



DCUSA CHANGE REPORT

DCP 133 - 500MW Network Common Model for CDCM Input

Executive Summary

DCP 133 seeks to introduce a common 500MW model for use by DNOs.

This document presents the Change Report for DCP 133 and invites respondents to vote on the proposed change.

1 PURPOSE

- 1.1 This document is issued in accordance with Clause 11.20 of the DCUSA, and details DCP 133 '500MW Network Common Model for CDCM Input'. 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.
- 1.2 Parties are invited to consider the proposed amendment (Attachment 1), together with the Consultation documentation (Attachment 3) and submit their votes using the Voting form (Attachment 4) to dcusa@electralink.co.uk by **1 August 2014**.

2 BACKGROUND OF DCP 133

- 2.1 The 500MW model is used to derive representative network level gross asset values, for input into the Common Distribution Charging Methodology (CDCM) model and indirectly into the EHV Distribution Charging Methodology (EDCM) model. Currently DNOs have their own individual 500MW models based upon their in-house methodology developed under common guidance rather than this proposal which will use a single version of the model based upon a common methodology under open governance.
- 2.2 DCP 133 has been raised by UK Power Networks following on from the work of the Distribution Charging Methodologies Forum (DCMF) Methodologies Issues Group (MIG) 500MW Commonality sub-group. The intent of CP is to introduce a common 500MW network model spreadsheet under DCUSA governance, which would be used across all DNOs.
- 2.3 The Change Proposal form is provided as Attachment 5 to this document.

3 WORKING GROUP

- 3.1 The DCUSA Panel established a Working Group to assess DCP 133. The group consists of Distributor, Supplier and Ofgem representatives. Meetings were held in open session and the minutes and papers of each meeting are available on the DCUSA website – www.dcusa.co.uk.

- 3.2 The Working Group discussed and refined the DCP 133 solution and developed a methodology. The Working group then worked with a modelling support consultant to develop a common 500MW network model based on this methodology.

4 THE 500MW NETWORK MODEL

What is the purpose of the 500MW Network Model?

- 4.1 The 500MW model is used to derive representative network level gross asset values, for input into the Common Distribution Charging Methodology (CDCM) model and indirectly into the EHV Distribution Charging Methodology (EDCM) model.
- 4.2 The methodology behind the 500MW model is designed to calculate the asset cost at each network level of a notional distribution network capable of meeting a permanent 500MW increase in demand. In other words the model essentially calculates the cost of building a representative 500MW network, with the costs allocated by the following network levels:
- 132kV circuit network level
 - 132kV/EHV transformation level
 - EHV circuit network level
 - EHV/HV transformation level
 - 132kV/HV transformation level
 - HV circuit network level
 - HV/LV transformation level
 - LV circuit network level
- 4.3 It is a hypothetical model which is intended as a means of representing a scaled version of an actual network. The use of a scaled version is possible because it is not the absolute cost at each network level that drives DUoS charges, but rather the relative cost between voltage levels. The methodology is based on the concept of producing forward looking cost signals.

Why has the Common 500MW Network Model been developed?

- 4.4 Currently, DNO organisations each have their own 500MW models. These were developed under common guidance in advance of the introduction of the CDCM in 2010. The Common 500MW Network Model has been developed in response to a drive by Ofgem to introduce greater commonality in the calculation of DUoS charges across DNOs.

It is proposed that all DNOs would use this single methodology and model.

- 4.5 In addition to introducing a common model, the methodology developed by the Working Group introduces a greater reliance on published data sources, such as the Regulatory Reporting Pack (RRP). This means that the methodology will improve commonality in the both calculations and the data used by the DNOs.

Who will be impacted by the introduction of the Common 500MW Network Model?

