultant respondent. The Working Group discussed each response and its comments are summarised alongside the collated consultation responses in Attachment 5.
- 7.2 A summary of the responses received, and the Working Group's conclusions are set out below:

Question 1: Do you consider the capacity requested by HH customers but not being utilised to be spare capacity or reserved capacity?

- 7.3 Five respondents considered that the capacity not being utilised by HH Customers **is reserved capacity**. The rationale for this conclusion is set out in the summary of responses below:
- The capacity requested by HH customers is reserved and not spare capacity, as the customer reserves the right to utilise it at any point and depend on that reserved capacity being made available when required.

- DNOs have a contractual obligation to provide such capacity to the customer and the HH customers are explicitly paying for it.
- The capacity requested by HH customers is reserved, as under the standard terms of connection within DCUSA we are obligated to use reasonable endeavours to make this capacity available as follows:

12.2 Subject to the other provisions of this Agreement, the Company shall use reasonable endeavours to:

12.2.1 ensure that the Maximum Import Capacity and the Maximum Export Capacity is available at the Connection Point at all times during the period of this Agreement; and

12.2.2 maintain the connection characteristics at the Connection Point.

This clause covers all CT metered customers be they NHH or HH settled so some NHH customers also have reserved capacity.

- HH customers are able to adjust their agreed capacity downwards to a more appropriate level. This then frees up the capacity in question by removing the obligation on the DNO to make it available to that customer.
- The respondent who considered it to be **spare capacity** advised that *“Unless there is some evidence that the networks actually provide all the capacity that they have connection agreements for, and do not have any diversity allowances, we would consider requested but unused capacity as spare capacity. We would only consider it to be reserved if the networks have zero diversity allowance (i.e. all customers could simultaneously consume their ASC and the network would not be under stress.)”*.
- One respondent considered that it was neither spare nor reserved capacity but is an unused allocation of the contracted capacity.
- One respondents comment was interpreted as indifferent to this question.

7.4 The Working Group noted that five of the respondents considered it to be reserved capacity, one respondent considered it to be spare capacity and another respondent was indifferent.

7.5 In response to the rationale from the party who considered the contract capacity not utilised by the HH Customer to be spare capacity, the Working Group advised that it is not spare capacity but reserved capacity that the DNOs must make reasonable endeavours to supply.

Question 2: Do you agree with the proposer’s view that HH customers are paying for spare

capacity whereas NHH customers are not?

7.6 Five respondents considered that HH customers are paying for spare capacity where NHH customers are not. Some of the responses are highlighted below.

- *“As a general rule, there will be diversity applied to most customers as you move up the network, so we would agree that under the existing CDCM methodology, HH customers are paying for spare capacity and NHH customers are not”.*
- *“To be more precise, the problem with the CDCM is that customers in measurement classes C or E have to pay capacity charges which are disproportionately higher than the charges for the same LV and HV network capacity that are being levied through fixed charges and/or unit rates on customers in measurement classes A, F or G. This is an unfair and non-cost-reflective feature of the CDCM”.*

The Working Group advised that the key difference is that for NHH Customers (excluding unmetered supplies) the Standing Charge Factors dictate that only costs in relation to the network at the voltage of connection (100% at LV) are recovered on a capacity basis (via the fixed charge) whilst for HH Customers the costs relating to the network at the voltage of connection, the next transformation level and 20% of the network level above that (100%, 100%, 20%) are recovered on a capacity basis (or 100%, 100%, 0% in the case of LV substation tariffs).

Standing charge factors in the CDCM represent the extent to which the network design and planning process takes account of the capacity of a particular customer.

