Proposed variation:	**Distribution Connection and Use of System Agreement (DCUSA) DCPs 341 and 342 – Removal of residual charging for storage facilities in the CDCM (341) and EDCM (342)**		
Decision:	The Authority[1] directs these modifications[2] be made[3]		
Target audience:	DCUSA Panel, Parties to the DCUSA and other interested parties		
Date of publication:	18 December 2019	Implementation date:	In accordance with clause 19.1B of Part 2A of DCUSA 1 April 2021

Background

For the distribution network, Distribution Network Operators (DNO) recover their allowed revenue from their customers through distribution use of system (DUoS) tariffs. The methodologies for calculating these tariffs are the Common Distribution Charging Methodology (CDCM) for customers connected to low voltage (LV) and high voltage (HV) networks and the Extra High Voltage Distribution Charging Methodology (EDCM) for customers connected to the extra-high voltage network.

In the calculation of DUoS tariffs, 'tariff scaling' is applied to unit charges. In the CDCM, the use of a fixed adder to 'scale' unit charges allows DNOs to recover their allowed revenue as pre-scaled tariffs are unlikely to recover the allowed revenue if they remain unaltered. Scaling is used to recover the 'residual' that is the difference between the target revenue and the revenue derived from pre-scaled tariffs. Residual charges are 'top up' charges set to ensure that the network's efficient costs, as determined through price controls, can be covered, after other charges have been levied.

In the CDCM, residual charges are applied as a unit charge (i.e. on a p/kWh basis) to demand customers. Whereas, for customers charged in the EDCM, residual charges are applied as a capacity charge (i.e. on a p/kVA/day basis).

In July 2017, in our joint plan with government, the Smart Systems and Flexibility plan, we said that storage facilities are not end consumers of energy.[4] Further, our view is that charging arrangements should not discriminate between storage and generation. With government, we identified a range of policy and regulatory barriers to the further deployment of storage. Specifically, we stated that the definition of storage, based on the definition proposed by the Electricity Storage Network, is a distinct subset of the generation asset class.

Following Targeted Charging Review (TCR) consultation, we indicated that storage facilities should not pay the distribution 'demand residual' element of network charges, when storage takes electricity from the network.[5] In order to deliver the changes as

[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] https://www.ofgem.gov.uk/system/files/docs/2017/07/upgrading_our_energy_system_-_smart_systems_and_flexibility_plan.pdf
[5] https://www.ofgem.gov.uk/system/files/docs/2017/03/tcr-consultation-final-13-march-2017.pdf

quickly as possible, we determined that charging arrangements for storage should not be included in the TCR Significant Code Review (SCR)[6]. Instead, we directed that changes to network charges for storage should proceed through the usual industry code modification process. In May and June 2018, Northern Powergrid Holdings Company proposed modifications DCPs 319 and 321, which sought to remove residual charges from all generators connected to the distribution network. These modifications were later withdrawn by the proposer due to interactions with the TCR SCR as they covered all distribution-connected generation and were not limited to storage.

The TCR SCR covers reform of residual charging for the distribution and transmission networks, for both generation and demand. As part of a TCR update on our approach to reviewing residual charging arrangements published in November 2017, we assessed two options for recovering residual charges that included charging only generation users or only final demand users.[7] From our assessment, we determined that there are considerable benefits to levying residual charges on final demand users only, compared to generation. In the TCR minded to decision consultation, we indicated that final demand users are end consumers who use the electricity supplied by electricity networks, whereas storage facilities are intermediate users of electricity which store electricity for later consumption.[8]

In January 2019, we published an open letter on the implications of our charging reform on electricity storage. We encouraged interested parties to raise new modifications that promptly address residual charging for standalone storage in the CDCM and EDCM.[9] DCP 341, 'Removal of residual charging for storage facilities in the CDCM' and DCP 342 'Removal of residual charging for storage facilities in the EDCM' were raised respectively for the CDCM and EDCM charges, with the two modifications progressing together.

The modification proposals

Electricity North West Limited (the 'Proposer') raised DCPs 341 and 342 on 31 January 2019. The Proposer argued that storage facilities are exposed at a greater level to residual charges as their imports typically exceed exports. In contrast, they argued that other generators will usually have small import volumes and import capacity and subsequently residual charges will form a much smaller component of their distribution network charges. As a result, the proposer asserted that storage is not competing on a level playing field with other generation connected to the distribution network. The intent of DCPs 341 and 342 is to ensure that storage, without co-located final demand, is not subject to residual charges for demand where the intent is to export the energy back onto the system.

