



DCUSA Consultation

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

DCP 160 was raised by UK Power Networks and 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. The notional spare capacity should align with the same proportions which are calculated and allocated to Half Hourly (HH) tariffs.

PURPOSE

- 1.1 The Distribution Connection and Use of System Agreement (DCUSA) is a multi-party contract between electricity Distributors, 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.
- 1.2 This document is a consultation issued to all DCUSA Parties, interested third parties, and the Authority in accordance with Clause 11.14 of the DCUSA seeking industry views on DCP 160 '*Non-Half Hourly (NHH) Notional Capacity*' .
- 1.3 Parties are invited to consider the options for proposed legal drafting set out in Attachment 2 to this document and submit comments using the response form provided as Attachment 1 to DCUSA@electralink.co.uk by **Friday, 15 April 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 CDCM in 2011.
- 2.2 There was a number of other CPs which were submitted as a result of the work of the MIG sub-group and two have been implemented, DCP 130¹ and DCP 179².
- 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

¹ DCP 130 'Remove the discrepancy between Non Half Hourly (NHH) and Half Hourly (HH) Un-metered Supplies (UMS) tariffs'

² DCP 179 'Amending the CDCM Tariff Structure'

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. **Attachment 5** provides a summary of the treatment of capacity in the CDCM, but at a very high level, aggregate capacity for HH customers is derived by the summation of agreed capacities, whereas for NHH customers it is the sum of maximum demand.

3 DCP 160 'NON-HALF HOURLY (NHH) NOTIONAL'

- 3.1 DCP 160 was raised by UK Power Networks and 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. The notional spare capacity should align with the same proportions which are calculated and allocated to 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.

4 WORKING GROUP ASSESSMENT

- 4.1 The DCUSA Panel has established a DCP 160 Working Group which consists of Supplier, DNO and Ofgem representatives to consider the CP. An open invitation was extended to all DCUSA counterparties to attend this Working Group and this invitation remains open for any interested industry parties.
- 4.2 The Working Group consulted with industry parties on the principles of this change in March 2015.

4.3 This consultation looked at the treatment of Capacity in the CDCM (Attachment 5) and whether the current basis of charging HH and NHH Customers types was appropriate. The March 2015 consultation covered areas such as:

- Whether unused agreed capacity was spare capacity or reserved capacity;
- Whether charges should prioritise consistency or cost reflectivity or both;
- Whether the CDCM is consistent with network planning; and
- Whether, if NHH customers should be picking up some proportion of notional spare capacity, the proportion suggested by this CP is appropriate

4.4 Further details on the areas previously consulted upon are contained in **Attachment 6**.

4.5 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 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.

4.6 For HH customers 'spare capacity' is defined 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 capacity allocated to NHH customers in the CDCM has been uplifted by the same 'spare capacity' factor.

4.7 The resulting CDCM model and impact assessment shows that the impact in the tariffs varies in its magnitude but is directionally consistent across all regions. NHH fixed charges generally increase, as illustrated in Table 1 below, whilst the low voltage HH capacity charge decreases across all regions as illustrated in Table 2. The net overall impact on charges is that low voltage NHH tariffs generally increase and the low voltage HH tariff decreases as illustrated by table 3 below.

4.8 The CDCM model requires a volume of units (and customers) to be entered into the volume

table (1053) for each tariff which could be offered in that DNO region. As a result for a number of tariffs including 'LV Medium Non-Domestic', 'LV Sub Medium Non-Domestic' and 'HV Medium Non-Domestic' where no percentage movement is shown in the impact analysis, then for that DNO in their final 2017/18 charges they will not have entered any volume into their CDCM models for those tariffs, assuming that there will be no customers on that tariff.

- 4.9 There are significant increases seen for the 'HV Medium Non-Domestic' tariffs in three regions. The fixed charge for HV Medium³ and LV Sub Medium should be expected to increase under DCP 160 because DCP 160 applies a correction factor to the notional average capacity used per MPAN for these tariffs, in a similar manner to the LV non half hourly tariffs. The impact should be particularly large at LV Sub and HV Medium because there is no countervailing effect through increases in calculated diversity allowances at the LV network level. It would be in keeping with the intention of DCP 160 to charge more, through fixed charges, for capacity used by tariffs without explicit capacity charges.