- *“we agree that HH customers are paying for spare capacity whereas NHH customers are not. NHH customers’ “capacity” in the CDCM is based on an estimate of their peak consumption without the same headroom as HH customers get. Presumably if HH customers had a choice, some would choose to have a capacity charge only based on their peak consumption rather than having to buy more than they need”.*

The Working Group considers that HH Customers are paying for Maximum Import Capacity (MIC) for network levels close to the voltage level of connection which is intended to reflect the costs imposed by the Customer

- One respondent considered that HH customers were paying for contracted capacity and not spare capacity but agreed with the statement set out in the question. This respondent considered that at the current time NHH customers do not pay for their notional contracted

capacity requirement outside the times and above the level that their use requires, whereas HH customers do. This respondent noted that with the current method for how charges are applied it is notable that capacity is charged to HH customers for 100% of the time, whereas the proxy for capacity recovered through the NHH unit rate is only collected when the demand is consumed and not throughout the year.

7.7 Three respondents did not agree that HH customers are paying for spare capacity where NHH customers are not and a summary of those responses is set out below:

- No one is currently *“paying for ‘spare capacity’ explicitly but all customers are effectively paying for it, i.e. HH customers paying in terms of capacity charge and NHH customers paying through scaling, to ensure DNOs recover their allowed revenue”*.
- *“Each individual HH customer has an agreed capacity. The network will have been designed (and reinforced if required) to provide that agreed capacity and the DNO is obliged to make that agreed capacity available to that customer. If a HH customer’s maximum demand is lower than their agreed capacity and the extra capacity is not required, the customer is free to reduce their agreed capacity accordingly – but until such time as they do, this capacity remains reserved for that customer. It is therefore appropriate and cost reflective that capacity reserved by HH customers is paid for by HH customers. NHH customers are paying for capacity on a diversified basis in the CDCM. Whilst this means that the true amount of capacity used by any individual NHH customer may be higher than the capacity assumed for the purposes of calculating CDCM tariffs, this appears to be consistent with the way that networks are designed and reinforced (on the basis of assumed diversified maximum demands). It is therefore appropriate and cost reflective that NHH customers pay for capacity on a diversified basis”*.

7.8 In terms of the treatment of capacity (excluding unmetered supplies), the Working Group notes that both NHH and HH Customers pay for the capacity allocated in the CDCM 100% of the time. The key difference is that for NHH Customers the Standing Charge Factors dictate that only costs in relation to the network at the voltage of connection (100% at LV) are recovered on a capacity basis (via the fixed charge) whilst for HH Customers the costs relating to the network at the voltage of connection, the next transformation level and 20% of the network level above that (100%, 100%, 20%) are recovered on a capacity basis (or 100%, 100%, 0% in the case of LV substation tariffs).

7.9 Standing charge factors in the CDCM represent the extent to which the network design and

planning process takes account of the capacity of a particular customer. Therefore, as you move further up the network both HH and NHH Customers only pay when they use the network through the unit rates.

Question 3: Do you agree with the statement: All tariffs need to be derived on a consistent cost reflective basis for both existing and new tariffs?

7.10 Six respondents agreed that all tariffs should be derived on a cost reflective basis.

- One respondent considered there may be instances where cost reflectivity may require that different approaches be used to derive tariffs. So consistency, whilst desirable, should not compromise cost reflectivity.
- One respondent agreed that tariffs need to be derived on a consistent basis and advised that this is an important principle that ensures DNOs comply with their licence.

The Working Group noted that under DCUSA Charging Objective 3 requires the tariff to be derived on the basis of cost reflectivity. There is not a requirement on consistency.

- Another respondent agreed that tariffs need to be derived on a cost reflective basis for both existing and new tariffs but did not believe that spare capacity should be chargeable, or that using a notional proxy in deriving tariffs to be any more cost reflective than the current charging mechanism.

7.11 One DNO respondent did not indicate whether they agreed with the questions statement but instead commented that *“it is important that any differentials between NHH and HH charges are minimised as much as possible. Similar usage for a NHH or HH metered customer should ultimately equate to similar overall annualised charges”*.

7.12 One consultant respondent did not agree that all tariffs should be derived on a cost reflective basis as overall cost-reflectivity in the context of the CDCM in several DNO areas, has a grossly non-cost-reflective revenue matching element.

