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Proposed variation:	**Distribution Connection and Use of System Agreement (DCUSA) DCP133 – 500MW Network Common Model for CDCM Input**		
Decision:	The Authority[1] does not direct this modification[2] be made[3]		
Target audience:	DCUSA Panel, Parties to the DCUSA and other interested parties		
Date of publication:	10 September 2014	Implementation Date:	n/a

Summary

We have decided not to direct this modification to be made to DCUSA. In our original decision to approve the Common Distribution Charging Methodology (CDCM) in 2009, we suggested that greater commonality of the principles guiding the 500 megawatt (MW) network model, currently used as an input to the CDCM, should be an area of further development. This modification proposes the use of a common 500MW model by all Distribution Network Operators (DNOs) rather than using company specific models. However, it does not provide evidence to support the case that the use of a common 500MW model would improve the methodology when judged against the charging objectives.

Background to the modification proposal

The electricity DNOs currently use a hypothetical 500MW model to derive input data for the model used for the CDCM. These data are used to develop incremental costs which feed directly into the different charges produced through the CDCM.

The use of 500MW as the increment was established at the start of the common methodology. It reflects previous practice which led the DNOs to have different models showing changes based on a change of that size. The models currently used by the DNOs are consistent with the guidelines included in the CDCM user manual, published by the Electricity Networks Association (ENA)[4]. Each DNO is free to develop its own 500MW model in accordance with its specific needs and circumstances. The models are supposed to be representative of each DNO's network including: topography, diversity, customers' locations, consumption patterns and other characteristics.

On 20 November 2009 we published our Decision Document *'Electricity distribution structure of charges: the common distribution charging methodology at lower voltages'* approving the CDCM, subject to a small number of conditions and areas for further development. One of the areas for further development was *'Commonality of the network (500MW) model'* (para 2.34) where we stated:

". . . The DNOs have developed guidance containing a set of principles and instructions that all DNOs should follow when developing the 500MW network model. While this guidance is a good beginning, we expect that further work towards commonality on the principles guiding the network model should be taken up by the industry under open governance arrangements.".

The Decision Document (para 2.43) said:

[1] References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work.
[2] "Change" and "modification" are used interchangeably in this document.
[3] This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.
[4] CDCM model user manual, ENA, 28 February 2013

". . . It is also important to ensure commonality in the derivation of inputs and to consider whether standardisation of certain assumptions within the method across DNOs would be appropriate in certain circumstances.".

This proposal responds to these suggestions for further development.

The modification proposal

The modification was raised by UK Power Networks on 10 May 2012. It proposes to introduce a common 500MW network model to be used by all the DNOs. All DNOs would replace their existing 500MW methodology and models with the common methodology and model.

The proposed common model calculates the asset costs at network level as inputs to the CDCM and the EHV distribution charging methodology (EDCM).

The models currently used by the DNOs have numerous differences in definition and calculation. These include how assets are defined, where network level boundaries fall, data sources, constraint conditions and ways in which network lengths are determined, all of which would be harmonised through this proposal. Several other features including how transformers are configured, unit costs and the ratio of underground cables versus above ground lines, will remain unique to each DNO.

The modification was developed and examined in detail by the DCUSA working group which undertook a detailed impact analysis followed by a consultation. The impact analysis comprised a schedule of tariffs and revenues with and without the change.

The industry report to us claims that the proposal better facilitates DCUSA general objectives 2 and 3, and charging objectives 1, 2, 3 and 4. The Report, the consultation responses and the change declaration, however, also included statements from various parties who disagreed and /or felt that such statements were unproven.

The modification proposes the adoption of the common methodology and model by the DNOs with the methodology incorporated into DCUSA.

The working group, after taking legal advice, concluded that the populated models should not be placed in the public domain, as it considered that the sharing of cost and other information could be a breach of competition law.

DCUSA Parties'[5] recommendation

The Change Declaration for DCP133 indicates that all parties were eligible to vote. In each party category where votes were cast (no votes were cast in the distributed generation (DG) and gas supplier categories), there was majority support for the proposal from DNOs and Suppliers, but a unanimous rejection by Independent DNOs / Offshore Transmission System Operators (IDNO/OTSOs). In accordance with the weighted vote procedure, the industry's recommendation is that the DCP133 change solution and its proposed implementation date should be rejected. The outcome of the weighted vote is set out in the table below:

[5] The DCUSA Parties are established and constituted pursuant to and in accordance with the section 1A of the DCUSA Agreement.