Table 1: Impact of DCP 160 on the **fixed** charge by DUoS tariff and region

	ENWL	NPG Northeast	NPG Yorkshire	SPEN SPD	SPEN SPM	SSEPD SEPD	SSEPD SHEPD	UKPN EPN	UKPN LPN	UKPN SPN	WPD EastM	WPD SWales	WPD SWest	WPD WestM
Domestic Unrestricted	4.8%	8.6%	5.5%	5.8%	3.1%	10.5%	14.6%	9.8%	17.9%	7.8%	13.8%	10.8%	8.2%	13.1%
Domestic Two Rate	4.8%	8.6%	5.5%	5.8%	3.1%	10.5%	14.6%	9.8%	17.9%	7.8%	13.8%	10.8%	8.2%	13.1%
Domestic Off Peak (related MPAN)														
Small Non Domestic Unrestricted	4.8%	7.8%	5.1%	4.5%	2.4%	6.7%	9.5%	8.9%	16.7%	7.0%	8.1%	6.3%	4.9%	8.5%
Small Non Domestic Two Rate	4.8%	7.8%	5.1%	4.5%	2.4%	6.7%	9.5%	8.9%	16.7%	7.0%	8.1%	6.3%	4.9%	8.5%
Small Non Domestic Off Peak (related MPAN)														
LV Medium Non-Domestic	-0.1%	28.8%	18.9%			20.2%	24.7%	20.9%	38.1%	18.3%				
LV Sub Medium Non-Domestic	-0.0%													
HV Medium Non-Domestic	52.2%					46.5%	87.0%							
LV Network Domestic	4.8%	8.6%	5.5%	5.8%	3.1%	10.5%	14.6%	9.8%	17.9%	7.8%	13.8%	10.8%	8.2%	13.1%
LV Network Non-Domestic Non-CT	4.8%	7.8%	5.1%	4.5%	2.4%	6.7%	9.5%	8.4%	15.9%	6.8%	8.1%	6.3%	4.9%	8.5%
LV HH Metered														
LV Sub HH Metered	-0.0%													
HV HH Metered	-0.0%						-0.0%							
NHH UMS category A														
NHH UMS category B														
NHH UMS category C														
NHH UMS category D														
LV UMS (Pseudo HH Metered)														

Table 2: Impact of DCP 160 on the low voltage HH **capacity** charge by region

	ENWL	NPG Northeast	NPG Yorkshire	SPEN SPD	SPEN SPM	SSEPD SEPD	SSEPD SHEPD	UKPN EPN	UKPN LPN	UKPN SPN	WPD EastM	WPD SWales	WPD SWest	WPD WestM
LV HH Metered	-7.6%	-24.4%	-25.5%	-15.8%	-13.5%	-13.3%	-20.0%	-19.7%	-13.4%	-15.1%	-22.0%	-25.9%	-31.4%	-23.5%

³ The customer numbers specified for SHEPD and SEPD (13 & 19, respectively) relate specifically to the HV Medium Non-Domestic tariff.