7.13 The Working Group noted that there is a licence obligation for tariffs to be cost reflective. The methodology produces average tariffs which may result in the cost reflectivity being diluted. However, the reference to revenue matching is outside the scope of this CP but another DCP 228 is looking at this area.

Question 4: The planning process for domestic and small non-domestic customers is based on a diversified maximum demand assumption, whereas for medium-large customers it

is based on agreed capacity. Do you consider the current process correct for deriving NHH and HH tariffs as set out under the CDCM?

- 7.14 Some respondents considered that on the basis of this description of how the network is planned that the current process for deriving NHH and HH tariffs in the CDCM is appropriate but considered that this CPs approach may have been suitable for Profile Class 5-8 tariffs customers who are CT metered and who should have an agreed capacity with the DNO. However, for this group of customers after the implementation of DCP 179, P272 and P300, those customers will become HH and billed on a site specific basis with a capacity charge consistent with other HH customers.
- 7.15 One DNO respondent advised that when planning their network, diversity is applied to almost all customers. It is only very large customers where this does not apply and even in these circumstances some diversity is likely to be applied at voltage levels above the level of connection. This respondent proposed that the NHH and HH customers could be treated in a similar way by allocating all costs on MD or on a notional capacity. However, the present methodology of allocating some customers on capacity and some on MIC is not an equitable approach.
- 7.16 Another DNO respondent who agreed that the cost allocation approach in the CDCM does tend to reflect the difference in the planning process between NHH and HH customers proposed that this CP should attempt to address the issue that the proxy for a capacity charge is collected from NHH customers based on their consumed kWhs use, whereas the capacity charge collected from HH customers is based on their maximum annual capacity requirement. Consequently, the NHH customer does not pay a charge for their maximum annual capacity requirement which does result in a situation where NHH and HH tariffs result in annual charges which are derived on an inconsistent basis.
- 7.17 The Working Group noted that the majority of respondents were in general agreement on the current approach. The Working Group considered that the current methodology attempts to treat them in the way that reflects the network planning approach as set out in the consultation document.

Question 5: There is a perception that there is notional spare capacity created by HH customers. Is this correct?

- 7.18 The majority of respondents considered the perception of spare capacity being created by

HH customers as:

- Any spare capacity on the DNO network is likely to have been created primarily by the lumpy nature of reinforcements, or by reductions in overall demand rather than by HH customers, not using their full agreed capacity;
- To the extent that there is any such genuine spare capacity, it is beneficial to both NHH and HH customers (for example new connections, whether NHH or HH, may be able to connect without any reinforcement);
- There will always be an element of spare capacity on the networks, as this is how they are designed to provide security of supply for customers; and
- NHH customers are picking up some costs as a proxy for capacity in the fixed charge element of their tariffs.

7.19 One DNO respondent who did not agree with this perception advised that unused 'contracted' capacity is a component of NHH and HH Customers usage, and as such should be paid for by that group of customers.

7.20 One respondent who agreed with the concept of notional spare capacity advised that when this issue has been looked at previously, the aggregate maximum demand of HH customers is less than the aggregate MIC for those customers. Therefore, we consider that there is notional spare capacity created by HH customers.

7.21 The Working Group noted that most respondents consider it to be reserved capacity rather than notional spare capacity.

Question 6: If you think that NHH customers should be picking up some proportion of this notional spare capacity, is the proportion⁷ suggested in this CP appropriate?

7.22 The majority of respondents agreed with the proportion proposed. One respondent noted that NHH customers should be paying for the same amount of redundancy that a HH customer typically does – noting that HH customers already have a financial incentive to optimise their capacity.

7.23 Another respondent who did not agree with the approach proposed advised:

⁷ The factor proposed is the ratio between the average maximum demand and capacity from a similar HH tariff.