- 4.6 The output from each DNO's individual 500MW model is one of the key inputs into the CDCM model, which is used to generate Distribution Use of System (DUoS) tariffs for HV and LV customers. Some of the tables in the 500MW models also feed into the EHV Distribution Charging Methodology (EDCM) model, which is used to calculate DUoS tariffs for EHV customers.
- 4.7 Replacing DNO's individual 500MW models with the Common 500MW Network Model will, therefore, affect the tariffs for all connected customers. The Working Group has carried out a detailed impact assessment on the proposed DCP 133 solution and this is presented in section 6 below.

5 DEVELOPMENT OF THE 500MW COMMON METHODOLOGY AND MODEL

- 5.1 The Common 500MW methodology was originally developed by the DCMF MIG 500MW Commonality sub-group over the course of approximately 30 meetings. During these meetings there was much discussion on developing commonality in the model and its inputs across DNOs. Discussions on commonality have continued since the DCP 133 Working Group was initiated in May 2012.

- 5.2 The following table outlines the areas in which a common approach has been developed.

Developed Common Areas:

1	Clarified asset unit costs principles
2	Reviewed assets list and determined asset categories in various network levels
3	Determined network level boundaries and therefore the cost categories
4	Determined common data sources
5	Developed a common approach of calculating the Coincidence Factors which are used to calculate the modelled maximum demand at 132kV/EHV, 132kV/HV and EHV/HV levels

6	Developed a common approach of calculating the installed and firm capacity for single and multi-transformer substations
7	Developed common constraint conditions of modelled firm capacity vs. modelled max demand of substations above HV level when the substation numbers are determined
8	Developed a common constraint conditions of modelled installed capacity vs. modelled firm capacity of HV/LV substations when their numbers are determined
9	Developed a common approach of calculating the modelled firm capacity of HV/LV pole mounted and ground mounted substations
10	Developed a common approach of calculating the modelled length of 132kV, EHV, HV and LV circuits
11	Developed a common approach of calculating the modelled number of HV/LV substations
12	Developed a common approach and introduced common data source to calculate protection devices at HV level

5.3 Whilst many common areas have been developed there are some areas where it is felt that it is appropriate for DNOs to make a decision based on their own design policies and expectations. The DCP 133 methodology has been designed to allow for DNOs to determine the most appropriate value for their network in the areas outlined in the following table.

Open areas for DNOs to make the decision based on their own design policies, purchase data or estimates:

1	Typical type of transformer configurations and circuits at various levels
2	Unit cost of network assets
3	Adjusted proportion of underground cables and overhead lines for 132kV, EHV circuits and the adjusted proportion of excavate, lay and reinstatement relative to lay only for HV, LV cables
4	Number of each substation configuration at 132kV/EHV and EHV/HV and 132kV/HV levels
5	The enhanced forced cooling ratings of grid and primary transformers
6	Additional HV switchgear to meet DNO standard
7	Adjustments to existing asset quantities where parts of the network are generation dominated (i.e. where generation is higher than demand)

6 IMPACT ANALYSIS

6.1 The methodology proposed by the DCP 133 Working Group has been used to create a Common 500MW Network Model. This model is provided as Attachment 6 and a user

manual is provided as Attachment 7.

- 6.2 DNOs have populated the Common 500MW model with full and representative data for their distribution licence areas. For the purpose of the impact analysis the Working Group has entered the output from the Common 500MW Network Model for each DNO area in to the April 2014 CDCM model to calculate the impact of DCP 133 on charges. In addition, if notice has been given for a change to the input values for 2015/16, then an impact assessment has been carried out using the 2015/16 updated asset costs which have been calculated using the exiting 500MW model. The impact assessment is provided as Attachment 8 to this consultation.
- 6.3 It should be noted that for the purposes of this impact assessment DNOs have updated the diversity factors in the CDCM with values derived using data from the Common 500MW model. One member of the Working Group believed that a revised impact assessment should be produced to demonstrate the impact of the Common 500MW model costs only (without updated CDCM diversity factors). This Working Group member believed this was appropriate since it has been agreed that changes to the CDCM diversity factors are outside of the scope of DCP 133. This member also believed that the updated diversity factors were a significant driver of the tariff changes illustrated by the impact assessment, and that the updated HV diversity factors used for the impact assessment have been calculated in a manner which would require a separate change proposal, since they have been calculated using firm capacity data rather than maximum demand data as required by Schedule 16. However other members of the Group felt that the Change Report should reflect the impact assessment which has been consulted upon.
- 6.4 The populated versions of the Common 500MW Network Model have not been provided with this Change Report. This is in line with legal advice that the Working Group has received and is to avoid DNOs from potential breach of competition law. This is because the populated models contain DNO asset costs and information relating to future strategic plans that could potentially be harmful to competition by placing this information in the public domain.

