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Proposed variation:	**Distribution Connection and Use of System Agreement (DCUSA) DCP138 – Implementation of alternative Network Use Factor (NUF) calculation method in EDCM**		
Decision:	The Authority[1] directs this modification[2] be made[3]		
Target audience:	DCUSA Panel, Parties to the DCUSA and other interested parties		
Date of publication:	9 October 2015	Implementation date:	1 April 2017

Background

On 6 September 2011, Ofgem published its decision to approve the Extra high voltage Distribution Charging Methodology (EDCM) for import charges. We set out three conditions in our decision to approve.[4] One of these, Condition 3[5], relates to the methodology for determining "network use factors" (NUFs), which in turn determines the allocation of Distribution Network Operator (DNO) costs and demand scaling to import tariffs.

An NUF is the value of assets, at a given network level, used to supply a unit of power (kW) to a specific EDCM demand customer relative to the average value of assets at the same network level used to supply a unit of power to a Common Distribution Charging Methodology (CDCM) customer. For example, a NUF of two would indicate that the EDCM customer uses twice as many assets to serve it as the average CDCM customer.

Under the current methodology, NUFs are calculated by apportioning the entire cost of an asset to those who use it. This remains the case even if a portion of the asset capacity is "unused" or "spare". Consequently, the full value of the asset is allocated amongst the customers that use it at maximum demand, even if there is unused capacity ("spare capacity") on the asset. Asset capacity can be increased or decreased only in discrete increments and will therefore not match required capacity. Furthermore, unused capacity may arise as a result of other operating parameters rather than demand.

The EDCM recognises that in some cases the allocation of costs may be excessive and unreasonable in cases where there is significant excess capacity or, in generation dominated areas, where the asset may exist primarily to accommodate generation export. The NUFs are subject to caps and collars to limit the impact on such outliers. They are calculated on the basis of the 15th and 85th percentile of the NUFs greater and less than 1 respectively and are applicable to all DNOs.

In response to our consultation[6] ahead of our approval of the EDCM in September 2011, respondents generally agreed that costs associated with spare capacity should not necessarily be borne by the user of the asset. A number of respondents suggested that

[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. This decision is made by or on behalf of GEMA.
[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] Ofgem (2011) Electricity distribution charging: decision on the methodology for higher voltage import charges, ref 116/11 is available here: https://www.ofgem.gov.uk/publications-and-updates/electricity-distribution-charging-decision-methodology-higher-voltage-import-charges
[5] Condition 3 required the DNOs to conduct further investigations into:
- the circumstances in which it may or may not be appropriate to socialise spare capacity costs and the different options which could be used to do this,
- the materiality of the impact on customers charges" and whether these can be justified, and
- a well reasoned recommendation to change the methodology or a well reasoned report saying why no change is necessary.

[6] https://www.ofgem.gov.uk/publications-and-updates/electricity-distribution-charging-methodologies-distribution-network-operators'-dnos-proposals-higher-voltages

this issue may require further work to understand the circumstances in which it arises and the impact on customers.

In response to Condition 3, the DNOs proposed and then consulted on a revised methodology for calculating NUFs. In June 2012, the Energy Networks Association (ENA) published a report 'EHV Distribution Charging Methodology (EDCM) - Report on Condition 3'[7] that proposed an alternative approach to determining NUFs.

The revised methodology put forward in the ENA report is to allocate the costs associated with spare capacity amongst all demand customers. Spare capacity in this instance is defined as the unused capacity under maximum contingency flow conditions.[8] DCP138 seeks to introduce the revised methodology for calculating NUFs in the EDCM model set out in the DCUSA.

We confirmed that we were satisfied that Condition 3 had been fulfilled in our decision of 6 November 2014 (included as Attachment 5 to the DCP138 Change Report).

The modification proposal

DCP138 (the "proposal") was originally raised by SSE Power Distribution Limited on 6 July 2012 following the ENA's report.[9] It seeks, in line with the report's recommendations, to:

1. redetermine the NUFs based upon allocating the costs of spare capacity amongst all demand customers (including CDCM customers), and
2. revise the method of determining the caps and collars for the NUFs to accommodate the change in 1) above.

As a result of our 2014 decision, the proposal was developed and consulted upon by an industry workgroup (the DCP138 Workgroup). A first Workgroup consultation on the proposal in May 2015 received six responses. Respondents generally supported the proposal but some questioned the appropriateness of the proposed implementation date of 1 April 2016. The Workgroup agreed that an implementation date of 1 April 2017 would be more appropriate to give affected customers more notice of changes to the new NUFs calculation methodology.

The Workgroup issued a second consultation in July 2015 to give DCUSA Parties an opportunity to comment on the revised implementation date and the proposed legal text to accompany the revised proposal. This consultation also included a change to the 'caps and collar' NUFs calculation timeline in Schedule 17 and Schedule 18 of DCUSA. Seven responses were received. The respondents generally agreed with the revised implementation date and the proposed changes to the 'caps and collar' NUFs calculation timeline.