- (1) *“The factor proposed is the ratio between the average maximum demand and capacity from a similar HH tariff. There is no HH tariff (with a capacity charge) which could reasonably claim to be ‘similar’ to the domestic or small non-domestic tariffs.*
- (2) *The difference between HH agreed capacity and HH maximum demand is driven primarily by HH customers choosing to reserve more capacity than they currently require. The proportion is inappropriate to apply to NHH customers because:*
 - a) *NHH customers would not be able to ‘choose’ to reduce their capacity requirements to remove any notional reserved capacity (unlike HH customers) since it would be converted to a fixed p/mpa/day; and,*
 - b) *NHH customers are not able to ‘reserve’ the additional capacity they would be being charged for”.*

7.24 The Working Group noted that there was a mixed response to this question, with many respondents considering that the NHH Customers should be picking up a portion of the notional spare capacity and others who do not.

8 DCP 160 CONSULTATION TWO

- 8.1 The Working Group considered that this change would benefit from Parties being able to understand its impact in a modified CDCM model with impact estimates. The Working Group carried out a consultation (Attachment 6) to give DCUSA Parties and other interested organisations an opportunity to review and comment on the proposed CDCM model containing the DCP 160 solution. The CDCM model has been modified so that for each NHH tariff group the average maximum demand used in the calculation of charges is increased by a factor to allow for spare capacity. This factor is the ratio between the average maximum demand and capacity from a similar HH tariff, so that the notional spare capacity aligns with the same proportions which are calculated and allocated to Half Hourly (HH) tariffs.
- 8.2 There were eleven respondents to this consultation which were comprised of three Supplier respondents, four DNO respondents, two anonymous respondents, one IDNO respondent and one consultant. The Working Group discussed each response and its comments are summarised alongside the collated consultation responses in Attachment 6.

Question 1: Do you understand the intent of the DCP 160 change?

8.3 All respondents understood the intent of the CP.

Question 2: Are you supportive of the principles of the DCP 160 change?

8.4 Four respondents were supportive of the principles of the CP. The remaining six respondents were not supportive of the principles of the CP.

8.5 The Working Group recognised that there are two different views on how the network manages its capacity. Some respondents consider that the CDCM currently reflects reasonably well the differences in the network planning process between HH and NHH customers and the capacity requested by HH customers is reserved and not spare capacity. Whilst other respondents consider that DCP 160 will address the difference in costs between NHH and HH arrangements.

Question 3: Do you have any comments on the proposed legal text?

8.6 Eight respondents had no comments on the proposed legal text. Three respondents requested that the draft legal text be clarified on the following points:

Author	Draft Legal Text Comments
Supplier Respondent	The factor proposed is the ratio between the average maximum demand and capacity from a similar HH tariff. There is no HH tariff (with a capacity charge) which could reasonably claim to be 'similar' to the domestic or small non-domestic tariffs.
Working Group	One member suggested that the legal text should state a HH tariff at a similar voltage level rather than a similar HH tariff. Another member suggested that the ratios from consultation one be included as footnote in the legal text: <i>"The concept of 'spare capacity' for HH customers as being implicitly defined by the proposal as: where the sum of HH agreed capacity is x; and the sum of the HH maximum demand capacity is y; then the HH Spare Capacity is x/y. The intent is to uplift the capacity allocated to NHH customers in the CDCM by this 'spare capacity' factor".</i>

DNO Respondent	We are not certain that the legal text expresses the uplifting of the NHH tariffs clearly (para. 84). The terms “uplifted”, and “ratio as determined from” are mathematically imprecise, and could lead to differing interpretations. Clearer language might be “multiplied by” and “the ratio of x to y”, for example.
Working Group	The Working Group agreed to change the wording from ‘ <i>uplifted by</i> ’ to ‘ <i>multiplied by</i> ’ in the legal text.
Respondent	Use of the text “...from a similar HH tariff...” is not very clear.
Working Group	The Working Group agreed to change the legal text to state that it is the ‘ <i>capacity from a similar HH tariff at the same voltage</i> ’.

Question 4: Do you have any comments on the updated model or impact analysis? Please provide supporting comments.