7 DCP 133 CONSULTATION

- 7.1 The DCP 133 Working Group carried out a Consultation to give DCUSA Parties and other interested stakeholders an opportunity to review and comment on DCP 133
- 7.2 There were nine responses received to the consultation. Each of the responses was reviewed and discussed by the Working Group. All consultation responses, along with the Working Group's comments and the consultation document can be found in Attachment 5.
- 7.3 A summary of the responses received and the Working Group's comments is provided below.

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

- 7.4 The Working Group noted that all respondents to this question stated that they understood the intent of the CP.

Question 2- Are you supportive of the principles established by this proposal?

- 7.5 The Working Group noted that six of the nine respondents were supportive of the principles established by the proposal.
- 7.6 The remaining three respondents were supportive of the principles but expressed concerns in how they had been applied. One of these respondents suggested that the range of outputs derived from the DCP 133 500MW across the DNOs suggests that commonality has not been achieved. The Working Group did not agree with this view, noting that the range of outputs should be reflective of the topologies and current design standards of the different DNOs.
- 7.7 Another of the respondents explained that in their view the proposed model is too large and would require a disproportionate amount of time, effort and resource to maintain. The respondent suggested that the model should be reduced in scope and simplified. The Working Group discussed this comment and noted that, in accordance with the model guidance, the full model should be updated about every three to five years, with costs updated on an annual basis. The Working Group does not believe this represents a disproportionate amount of time and effort to maintain.

- 7.8 The third respondent explained that they had concerns regarding the representation of generation dominated networks in the Common 500MW Network Model. The Working Group noted that the scope of DCP 133 was to deliver a common 500MW network model by standardising what was currently in place. The group had worked on the principle that the representation of generation was out of scope for DCP 133.

Question 3 - Do you agree that the model should be called the 'The Hypothetical Incremental Distribution Asset Model' or would your preference be for it to be called 'The Common 500MW Network Model'?

- 7.9 As demonstrated in the following table, the majority of consultation respondents expressed a preference for the model developed by the Working Group to be called the Common 500MW Network Model.

Respondent Type	Response			
	HIDAM	Common 500MW Network Model	No View	Total
DNO	1	4	1	6
Supplier		2	1	3
Total	1	6	2	9

- 7.10 The Working Group agreed to use the name preferred by the majority of respondents and updated the DCP 133 legal text accordingly.

Question 4 - Do you agree that both the HIDAM model and the methodology should be incorporated into DCUSA? (An alternative is that the methodology (Annex A in the legal text) is not incorporated into DCUSA but rather kept outside of DCUSA governance).

- 7.11 The Working Group noted that all respondents to this question were in agreement that the methodology should be incorporated into the DCUSA.

Question 5 - Should the methodology be incorporated in the DCUSA as an annex to schedule 16 or as a separate schedule?

- 7.12 As demonstrated in the following table, the majority of consultation respondents expressed a preference for the methodology to be incorporated into the DCUSA as an annex to schedule 16.

Respondent Type	Response			
	New Schedule	Annex to Schedule 16	No View	Total

DNO	1	5		6
Supplier		1	2	3
Total	1	6	2	9

Question 6 - For the purposes of the HIDAM model it is assumed that if a circuit is feeding generation as well as demand then it was likely that that circuit was there before the generator, feeding load only, and based on this assumption it is reasonable that the circuit should be included when calculating circuit lengths. Do you agree that this is a reasonable assumption?