Table 3: Impact of DCP 160 on **overall** DUoS charges by DUoS tariff and region

	ENWL	NPG Northeast	NPG Yorkshire	SPEN SPD	SPEN SPM	SSEPD SEPD	SSEPD SHEPD	UKPN EPN	UKPN LPN	UKPN SPN	WPD EastM	WPD SWales	WPD SWest	WPD WestM
Domestic Unrestricted	0.7%	1.7%	1.3%	1.1%	0.4%	1.2%	3.1%	1.9%	3.9%	1.3%	2.0%	1.6%	1.1%	2.0%
Domestic Two Rate	0.6%	1.6%	1.2%	1.0%	0.4%	1.2%	2.2%	1.9%	3.6%	1.2%	1.8%	1.4%	1.1%	1.9%
Domestic Off Peak (related MPAN)				-0.0%	0.0%		-0.1%							
Small Non Domestic Unrestricted	0.2%	0.5%	0.3%	0.3%	0.1%	0.5%	0.8%	0.8%	1.5%	0.8%	0.6%	0.5%	0.5%	0.7%
Small Non Domestic Two Rate	0.1%	0.4%	0.2%	0.2%	0.1%	0.3%	0.6%	0.6%	0.9%	0.4%	0.4%	0.3%	0.3%	0.5%
Small Non Domestic Off Peak (related MPAN)				-0.0%										
LV Medium Non-Domestic		1.3%	1.1%			1.0%	2.0%	1.7%	3.0%	1.3%				
LV Sub Medium Non-Domestic														
HV Medium Non-Domestic	17.2%					29.2%	41.3%							
LV Network Domestic														
LV Network Non-Domestic Non-CT	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.2%	0.1%	0.3%	0.1%	0.1%	0.1%	0.1%	0.2%
LV HH Metered	-2.5%	-5.1%	-4.2%	-3.3%	-2.8%	-3.4%	-6.1%	-7.0%	-5.6%	-4.4%	-5.7%	-5.2%	-7.0%	-7.2%
LV Sub HH Metered	-0.0%						-0.0%							
HV HH Metered	-0.0%						-0.0%							
NHH UMS category A							-0.0%		-0.0%					
NHH UMS category B	-0.0%						-0.0%							
NHH UMS category C														
NHH UMS category D														
LV UMS (Pseudo HH Metered)	-0.0%					-0.0%	-0.0%							

4.10 The DCP 160 Modelling Documentation (Attachment 3) sets out the changes made to the CDCM model, the revised CDCM model, and the tariff impacts in more detail and the Working Group is interested in Parties views on the changes made the CDCM model and the impact that this change has on the different tariff types.

4.11 All DNOs have successfully populated the DCP 160 CDCM model and replicated the expected resulting outputs from this modified model.

5 ASSESSMENT AGAINST THE DCUSA OBJECTIVES

5.1 The Working Group is also seeking Parties views on whether the DCP 160 better facilitates any of the DCUSA General Objectives and DCUSA Charging Objectives as set out in the table below.

DCUSA General Objectives	DCUSA Charging Objectives
1. The development, maintenance and operation by each of the DNO Parties and IDNO Parties of an efficient, co-ordinated, and economical Distribution System.	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.

<p>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.</p>	<p>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).</p>
<p>3. The efficient discharge by each of the DNO Parties and IDNO Parties of the obligations imposed upon them by their Distribution Licences.</p>	<p>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.</p>
<p>4. The promotion of efficiency in the implementation and administration of this Agreement and the arrangements under it.</p>	<p>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.</p>
<p>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-</p>	<p>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</p>

operation of Energy Regulators.	Agency for the Co-operation of Energy Regulators.
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6 LEGAL DRAFTING

6.1 The proposed legal drafting is included as Attachment 2.

7 IMPLEMENTATION

7.1 The proposed implementation date for DCP 160 is the 1 April 2018.

8 CONSULTATION

8.1 The Working Group is seeking views on the below questions:

1. Do you understand the intent of the DCP 160?
2. Are you supportive of the principles of the DCP 160? Please provide reasons.
3. Do you have any comments on the proposed legal text?
4. Do you have any comments on the updated model or impact analysis? Please provide supporting comments.
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.
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.

7. Are you aware of any wider industry developments that may impact upon or be impacted by this CP?
 8. Do you agree with the proposed implementation date of 1 April 2018?
 9. Are there any alternative solutions or matters that should be considered by the Working Group?
- 8.2 Responses should be submitted using Attachment 1 to DCUSA@electralink.co.uk no later than **Friday, 15 March 2016**.
- 8.3 Responses, or any part thereof, can be provided in confidence. Parties are asked to clearly indicate any parts of a response that are to be treated confidentially.

9 NEXT STEPS

- 9.1 Responses to the Consultation will be reviewed by the DCP 160 Working Group. The Working Group will then determine the progression route for the CP.
- 9.2 If you have any questions about this paper or the DCUSA Change Process please contact the DCUSA Help Desk by email to DCUSA@electralink.co.uk or telephone 020 7432 3017.

10 ATTACHMENTS

Attachment 1 – Response form

Attachment 2 – Proposed Legal Text

Attachment 3 – DCP 160 Modelling Documentation

Attachment 4 – DCP 160 Change Proposal

Attachment 5 - The Treatment of Capacity in the CDCM

Attachment 6 – Areas previously consulted upon for DCP 160