8.7 Four respondents had no comments on the updated model or impact analysis. Some of the responses received are highlighted below:

- One Supplier respondent advised “*that the additional capacity being allocated to domestic tariffs in particular cannot be justified as cost reflective. The diversified domestic maximum demand averages over 3.5kVA which we believe is significantly in excess of network planning standards*”. Furthermore, “*this change would also seem to create the perverse situation whereby the more that LV HH customers reserve on the network, over and above what they actually require, the more that NHH customers will be charged – which in turn will reduce the charges for the LV HH customer group which [are] reserving the unnecessary capacity*”.
- One DNO respondent advised that they “*are comfortable that the impact seen in the revised CDCM model is appropriate for the change which is being proposed, with the difference in charge for a ‘like for like’ customer moving between NHH and HH metered being reduced*”.
- Another DNO respondent “*We feel that this change may no longer be necessary, as events have overtaken it, and with the move towards smart metering we expect in one way or another HH data will be available for most customer groups in the not too distant future*”.

- 8.8 The Working Group noted the responses and agreed with the DNO respondent that industry arrangements have changed since this CP was initially raised 3 years ago and the validity of this change may not be as strong.

Question 5: Which DCUSA General Objectives does the CP better facilitate? Please provide supporting comments.

1. **The development, maintenance and operation by each of the DNO Parties and IDNO Parties of an efficient, co-ordinated, and economical Distribution System.**
2. **The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent with that) the promotion of such competition in the sale, distribution and purchase of electricity.**
3. **The efficient discharge by each of the DNO Parties and IDNO Parties of the obligations imposed upon them by their Distribution Licences.**
4. **The promotion of efficiency in the implementation and administration of this Agreement and the arrangements under it.**
5. **compliance with the Regulation on Cross-Border Exchange in Electricity and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.**

- 8.9 The following table provides a summary of the responses to this question.

Respondent Party Type	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	None / Not Applicable
Supplier	1	0	1	0	0	2
DNOs	1	0	2	0	0	2
IDNOs	0	0	0	0	0	1
Consultant	0	0	0	0	0	1
Anonymous	0	1	0	0	0	1
Total	2	1	3	0	0	7

- 8.10 The majority of respondents did not believe the Change Proposal better facilitated any of the DCUSA General Objectives.
- 8.11 One Supplier and one DNO considered that the Change Proposal better facilitated DCUSA General Objectives 1 and 3. Another DNO considered that the proposal better facilitated General Objective 3, whilst an anonymous respondent considered it better facilitated General Objective 2. This respondent did not provide their rationale for their decision.

8.12 The respondents who considered that DCUSA General Objective 1 and 3 were better facilitated by this change provided the following reasons for their conclusion:

- “General Objective one and three are better facilitated in that a fundamental difference in the calculation of NHH and HH charges will be reduced as a result of this change. This change will ensure that the charges for the network are more efficient and economical for all customers, which is also a key requirement of the obligations on DNOs as part of the distribution licence”.
- *“It is a condition of our licence that all tariffs are derived on a consistent basis, and it is our view that DCP160 strengthens the consistency of tariff calculations”.* The respondent further clarified that their point refers to the requirement for tariffs to be cost reflective in the licence.

8.13 The Working Group noted the responses. Please refer to Section 14 of this report for the Working Groups rationale on which Objectives are best facilitated by this CP.

Question 6: Which DCUSA Charging Objectives does the CP better facilitate? Please provide supporting comments.

- 1. that compliance by each DNO Party with the Charging Methodologies facilitates the discharge by the DNO Party of the obligations imposed on it under the Act and by its Distribution Licence**
- 2. that compliance by each DNO Party with the Charging Methodologies facilitates competition in the generation and supply of electricity and will not restrict, distort, or prevent competition in the transmission or distribution of electricity or in participation in the operation of an Interconnector (as defined in the Distribution Licences)**
- 3. that compliance by each DNO Party with the Charging Methodologies results in charges which, so far as is reasonably practicable after taking account of implementation costs, reflect the costs incurred, or reasonably expected to be incurred, by the DNO Party in its Distribution Business**
- 4. that, so far as is consistent with Clauses 3.2.1 to 3.2.3, the Charging Methodologies, so far as is reasonably practicable, properly take account of developments in each DNO Party’s Distribution Business**
- 5. that compliance by each DNO Party with the Charging Methodologies facilitates compliance with the Regulation on Cross-Border Exchange in Electricity and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.**