7.13 The Working Group noted that four of the nine respondents believed this to be a reasonable assumption, with one of these respondents requesting for further analysis to be undertaken to demonstrate the impact of this. The Working Group did not believe that this was a large enough issue to justify the need for analysis to be undertaken.

7.14 Three of the respondents believed that this assumption should only apply for demand dominated networks, and that different assumptions would be required for generation dominated networks. The Working Group suggested that if the DCP is implemented then the respondents should raise new Change Proposals to address this specific issue should they wish too.

7.15 Two of the respondents provided no comment.

Question 7 - Do you have any views on how the methodology could be improved to better accommodate embedded generation. If yes, please provide details.

7.16 The Working Group noted that six of the nine respondents did not have any views on how to improve the methodology to better accommodate generation.

7.17 One of the respondents believed that due to the intermittent and/or unreliable nature of small and medium power stations they should not be included within the model.

7.18 Another of the respondents thought that as the model is forward looking, and with the increasing penetration of Distributed Generation, lines will exist purely to facilitate generation. It would be reasonable to include these lines in a “scaled down” network model. If the network was rebuilt, these lines would also have to be rebuilt and the model should take account of this.

7.19 The third respondent believed the methodology would need to include a load flow

analysis to determine the utilisation of existing assets by generation and/or demand, and that a scaling factor could be produced to adjust inputs into the model.

- 7.20 The Working Group replied to the respondents who had views on how to improve the methodology by suggesting that if DCP 133 is implemented then new Change Proposals should be raised to address their specific issues. The intent of DCP 133 is to bring a common model under DCUSA Governance.

Question 8 - Where there is a difference in DNO design policy which could result in differences in the values entered into the HIDAM by DNOs for similar assets, should the input value for the asset be fixed by the Working Group? For example, it could be specified what forced cooling rating to enter into the model. This would improve consistency across DNOs and make the input values more predictable; however, the differences in cost incurred due to different DNO design policies would not be reflected in the HIDAM output.

- 7.21 The Working Group noted that six of the nine respondents believed the input value for assets should not be fixed.
- 7.22 Two of the respondents believed the input value should be fixed, to which the group responded that they had to address the balance between reflecting DNOs operation of the networks and having standardised inputs. The Group felt that it is more appropriate for the proposed approach to allow DNOs to use the values used in their operational practice.

Question 9 - Do you agree that the existing spread of HV/LV transformers relative to transformers added to the network in the last five years should be fixed at 50/50? This would improve consistency across DNOs and make the input values more predictable; however, the input values may be less representative of DNOs forward looking expectations than the otherwise might be the case.

- 7.23 The Working Group noted that the majority of the respondents tended to agree in principle with the approach proposed and therefore would not amend the wording. It is suggested that if respondents still have concerns following the implementation of DCP 133, then a DCP specific to this issue can be raised in the future.

Question 10 - Do you agree that proportions for other inputs (for example, the proportion of overhead cables to underground cables) should not be locked down to the existing percentages by the Working Group and that DNOs should provide a comment against the inputs in the model justifying the adjustment value chosen? If you believe they should be locked down please provide details of what value they should be locked down to.

- 7.24 The Working Group noted that the majority of the respondents agree that it should not be locked down, and if there are still concerns then they should be addressed through future DCPs.
- 7.25 One of the respondents suggested that a more appropriate approach is to lock down the inputs using existing percentages. The Working Group stated that this is a forward looking model and should be allowed to reflect the networks appropriately as they develop.

Question 11 - Do you agree with the approach taken in the methodology to meet the minimum specification for p2/6 compliance and the way of capturing costs to meet average UK performance for customer interruptions per fault?

- 7.26 The Working Group noted that the majority of the respondents agreed with the approach taken in the methodology and that the method of establishing the costs correctly allocates additional cost to users that benefit from the equipment.

Question 12 - What are your views on allowing DNOs to add additional costs to meet their own current design standards?