DCP 341 proposes to introduce three new DUoS tariffs for CDCM customers. These would apply to the demand element of storage facilities and mirror the existing LV Half Hourly (HH) metered, LV sub HH metered and HV HH metered tariffs. The only difference is that

[6] https://www.ofgem.gov.uk/system/files/docs/2017/08/tcr_scr_launch_letter.pdf

[7] https://www.ofgem.gov.uk/system/files/docs/2017/11/tcr_working_paper_nov17_final.pdf

[8] https://www.ofgem.gov.uk/system/files/docs/2018/11/targeted_charging_review_minded_to_decision_and_draft_impact_assessment.pdf

[9] https://www.ofgem.gov.uk/system/files/docs/2019/01/storage_and_charging_reform_2201f.pdf

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they exclude the fixed adder applied to unit rates in the CDCM (ie the 'scaling' or residual element). The name of the new DUoS tariffs to be introduced are:

- LV Site Specific Storage Import;
- LV Sub Site Specific Storage Import; and
- HV Site Specific Storage Import

For the EDCM, the DCP 342 proposes to amend the calculations set out within Schedules 17 and 18 of DCUSA for demand scaling to indicate that storage facilities should not be subject to residual charges. In the EDCM, 80 per cent of the residual revenue is allocated on the basis of notional shared assets. The remaining 20 per cent of the difference between the EDCM demand revenue target and the sum of charges relating to direct operating costs, indirect costs and network rates is allocated using a £/kVA fixed adder. The fixed adder calculation will be set to zero to ensure no residual revenue shortfall is created by the removal of residual charging from storage sites. DCP 342 also removes the notional shared assets for storage sites from the residual revenue charging rate calculation.

DCPs 341 and 342 also introduce two new CDCM and EDCM storage facility definitions into the DCUSA that detail how DNOs could determine whether a licensed or unlicensed storage facility is eligible for exemption from residual charges under these change proposals. As suppliers are the registrant of the metering systems, these modifications propose that suppliers provide assurance to the DNO and Independent DNO parties that the storage facility meets the requirements for residual charges exemption where the metering systems is registered in a Meter Point Administration Service (MPAS) system. For storage facilities registered for Central Volume Allocation (CVA) purposes in the Central Meter Registration Service (CMRS), the storage facility itself will be required to provide confirmation that the eligibility requirements set out in the definition are met to qualify for an exemption.

DCUSA Parties' recommendation

In each party category where votes were cast (no votes were cast in the DG party category),[10] there was some support for the proposals and for their proposed implementation date. In accordance with the weighted vote procedure, the recommendation to the Authority is that DCP 341 and DCP 342 are accepted. The outcome of the weighted vote is set out in the table below:

DCP 341 and DCP 342	WEIGHTED VOTING (%)							
	DNO[11]		IDNO/OTSO[12]		SUPPLIER		DG[13]	
	Accept	Reject	Accept	Reject	Accept	Reject	Accept	Reject
CHANGE SOLUTION	39%	61%	100%	0%	100%	0%	n/a	n/a
IMPLEMENTATION DATE	53%	47%	100%	0%	100%	0%	n/a	n/a

[10] There are currently no gas supplier parties.
[11] Distribution Network Operator
[12] Independent Distribution Network Operator/Offshore Transmission System Operator
[13] Distributed Generation

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Our decision

We have considered the issues raised by the proposals, and the Change Declarations and Change Reports dated 13 August 2019. We have considered and taken into account the vote of the DCUSA Parties on the proposals, which are attached to the Change Declarations. We have concluded that:

- implementation of the modification proposals will better facilitate the achievement of the Applicable Charging Methodology Objectives;[14] and
- directing that the modifications be made is consistent with our principal objective and statutory duties.[15]

Reasons for our decision

We consider these modification proposals will better facilitate Applicable Charging Methodology Objectives 2 and 3 and has a neutral impact on the other relevant objectives.

Second Applicable Charging Methodology Objective – that compliance with the Relevant Charging Methodology 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 the participation in the operation of an Interconnector

The majority of the DCUSA respondents considered that the solutions presented in these change proposals would have a positive impact on the second charging methodology objective. The majority of respondents suggested implementation of these modifications would allow storage facilities to compete on a level playing field with generation technologies and so avoid distorting competition in the generation of electricity. In contrast, a few respondents suggested that these change proposals would reduce barriers to market participation for storage facilities only, creating a distortion with other generation.