8.14 The following table provides a summary of the responses to this question.

Respondent Party Type	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	None / Not Applicable
Supplier	1	0	1	0	0	2
DNOs	1	0	2	0	0	2
IDNOs	0	0	0	0	0	1
Consultant	0	0	0	0	0	1
Anonymous	0	0	1	0	0	1
Total	2	0	4	0	0	7

8.15 The majority of respondents did not believe the Change Proposal better facilitated any of the DCUSA Charging Objectives.

8.16 One Supplier and one DNO considered that the Change Proposal better facilitated DCUSA Charging Objectives 1 and 3. Another DNO and an anonymous respondent considered that the proposal better facilitated General Objective 3. Respondents provided the following reasons for their conclusion:

- *“A fundamental difference in the calculation of NHH and HH charges will be reduced as a result of this change. This change will ensure that the charges for NHH metered customers more accurately reflects the actual capacity that is used by those customers. This will have the effect of reducing the differential between NHH metered charges and HH metered charges. This change will therefore reduce a barrier that exists towards the increased use of HH metering which will add to the application of improved cost reflectivity not just in the application of network tariffs but also in the application of energy settlement”.*
- *“DCP 160 would result in tariffs that are more cost reflective”.*

8.17 One of the respondents that did not consider that this change better facilitated the objectives advised that *“this change may no longer be necessary, as events have overtaken it, and with the move towards smart metering we expect in one way or another HH data will be available for most customer groups in the not too distant future. We therefore do not believe that this change better facilitates any of the above objectives”.*

8.18 The Working Group noted the responses. Please refer to Section 14 of this report for the Working Groups rationale on which Objectives are best facilitated by this CP.

Question 7: Are you aware of any wider industry developments that may impact upon or be impacted by this CP?

8.19 Seven respondents were not aware of any wider industry developments that may impact upon this CP. Four respondents advised the Working Group of the following wider industry developments:

- *“The transition of customers to HH settlement through P272 means that the need for this type of change is already being reduced”;*
- *“DCP 268 - charging using HH settlement data”;*
- *“We think it may be better to review this as part of a more significant review of the CDCM taking into account, Ofgem’s proposed consultation and the potential move to HH settlement for all”;* and
- *“Since the planning process does not seem to differentiate on the basis on NHH/HH settlement, but rather on the basis of customer size (large, medium, small), the proposal could possibly have been justified for those PC5-8 customers who are CT metered and who should have an agreed capacity with the DNO. However since those customers will become HH settled and be billed on a site specific basis (incl. capacity charge) following the implementation of DCP 179 and P272, the solution proposed by DCP 160 would appear to be unnecessary for any remaining NHH customer group”.*

8.20 The Working Group noted respondents differing views and advised that they did not believe that DCP 268 affects this change as it just changes unit charges.

Question 8: Do you agree with the proposed implementation date of 1 April 2018?

8.21 The majority of respondents agreed with the implementation date of the 01 April 2018. The majority of respondents who did not agree with the implementation date did so as they were not supportive of the change as a whole. One respondent advised that *“Some suppliers may already have fixed DUoS costs in contracts for this period and this implementation date overlaps and causes contract friction”.*

8.22 The Working Group noted that this is a valid concern but the introduction of the 15-month notification of charging methodology times should provide the respondent with sufficient lead time to make this change.

Question 9: Are there any alternative solutions or matters that should be considered by the Working Group?

8.23 Eight respondents did not have any alternate solution or matters to be considered. One respondent reiterated their position in relation to this CP. Another respondent highlighted the impact of DCP 115 '*NTC Amendments - Capacity Management (Under Utilisation)*' implemented on the 05 November 2015.