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

Respondent Type	Response			
	Allow	Do Not Allow	No View	Total
DNO	4	1	1	6
Supplier		2	1	3
Total	4	3	2	9

- 7.28 The Working Group noted that four of the nine respondents were in agreement to allow DNOs to add additional costs to meet their own current design standards.
- 7.29 Three of the respondents believed this to be over what is required to achieve a “minimum cost network” and that the Common 500MW Network Model should only meet the minimum specification for p2/6 compliance.
- 7.30 The Working Group believed that allocating additional costs to their correct network level allocates that cost to users that are either causal or beneficiaries and so is an appropriate approach. This is generally supported by respondents.

Question 13 - The HIDAM model calculates more accurate power factors than currently used in the CDCM model. Do you believe that these more accurate power factors should be used in the CDCM?

- 7.31 The Working Group noted that four of the nine respondents did not believe that a single power factor should be used for both models.
- 7.32 Three of the nine respondents believed that the same factors should be used in both models as the increased accuracy would improve the input into the CDCM.
- 7.33 One of the respondents believed that an impact assessment would need to be undertaken to understand the impact of using more accurate power factors.
- 7.34 The Working Group acknowledged that the term ‘power factor’ as used in Schedule 16 would have to be clarified. The text in Schedule 16 was worded so that the 500MW model and the CDCM power factor were one and the same. The legal text was amended to make it clear that the CDCM uses the standard design power factor of 0.95.
- 7.35 The Group acknowledged that more accurate power factors could be used in the CDCM; however they felt that this was outside of the scope of this Change Proposal and should be reviewed subject to this Change Proposal being implemented.

Question 14 - Do you agree that updating the CDCM to include the HIDAM calculated power factors, rather than the assumed 0.95 power factor, is outside within the scope of DCP 133?

- 7.36 The Working Group acknowledged that the majority of the respondents agree that updating the power factor used in calculations within the CDCM methodology is outside the scope of the DCP.
- 7.37 As noted in response to question 13, the text of Schedule 16 has been revised to make this clear.

Question 15 - Do you believe that the diversity allowances calculated in the HIDAM should be used in the CDCM, as opposed to the current situation where diversity allowances are calculated outside the CDCM and are also a “smoothed” 3 year average (as per implemented DCUSA change proposal DCP087 - ‘Smoothing Load Characteristics and Peaking’).

Respondent Type	Response			
	Use Same Allowances	Use Different Allowances	No View	Total
DNO	4	2		6
Supplier		2	1	3
Total	4	4	1	9

7.38 The Working Group noted that four of the nine respondents believed that the diversity allowances calculated in the Common 500MW Network Model should also be used in the CDCM, as it will improve consistency between the two.

7.39 Four of the nine respondents believed that the diversity allowances used should be separate as the models are based on different assumptions, and that the diversity allowances calculation in CDCM is sufficient for its own purpose.

7.40 Two respondents identified that the current requirement is to provide 15 months' notice of the revised input value rather than a smoothed 3 year average.

7.41 The Working Group noted the responses and acknowledged the differing viewpoints, and if DCP 133 is implemented further CPs could be raised to clarify the use of diversity factors within the CDCM, this is also supported with the responses to question 16.

Question 16 - Do you agree that updating the CDCM to include the HIDAM calculated diversity factors is outside the scope of DCP 133?

7.42 The majority of the respondents agree that this is outside of the scope of DCP 133, because the intent of the Change Proposal is to develop a Common 500MW Network Model and not modify the CDCM.

Question 17 - The Working Group has not included indirect costs in the HIDAM model do you agree with this position?

7.43 The Working Group noted that all respondents who commented agreed with the conclusions of the working group.

Question 18 - Do you agree with the assumptions and methodology as set out in the legal text (Appendix D)? If no, please provide alternative proposals?

- 7.44 The Working Group noted that the respondents agreed with the assumptions and methodology as set out in the legal text. It was suggested by one respondent that the assumptions and methodology set out in the legal text is too lengthy and over complicated, however the Working Group reviewed this response and believe that they have delivered a solution that meets the needs of the Change Proposal.