Our position

We think the current charging arrangements are distortive and lead to network costs being disproportionately recovered from storage facilities that are at a relative disadvantage to generation, that provide the same or similar services. As we have previously stated, we want to see storage become a genuinely viable proposition in the energy system.[16] In the TCR decision and Impact Assessment, published in November 2019, we indicated that network licensees must bring forward modification proposals which deliver specific requirements.[17] We set out that electricity which is consumed other than for the purposes of generation or export onto the electricity network is defined as final demand. Generation only and storage only sites will therefore be exempt from

[14] The DCUSA Charging Objectives (Relevant Objectives) are set out in Standard Licence Condition 22A Part B of the Electricity Distribution Licence.
[15] 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.
[16] https://www.ofgem.gov.uk/system/files/docs/2017/07/upgrading_our_energy_system_-_smart_systems_and_flexibility_plan.pdf
[17] https://www.ofgem.gov.uk/system/files/docs/2019/11/tcr_final_decision.pdf

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residual charges. For the distribution network, we decided that residual reform should be implemented in 2022.

As such, we consider DCPs 341 and 342 to be 'stepping stones' towards an enduring solution that removes residual charges for storage with further work in this area needed to robustly levy residual charges on final demand users only. Despite the possibility that these change proposals will be superseded by an enduring solution following TCR implementation, we believe that approving these modifications will reduce barriers to deployment of storage facilities allowing opportunities presented by flexible technologies to be realised much sooner as we set out in the Smart Systems and Flexibility Plan.

With respect to encouraging competition in the generation and supply of electricity connected at transmission, we are mindful that other modifications seeking to ensure storage is treated as generation are with us for determination.[18] We have assessed DCPs 341 and 342 on their own merits; we believe this to be a reasonable and proportionate approach to addressing competition in line with the overarching policy intent. We will also consider any other existing change proposals with us for determination on their own specific merits. This decision does not fetter our discretion on other modifications in relation to storage.

Third Applicable Charging Methodology Objective – that compliance with the Relevant Charging Methodology results in charges that, so far as is reasonably practicable after taking account of implementation costs, reflect the costs incurred, or reasonably expected to be incurred, by a Distribution Services Provider in its Distribution Business

The majority of respondents to the consultation considered that the third charging methodology objective would be better facilitated by these change proposals. Respondents to the consultation and DCUSA party members observed that the application of residual charges on final demand only, had not been justified and that all demand should attract residual charges. Stakeholders noted how residual charges are levied on storage operators and generators for their imports may differ even though both are generation asset classes; storage being a distinct subset of generation.

Our position

Residual charges are cost recovery 'top up' charges set to ensure that the network's efficient costs can be recovered, after other charges, such as cost reflective demand charges have been levied. Storage facilities are intermediate users of electricity which store electricity for later consumption. Earlier in the TCR update on our approach to reviewing residual charging arrangements, we determined that there are considerable benefits to levying residual charges on final demand users only, compared to generation.[19] As such, we believe that residual charges are currently disproportionately recovered from storage facilities that are not final demand users.

In the TCR decision and Impact Assessment, we explained that final demand meant electricity which is consumed other than for the purposes of generation or export onto

[18] https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc/modifications/creation-new-generator-tnuos-demand-tariff
[19] https://www.ofgem.gov.uk/system/files/docs/2017/11/tcr_working_paper_nov17_final.pdf

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the electricity network.[20] In practice, this would exclude electricity imported from the network which is necessary for the operation of generation or, in the context of storage, which is imported for the purposes of re-exporting.

Stakeholder feedback argued that exemption of residual costs being limited to storage for these change proposals would create a distortion in how network costs are levied on individual generation asset classes. With the publication of the TCR decision and impact assessment, we envisage the charging regime will create a level playing field for storage and generation. In our view, implementation of DCPs 341 and 342 will reduce existing distortions to cost reflective signals on storage and demand customers until an enduring solution is implemented that robustly calculates final demand for the purposes of residual charging as specified in the TCR direction.[21]

Specifics of the Change Proposals

The scope of DCPs 341 and 342 covers standalone storage facilities only. These change proposals cover both licensed and unlicensed storage connected at the distribution level and are limited to electricity storage facilities that are current transformer (CT) metered and registered in MPAS or CMRS. The eligibility criteria for storage facility is detailed in the two definitions; Schedule 16 for CDCM and Schedules 17 and 18 for EDCM. The changes propose that either suppliers or the operator of the storage facility (where applicable) obtain confirmation of the eligibility of the storage facility according to the requirements set out in the DNOs' individual Licence Condition 14 (LC14) Use of System Charging Statements.