8.24 The Working Group noted the responses.

9 FURTHER DEVELOPMENT FOLLOWING CONSULTATION TWO

9.1 The Working Group reviewed and revised the legal text based on comments provided by consultation two respondents. During this review the Working Group noticed that Clause 83 which had been deleted in the proposed legal text calculates a single estimated average capacity to be used for the listed domestic and small non-domestic customer tariff types. Whilst under Clause 84 for the medium non-domestic tariff types it calculates a tariff specific capacity. The DCP 160 legal text consulted upon proposed inserting the new text in to Clause 84 and deleting Clause 83, inadvertently implying that the CDCM will calculate a tariff specific capacity for all tariffs which was not the intention of this change. The Working Group agreed to reinstate Clause 83 with additional wording to reflect the adjustment required to the calculation for NHH notional capacity.

9.2 The Working Group agreed that the amended legal text did not require a further consultation to be issued as the amended legal text matched the principles of the change that were consulted upon as well as the impact assessment and the updated CDCM model.

9.3 An updated Annual Review Pack (ARP) containing the changes made by DCP 160 and baselined against the 01 April 2017 version is also included in Attachment 3.

10 PROPOSED LEGAL TEXT

10.1 The proposed legal text has been reviewed by the DCUSA Legal Advisor and acts as Attachment Two.

11 IMPACT ASSESSMENT

11.1 The Working Group carried out an impact assessment to determine the impact of this change

on consumers. The impact of the DCP 160 modelling change is seen on the following tariffs:

- Domestic Unrestricted
- Domestic Two Rate
- Small Non Domestic Unrestricted
- Small Non Domestic Two Rate
- LV Network Domestic
- LV Network Non Domestic Non-CT
- LV HH Metered

11.2 For each of the tariffs listed above, except for the LV HH Metered tariff, an impact is seen on the fixed charge (p/MPAN/day). For the LV HH Metered tariff, an impact is on the capacity charge (p/kVA/day).

11.3 The DCP 160 change predominantly affects the calculation of charges for NHH tariffs in two ways. The first is through its effect on the calculated average maximum demand (kVA) of customers on these tariffs. The second is through its effect on calculated diversity allowances at the LV network level. These two effects act in opposing directions on the fixed charge (p/MPAN/day). The combined effect is to typically increase the fixed charge for these tariffs.

11.4 The Working Group have noted that the impact set out in Table 1 below is broadly the same for Customers on Small Non Domestic Unrestricted, Small Non Domestic Two Rate and LV Network Non-Domestic Non-CT tariffs.

	Baseline	DCP 160	Percentage change	Change
	Fixed charge p/MPAN/day	Fixed charge p/MPAN/day	Fixed charge	£/MPAN/Yr
ENWL	3.13	3.28	4.79%	0.55
NPG Northeast	4.89	5.31	8.59%	1.53
NPG Yorkshire	5.11	5.39	5.48%	1.02
SPEN SPD	5.15	5.45	5.83%	1.10
SPEN SPM	4.16	4.29	3.13%	0.47
SSEPD SEPD	3.04	3.36	10.53%	1.17
SSEPD SHEPD	8.16	9.35	14.58%	4.34
UKPN EPN	4.69	5.15	9.81%	1.68
UKPN LPN	4.07	4.8	17.94%	2.66
UKPN SPN	4.51	4.86	7.76%	1.28

WPD EastM	3.12	3.55	13.78%	1.57
WPD SWales	4.44	4.92	10.81%	1.75
WPD SWest	4.66	5.04	8.15%	1.39
WPD WestM	3.9	4.41	13.08%	1.86

Table 1: Impact of DCP 160 on the Fixed Charge and Average Annual Bill for the Domestic Unrestricted, Domestic Two Rate and LV Network Domestic tariffs

11.5 For the LV HH metered tariff, DCP 160 has the effect of reducing capacity charges (p/kVA/day) through its effect on calculated diversity allowances at the LV network level. The impact is set out in table 2 below.