Question 19 - Do you agree that the methodology should be incorporated into the DCUSA, as opposed to being maintained outside the DCUSA with only the model itself under DCUSA governance?

- 7.45 The Working Group noted that the respondents are all in agreement that the methodology should be incorporated into the DCUSA, as having the Common 500MW Network methodology and model under open governance will only serve to increase transparency and allow other interested parties to offer alternative solutions not yet proposed. If not within DCUSA, it is likely that the commonality would be lost over time.

Question 20 - Should the methodology be incorporated into DCUSA as an annex to Schedule 16 or should it be added as a new schedule?

- 7.46 The Working Group noted that the majority of the respondents agreed that it should be incorporated as an annex to schedule 16 as the methodology in this change is linked to the CDCM.

Question 21 - Do you have any other comments on the legal text?

- 7.47 Two of the nine respondents provided comments which the Working Group agreed with and amended the legal text accordingly.
- 7.48 Another respondent suggested that the legal text is onerous on all parties, over complicated and in fact is larger than that for the CDCM and EDCM models. The respondent believes it needs to be substantially reduced to be workable. The Working Group acknowledges this, but believes they have delivered a solution with clarity that meets the needs of the change proposal.
- 7.49 The six other respondents had no comments.

Question 22 - Are there any alternative solutions or matters that should be considered?

- 7.50 The Working Group noted that the majority of respondents did not have any alternative solutions to be considered, however, it was noted that there were concerns raised by three respondents.
- 7.51 The Working Group acknowledged these concerns but believe the methodology as proposed is an appropriate starting point and further areas for future improvement will now be able to be addressed via the DCUSA Change Process.

Question 23 - Are there any unintended consequences of this proposal? If yes, please provide details.

- 7.52 The Working Group noted that the majority of the respondents did not see any unintended consequences of the DCP being implemented.
- 7.53 One respondent was not convinced that the Common 500MW Network Model methodology has been applied in a common manner across DNOs, since the variations in a number of the outputs being entered into the CDCM have actually increased significantly rather than reduced. The Working Group believes that the solution if implemented, introduces greater commonality and the methodology will be contained within the DCUSA governance. Consequently, the working group feels that this will be an appropriate starting point and further areas for future improvement will now be able to be addressed via the DCUSA Change Process.
- 7.54 Two respondents believe that the unintended consequences would be extra time and resources required to update the model and the time and resource that would be required to maintain open governance of the model due to its lack of transparency. The group noted that the model guidance suggests that the model should be updated about every 3-5 years with costs updated on an annual basis and consequently do not believe this represents a disproportionate amount of time and effort to maintain.

Question 24 - Do you consider that the proposal better facilitates the DCUSA objectives?

- 7.55 The Working Group noted that the majority of respondents agreed that the proposal better facilitates the DCUSA objectives.
- 7.56 The Working Group acknowledged the concerns raised by two respondents regarding transparency, complexity and commonality are valid points to be raised. However, it is noted that when bringing in a complex model which demonstrates how the DNOs had calculated these values, which was previously outside the governance of DCUSA, will be a significant step into improving the transparency for all Parties concerned. In doing this, the objectives of DCUSA will be better facilitated, and will also give Parties the opportunity to raise changes to the methodology in the future.

Question 25 - Are you supportive of the proposed implementation date of the next release following Authority consent?

- 7.57 The Working Group noted that the majority of respondents agreed with the proposed implementation date.
- 7.58 One respondent was not supportive of the implementation date and believes that the proposed model requires a complete review before implementation can be considered. The majority of the Working Group believes the model brings forward many benefits to the Charging methodology and any perceived weaknesses can be addressed through the DCUSA Change Process.

Question 26 - Please state any other comments or views on the Change Proposal.