The Workgroup conducted an assessment of the impact of this proposal on EDCM revenues and on CDCM customers. For ten of the fourteen DNOs, the EDCM revenues would fall by less than 10% as a result of this change. One DNO's EDCM revenue would fall by nearly 20%. Three DNOs would see their EDCM revenues increase by between 4.1% and 6.4%. The subsequent impact on CDCM customers is small.[10]

[7] Provided as Attachment 3 to the DCP138 Change Report.
[8] Maximum contingency flow is the maximum post-contingent flow through the asset in MVA. The maximum post-contingency asset flows are derived from the 'locational' power flow analyses.
[9] Although the proposal was raised in July 2012 the Workgroup deferred action on this until Ofgem confirmed that condition 3 had been fulfilled.
[10] The maximum and minimum movements in the domestic unrestricted tariff unit rate are 0.8% and -0.4% respectively. For HV HHM unit rates maximum and minimum movements to the unit rate 1 tariff movement in the HV HHM unit rate 1 tariff is 1.5% and -0.6% respectively.

The Workgroup's view, as stated in the first consultation document, was that this proposal better facilitates DCUSA charging objectives 1 to 4 and is neutral with respect to charging objective 5.

The respondents to both consultations generally agreed with the views of the Workgroup. The comments received alongside the party vote also generally agreed with the Workgroup's views.

DCUSA Parties' recommendation

The Change Declaration for DCP138 indicates that all parties were eligible to vote on DCP138. In each party category where votes were cast, there was unanimous support for the proposal and for its proposed implementation date. In accordance with the weighted vote procedure, the recommendation to the Authority is that DCP138 is accepted. The outcome of the weighted vote is set out in the table below.

DCP138	WEIGHTED VOTING (%)									
	DNO		IDNO/OTSO[11]		SUPPLIER		DG[12]		Gas Supplier	
	Accept	Reject	Accept	Reject	Accept	Reject	Accept	Reject	Accept	Reject
CHANGE SOLUTION	100%	0%	n/a	n/a	100%	0%	n/a	n/a	n/a	n/a
IMPLEMENTATION DATE	100%	0%	n/a	n/a	100%	0%	n/a	n/a	n/a	n/a

Our decision

We have considered the issues raised by the proposal and the Change Declaration and Change Report dated 8 September 2015. We have considered and taken into account the vote of the DCUSA Parties on the proposal which is attached to the Change Declaration. We have concluded that:

- implementation of the modification proposal will better facilitate the achievement of the DCUSA Charging Objectives;[13] and
- directing that the modification be made is consistent with our principal objective and statutory duties.[14]

Reasons for our decision

We consider this modification proposal better facilitates DCUSA Charging Objectives 3.2.1, 3.2.2, 3.2.3 and 3.2.4 and is neutral with respect to DCUSA Charging Objective 3.2.5.

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'

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

[11] Independent Distribution Network Operator/Offshore Transmission System Operator
[12] Distributed Generation
[13] The DCUSA Charging Objectives (Relevant 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.
[14] The Authority's statutory duties are wider than matters that the Parties must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

transmission or distribution of electricity or in participation in the operation of an Interconnector (as defined in the Distribution Licences)'

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'

DCUSA Charging Objective 3.2.4 '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'

We agree that this proposal better facilitates charging objectives 3.2.2 and 3.2.3 because it allocates only the proportion of the asset annuitised modern equivalent asset value (MEAV), which is deemed to be used by customers, to that EDCM customer in the calculation of NUFs. It ensures that an EDCM customer's charges reflect the proportion of the costs of the assets employed and prevents the costs of over-allocation of under-utilised assets to individual customers. Each EDCM customer will therefore be treated consistently and their charges will be based upon actual demand. Spare capacity can be utilised by other current and future customers and it is more cost reflective for the costs associated with this spare capacity to be distributed amongst all customers.

We also agree that this change proposal better facilitates charging objective 3.2.4 because it sets charges that are consistent with how the DNOs assess their networks and the need for future reinforcement.

DNOs are required by their licence to set their charging methodologies in a way that supports a number of relevant objectives, including cost reflectivity, facilitating competition and taking account of developments in the distribution businesses. As the change proposal better facilitates charging objectives 3.2.2, 3.2.3 and 3.2.4, we consider these improvements also enable the DNOs to better discharge their obligations under their licences and therefore the proposal better facilitates charging objective 3.2.1.

Legal text

The reference to paragraph 18.5 in revised paragraph 18.7 appears to be an error. We expect the DCUSA parties to correct or amend accordingly through a further change proposal. This does not affect our decision to approve this proposal.

Decision notice

In accordance with standard licence condition 22.14 of the Electricity Distribution Licence, the Authority hereby directs that modification proposal DCP138 *'Implementation of alternative network use factor (NUF) calculation method in EDCM'* be made.

Ian Rowson
Associate Partner, Regulatory Finance & Compliance
Signed on behalf of the Authority and authorised for that purpose