We acknowledge that in developing these change proposals, a pragmatic approach has been adopted to deliver the change reports to the Authority for determination in advance of the 1 October 2019 cut-off date to allow these modifications to be implemented by April 2021. Following the TCR decision and impact assessment, we consider DCPs 341 and 342 to be an interim solution pending implementation of the TCR decision which will provide for residual charges to be levied on final demand consumers only.

In view of this, we consider licensed and unlicensed storage to be exempt from residual charges. We expect that the process by which suppliers or storage facilities (as applicable) provide confirmation that the storage facility meets the criteria in order to qualify for the proposed storage tariffs is set out clearly by the DNOs in their LC14 charging statements. The process should be consistent across the DNOs and aligned for storage facilities connected at the distribution network level.

More generally, we would like to highlight a need for additional clarity in respect of the legal drafting definition of 'Eligible Electricity Storage Facility'. We think the ambiguity of having two identical defined terms with two different meanings, irrespective of the fact that the definitions relate to different schedules within DCUSA, can cause confusion. We encourage DCUSA parties to reconsider and raise a modification that will provide additional clarity and robustness as to which relates to CDCM and which the EDCM.

[20] https://www.ofgem.gov.uk/system/files/docs/2019/09/tcr_open_letter_sep_19.pdf

[21] https://www.ofgem.gov.uk/system/files/docs/2019/11/dcusa_direction_1.pdf

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Implementation of DCPs 341 and 342

We have carefully considered the benefits and implications of an April 2021 implementation date and informally consulted relevant stakeholders that are likely to be affected by the implementation of these modifications. A number of stakeholders have set out their concerns with an implementation date in April 2021 as it would not allow sufficient time to prepare revised charges ahead of the usual 15 months' notice for publishing charges. Those stakeholders are receptive to an implementation date of April 2021 for these modifications should the Authority allow DNOs to publish DUoS tariffs by issuing a direction that the requisite period of notice (15 months) for publishing DUoS charges need not apply (DCUSA Section 2A, Clause 19.1B).

In reaching our decision, we have considered postponing the implementation date to April 2022 to maintain the integrity of the three-month period for the calculation of DUoS charges and 15 months' notice for the publication of charges. We believe that it would ultimately further the interests of consumers to see changes to the charging regime that help towards creating a level playing field for storage earlier. We have consistently noted calls to modernise the regulatory environment for electricity storage and the possibilities that storage can provide that help to integrate low carbon generation, reduce the costs of operating the system and help avoid or defer costly reinforcements to the network.

The Authority hereby directs that the proposed implementation date for DCPs 341 and 342 is 01 April 2021. For DNOs to comply with the DCUSA implementation timelines, we are exercising our powers under DCUSA Section 2A, Clause 19.1B to direct that the 15 months' notice period set for publishing charges in 19.1A need not apply, the notice period shall be 40 days (without prejudice to any longer notice requirements prescribed by the Distribution Licence) in relation to the changes caused by this modification. We therefore stipulate the implementation date is 1 April 2021 under DCUSA Section 1C, Clause 14.2.

Following this decision, we invite DNOs that may not be able to fully implement and comply with their licence conditions and DCUSA obligations to seek a derogation and propose how they will implement these change proposals. DNOs may consider a means of implementing these change proposals in a way that minimises disruption to the wider industry, such as limiting changes to charges to those necessary to give effect to the new tariffs. Derogation requests should be sent to TCR@ofgem.gov.uk.

Decision notice

In accordance with standard licence condition 22.14 of the Electricity Distribution Licence, the Authority hereby directs that modification proposals DCP 341 and DCP 342 - *Removal of residual charging for storage facilities in the CDCM (341) and EDCM (342)* be made.

Andrew Self
Deputy Director, Electricity Access and Charging – Energy Systems Transition
Signed on behalf of the Authority and authorised for that purpose

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