- 7.59 The Working Group noted that the majority of the respondents had no comments.
- 7.60 One respondent, although supportive of the proposed Common 500MW Network Model, did not believe it has been applied correctly and is not fit for purpose. The Working Group acknowledged this comment, however the majority of the Group believe that the model brings forward many benefits to the Charging methodology, and should any problems arise if implemented Change Proposals can be raised.

8 WORKING GROUP ASSESSMENT OF DCP 133 FOLLOWING INDUSTRY CONSULTATION

- 8.1 After reviewing the consultation responses the Working Group discussed the Change Proposal and refined the DCP 133 legal text. The final version of the DCP 133 legal text is provided as Attachment 1.
- 8.2 The Working Group made changes to the legal text to clarify that the power factor used in the CDCM should continue be the standard design power factor of 0.95 and therefore remain unchanged as a consequence of this DCP.
- 8.3 The Working Group have also made subsequent changes to Paragraph 17 of the legal text to ensure that all network levels in the 500MW Network Model methodology are also stated in that paragraph. The Group believe that the omission of the missing network levels was an oversight when the CDCM was adopted into the DCUSA. This change in the text is purely for completeness and reflects current practice.

9 ENGAGEMENT WITH THE AUTHORITY

- 9.1 Ofgem has been fully engaged throughout the development of DCP 133 as a member of the Working Group.

10 ASSESSMENT AGAINST THE DCUSA OBJECTIVES

- 10.1 The majority of the Working Group has identified that DCP 133 better facilitates the following DCUSA Objectives.

Charging Objective One – ‘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’

- 10.2 The Common 500 MW Model provides greater consistency between companies in the tariff modelling used to underpin the CDCM charging methodologies, thereby enhancing the transparency and cost reflectivity of charges. This helps facilitate compliance with the statutory duty on licensees to develop and maintain an efficient, coordinated and economical system of electricity distribution.

Charging Objective Two – ‘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)’

- 10.3 The Common 500MW Network Model will provide greater commonality in tariff modelling and will through the CDCM help to facilitate competition in the generation and supply of electricity through allowing greater transparency and consistency in the detailed application of charging methodologies.
- 10.4 The use of the common model will retain and enhance the benefits to competition of existing common charging methodologies.
- 10.5 The Working Group notes that the Common 500MW Network model represents a demand network and is not forward looking with respect to generation.
- 10.6 The populated models used by the DNOs will not be published in keeping with the legal advice obtained as this could be detrimental to competition.
- 10.7 The Working Group believes that in the round Charging Objective Two is better facilitated.

Charging Objective Three –‘that compliance by each DNO Party with the Charging Methodologies results in charges which, so far as is reasonably practicable after taking account of implementation costs, reflect the costs incurred, or reasonably expected to be incurred, by the DNO Party in its Distribution Business’

- 10.8 The Common 500 MW Model will allow greater commonality in tariff modelling to be used in the common charging methodologies and assist in enhancing cost reflectivity of charges. This will help ensure that the relevant CDCM charging methodology, results in charges on the basis of costs incurred, or reasonably expected to be incurred, by the licensee in its Distribution Business.

Charging Objective Four –‘that, so far as is consistent with paragraphs 13A.6A to 13A.9, the CDCM, so far as is reasonably practicable, properly take account of developments in each DNO Party’s Distribution Business’

- 10.9 The introduction of a greater commonality in tariff modelling has certain mandatory requirement for data however the proposals for governance ensure that, where appropriate, developments in the distribution business in areas such as network design practices and procurement procedures will be able to be reflected in modification proposals submitted.

10.10 The implementation of this change will enable distribution businesses to meet their Licence Condition 13A.clause13A.6A.

General Objective Two – ‘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’

10.11 The Common 500 MW Model will provide greater commonality in tariff modelling and will through the CDCM and EDCM help to facilitate competition in the generation and supply of electricity through allowing greater transparency and consistency in the detailed application of charging methodologies.

10.12 The use of the common model will retain and enhance the benefits to competition of existing common charging methodologies.

10.13 The Working Group notes that the Common 500MW Network Model represents a demand network and is not forward looking with respect to generation.