DCP133	Weighted voting (%)									
	DNO		IDNO/ OTSO[6]		Supplier		DG[7]		Gas supplier[8]	
	A	R	A	R	A	R	A	R	A	R
Change solution	67	33	0	100	75	25	n/a	n/a	n/a	n/a
Implementation date	67	33	0	100	75	25	n/a	n/a	n/a	n/a

Our decision

We have considered the issues raised by the industry report and the Change Declaration dated 5 August 2014. We have considered and taken into account the vote of the DCUSA Parties on the proposal attached to the Change Declaration. We have concluded that implementation of the change proposal DCP133 has not been demonstrated to better facilitate the achievement of the DCUSA Charging Objectives[9].

Reasons for our decision

We have set out below our assessment against the DCUSA Charging Objectives affected by the modification. We consider the modification has a neutral effect in relation to the other DCUSA Charging Objectives.

DCUSA Charging Objective 3.2.1 – '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'

The proposal states that it will provide greater consistency between companies in the tariff modelling used to underpin the CDCM, thereby enhancing the transparency and cost reflectivity of charges. It states that this helps facilitate compliance with the statutory duty on licensees to develop and maintain an efficient, coordinated and economical system of electricity distribution. However, the proposal provides no evidence that this will improve DNOs' efficiency. In some cases the model introduces greater complexity in the charging process and additional administrative burdens in data collection and model updating, contrary to the objective of improved efficiency. Although we agree that greater commonality may provide greater consistency between companies, we remain unconvinced that this proposal will better facilitate this charging objective.

DCUSA Charging Objective 3.2.2 – '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)'

The working group considers that greater commonality in charging improves competition through greater transparency and consistency. Some parties have expressed concerns, however, that insufficient evidence has been provided to demonstrate that competition would be improved. Furthermore, the models will not be placed in the public domain. Some members of the working group felt this would undermine any potential advantage

[6] No votes were cast in this category of Parties
[7] No votes were cast in this category of Parties
[8] No votes were cast in this category of Parties
[9] The Applicable Charging Methodology Objectives (Charging Objectives) are set out in Standard Licence Condition 22A Part B of the Electricity Distribution Licence and are also set out in Clause 3.2 of the DCUSA.

in competition. The working group considered that in the round this objective would be better facilitated.

Although proponents of the proposal claim that greater commonality of inputs could better facilitate competition, the proposal provides no evidence to support this. Based upon the figures provided in the impact analysis, we undertook a more detailed examination to identify the impact of a common model on the degree of tariff and revenue variance between the DNOs[10]. The variance appeared to increase as a result of this proposal. Although this does not necessarily suggest a worsening of competition, it supports our view that competition is not improved as a result. The evidence presented, our subsequent check and the constraint that the models would not be published, suggest that there is no benefit to competition resulting from this proposal.

DCUSA Charging Objective 3.2.3 –'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'

The proposal states that it will allow greater commonality in tariff modelling to be used in the CDCM and assist in enhancing cost reflectivity of charges. The industry report and the Change Declaration both included statements from parties saying that this was unproven. In some areas, such as diversity factors and power factors, the inputs into the common model and those applied to the CDCM differ, and this may adversely impact on cost reflectivity.

The use of a common 500MW model could improve cost reflectivity if it is a more accurate reflection of costs than all, or most, of the existing 500MW models currently used by the DNOs. There is, however, no firm evidence that there would be such an improvement. We note that the model results in variation of charges but it is not clear as to whether such variations are due to better or worse cost reflectivity or other factors such as the impact of changes to diversity factors and reactive power assumptions employed in the model. We therefore do not consider we have been provided with evidence that the proposal better facilitates this objective.

DCUSA Charging Objective 3.2.4 –'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'

The report states that the introduction of greater commonality in tariff modelling would introduce certain mandatory data requirements. However, the report notes that the proposals for governance would ensure that developments in the distribution business in areas such as network design practices and procurement procedures would be able to be reflected in modification proposals submitted. We consider that the proposal is neutral in relation to this objective as the current arrangements already enable changes to be made to reflect developments in each DNO party's business.

Other issues

We welcome industry exploring whether greater commonality in this case would bring benefits. As discussed above, the outcome of this work has not demonstrated that the

[10] The analysis comprised an examination of the degree of variance (standard deviation) around the average of tariffs and revenues with and without the change proposal.

proposal would better facilitate the DUCSA Charging objectives. We are therefore not directing that this change should be made. Whilst a matter for industry parties, we recommend that, before any similar modification is developed in the future, the industry reassesses whether there is a case in terms of consumer benefits to pursue this area of work further.

Andrew Burgess
Associate Partner, Transmission and Distribution Policy
Signed on behalf of the Authority and authorised for that purpose