	Baseline Capacity charge p/kVA/day	DCP 160 Capacity charge p/kVA/day	Percentage change Capacity charge	Change £/MPAN/Yr
ENWL	2.91	2.69	– 7.56%	– 110.08
NPG Northeast	1.76	1.33	– 24.43%	– 231.85
NPG Yorkshire	1.49	1.11	– 25.50%	– 177.01
SPEN SPD	2.41	2.03	– 15.77%	– 197.37
SPEN SPM	2.6	2.25	– 13.46%	– 133.59
SSEPD SEPD	2.41	2.09	– 13.28%	– 193.49
SSEPD SHEPD	5.55	4.44	– 20.00%	– 588.99
UKPN EPN	3.15	2.53	– 19.68%	– 344.63
UKPN LPN	3.87	3.35	– 13.44%	– 380.50
UKPN SPN	3.12	2.65	– 15.06%	– 253.25
WPD EastM	2.55	1.99	– 21.96%	– 283.22
WPD SWales	2.82	2.09	– 25.89%	– 368.02
WPD SWest	2.8	1.92	– 31.43%	– 337.94
WPD WestM	3.44	2.63	– 23.55%	– 322.69

Table 2: Impact of DCP 160 on the Capacity charge and Average Annual bill for the LV HH Metered tariff

11.6 The full impact assessment is contained in Attachment 3 to this report.

12 DCP 160 – WORKING GROUP CONCLUSIONS

12.1 The Working Group reviewed each of the responses received to consultation one and concluded that all of the respondents understood the intent of DCP 160.

12.2 The Working Group noted that the majority of respondents were not supportive of the

principle of the CP and did not consider that the CP better facilitated any of the DCUSA Objectives, partly as a result of how the charging methodology has evolved since the change was originally proposed.

- 12.3 The Working Group noted that the respondents who supported the CP considered DCUSA Charging Objectives 1 and 3 were better facilitated by this change.

13 EVALUATION AGAINST THE DCUSA OBJECTIVES

- 13.1 Since DCP 160 consultation two was issued, Ofgem has directed that DCUSA Working Groups on charging methodology CPs should only consider which DCUSA Charging Objectives are best facilitated by the change. There are five Charging Objectives, the full list of objectives is documented in the CP form provided as Attachment 3.

- 13.1 Both the views of Working Group and the responses to the consultation(s) were mixed on whether the CP better facilitates the Charging Objectives. Following discussions, the Working Group decided that DCUSA Charging Objective one was not better facilitated by this change.

DCUSA Charging Objective 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.

- 13.2 DCUSA Charging Objective 3 was felt to be better facilitated by some responses to the consultation(s) and some members of the Working Group. Although in both cases this was less than half the total of those who stated a view. A view has been expressed by some that this change reduces the differential between NHH and HH metered charges. There was a broadly even split in the Working Group as to whether DCUSA Charging Objective three was better facilitated or not.

14 IMPACT ON GREENHOUSE GAS OMISSIONS

- 14.1 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 160 were implemented. The Working Group did not identify any material impact on greenhouse gas emissions from the implementation of this CP.

15 IMPLEMENTATION

15.1 Subject to Party approval and Authority consent, DCP 160 will be implemented on the 01 April 2018.

16 PANEL RECOMMENDATION

16.1 The DCUSA Panel approved the DCP 160 Change Report on 17 August 2016. The timetable for the progression of the CP is set out below:

Activity	Date
Change Report approved by DCUSA Panel	17 August 2016
Change Report Issued for Voting	19 August 2016
Party Voting Closes	12 September 2016
Change Declaration Issued	14 September 2016
Authority Decision	18 October 2016
Implementation	01 April 2018

17 ATTACHMENTS:

- Attachment 1 - DCP 160 Voting Form
- Attachment 2 - DCP 160 Proposed Legal Text
- Attachment 3 - DCP 160 Model Documentation
- Attachment 4 - DCP 160 Change Proposal
- Attachment 5 - DCP 160 Consultation One Documents
- Attachment 6 - DCP 160 Consultation Two Documents