10.14 The Working Group believes that in the round General Objective Two is better facilitated.

General Objective Three – ‘The efficient discharge by the DNO Parties and IDNO Parties of obligations imposed upon them in their Distribution Licences’

10.15 The implementation of this change will introduce a common model based upon a single methodology to all DNO parties to enable them efficiently comply with the obligation imposed upon them.

11 PROPOSED LEGAL TEXT

11.1 The DCP 133 legal drafting proposes to amend text in DCUSA Schedule 16. It also proposes to add the 500MW Network Model methodology as an annex to DCUSA Schedule 16.

11.2 The proposed legal drafting for DCP 133 is provided as Attachment 1.

12 IMPLEMENTATION

- 12.1 The proposed implementation date for DCP 133 is 6 November 2014, in line with the DCUSA release schedule.
- 12.2 The applicable input tables in the CDCM are subject to a 15 month notice period, this enables suitable notice period for customers and Suppliers to allow for the changes that are required.
- 12.3 The output from the DCP 133 500MW model must therefore be published by DNOs 15 months before it is used in the calculation of DUoS tariffs. Any future updates to the model itself or its inputs would also be subject to this notice period requirement.
- 12.4 For demonstration purposes, the following timetable provides an overview of the dates associated with an implementation date of 6 November 2014.

Date	Event
6 November 2014	DCP 133 implementation
December 2014	DNOs publish: <ul style="list-style-type: none"> April 2015 indicative CDCM and EDCM tariffs based on existing 500MW models Notice of the Common 500MW Network Model outputs that will be used in the calculation of April 2016 CDCM and EDCM tariffs
1 April 2015	Tariffs for the 1 April 2015 to 31 March 2016 charging period take effect.
December 2015	DNOs publish: <ul style="list-style-type: none"> April 2016 indicative CDCM and EDCM tariffs based on Common 500MW Network Model data (as published the previous December) Notice of the Common 500MW Network Model outputs that will be used in the calculation of April 2017 CDCM and EDCM tariffs
1 April 2016	Tariffs for the 1 April 2016 to 31 March 2017 charging period take effect. These are the first CDCM and EDCM tariffs that incorporate the new Common 500MW Network Model I in the calculations.

13 ENVIRONMENTAL IMPACT

- 13.1 In accordance with DCUSA clause 11.14.6, the Working Group assessed whether there would be a material impact on greenhouse gas emissions if DCP133 were implemented. The Working Group did not identify any material impact on greenhouse gas emissions from the implementation of this Change Proposal.

14 PANEL RECOMMENDATION

- 14.1 The Panel approved this Change Report on 18 June 2014. The Panel considered that the Working Group had carried out the level of analysis required to enable Parties to understand the impact of the proposed amendment and to vote on DCP 133.
- 14.2 The timetable for the progression of the Change Proposals is set out below:

Activity	Date
Change Report approved by DCUSA Panel	16 July 2014
Change Report issued for voting	18 July 2014
Voting closes	1 August 2014
Change Declaration	5 August 2014
Authority Decision	9 September 2014
Implementation	6 November 2014

15 NEXT STEPS

- 15.1 Parties are invited to consider the proposed amendment (Attachment 1), together with the Consultation documentation (Attachment 3) and submit their votes using the Voting form (Attachment 4) to DCUSA@electralink.co.uk by **1 August 2014**.
- 15.2 If you have any questions about this paper or the DCUSA Change Process please contact the DCUSA by email to DCUSA@electralink.co.uk or telephone 020 7432 3016.

ATTACHMENTS

- Attachment 1 – Proposed Legal Drafting
- Attachment 2 – Annex A to Schedule 16
- Attachment 3 – DCP 133 Consultation Document
- Attachment 4 - Voting Form
- Attachment 5 – DCP 133 Change Proposal

- Attachment 6 – Common 500MW Network Model
- Attachment 7 – User Manual
- Attachment 8 – Impact Assessment