




DCUSA Change Report		At what stage is this document in the process?
<h1>DCP 406 and DCP 406A</h1> <h2>Access SCR: Changes to CCCM</h2> <p><i>Date raised:</i> 06 May 2022</p> <p><i>Proposer:</i> Brian Hoy</p> <p><i>Company Name:</i> Electricity North West</p> <p><i>Company Category:</i> DNO</p>		01 – Change Proposal
		02 – Consultation
		03 – Change Report
		04 – Change Declaration
Purpose of the Change Proposals (DCP 406 and DCP 406A): The purpose of this change proposal (CP) is to implement parts of Ofgem's Access SCR Decision in respect of the Common Connections Charging methodology (CCCM). This CP seeks to address paragraphs 12 to 15 and 17 of the Access SCR Direction.		
	This document is issued in accordance with Clause 11.20 of the DCUSA, and details DCP 406 'Access SCR: Changes to CCCM'. Parties are invited to consider the proposed amendment (Attachment 1) and submit their votes using the Voting form (Attachment 2) to dcusa@electralink.co.uk by 12pm, 03 November 2022 . 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. 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 3011.	
	 Impacted Parties: Suppliers, CVA Registrants, DNOs and IDNOs	
	 Impacted Clauses: Schedule 22 – Common Connections Charging Methodology	

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Any questions?

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Timetable

The timetable for the progression of the CP is as follows:

Change Proposal timetable

Activity	Date
Initial Assessment Report	11 May 2022
Consultation issued to Industry Participants	12 August 2022
Change Report Approved by Panel	20 October 2022
Change Report issued for Voting	20 October 2022
Party Voting Ends	12pm, 03 November 2022
Change Declaration issued to Authority	03 November 2022
Authority Decision	TBC
Implementation Date	01 April 2023

1 Executive Summary

What?

- 1.1 On 3 May 2022 Ofgem published its final decision (the 'Access SCR Decision') and direction (the 'Access SCR Direction') to implement the Access Significant Code Review (SCR) which can be found [here](#).
- 1.2 Ofgem's work on the distribution connection charging boundary has considered whether current arrangements continue to work in the best interests of consumers – especially considering the need for increased investment associated with the electrification of heat and transport, as well as low carbon sources of generation. Ofgem has concluded that the charging arrangements no longer provide an effective signal for network users, and without change, may slow down the roll-out of low carbon technologies (LCTs) across the energy system.
- 1.3 The Access SCR Decision focuses on two main areas: changes to the connection charging boundary for demand and generation distribution network connections; and changes to better define non-firm access arrangements at distribution. Specifically, this CP seeks to implement the necessary changes to the DCUSA to deliver the obligations placed on DNOs in the Access SCR Direction with regard to changes to the connections boundary.
- 1.4 Regarding the distribution connection charging boundary, Ofgem has decided to:
 - Reduce the overall connection charge faced by those connecting to the distribution network. This includes (i) removing the contribution to wider network reinforcement for demand connections, and (ii) reducing the contribution to wider network reinforcement for generation connections.
 - Retain and strengthen existing protections for bill payers. This ensures that bill payers will be protected from cost increases associated with the most expensive types of connections. In these instances, the connecting customer will continue to be required to contribute more to the costs of reinforcement.

Why?

- 1.5 The Access SCR Direction places an obligation on DNOs to bring forward the necessary code changes to implement the Access SCR Decision. Failure to do so may lead to DNOs breaching their licence obligations.

How?

- 1.6 DCP 406 presents two solutions:
 - Demand/Generation definitions aligned with the TCR (option 1b as presented in consultation)
 - Demand/Generation definitions not aligned with the TCR (option 3b as presented in consultation)

- 1.7 In the first solution the definitions of Demand and Generation align with the TCR. The Working Group consider this to be consistent with the Access SCR Direction.
- 1.8 The second solution retains the principles of the TCR but takes into account the ‘primary purpose’ of a site in line with the Access SCR Decision.
- 1.9 A high-cost project threshold will also be introduced for a Demand Connection (in addition to the existing one for a Generation Connection) that results in customers contributing to any reinforcement at the same voltage and the one above the voltage of their point of connection.
- 1.10 The changes to the connection boundary caused the Working Group to review some of the existing charging principles to check alignment with Ofgem’s policy intent. Two situations were identified that would result in potentially inequitable treatment of connection customers. In order to address this anomaly, changes have been made to Exception 1 so that the assets remain Extension Assets and are paid for by the connection customer as they are necessary for the new connection to the site. A similar anomaly was identified by the Working Group when it reviewed the existing Exception 5. In order to address this, a new Exception is proposed that extends the principle from the current Exception 5 so that the new connection pays for the assets that connect it to the network.
- 1.11 After discussions, the Working Group agreed that DCP 406 solutions 1 and 2 should also be presented with the changes to exception 1 and the introduction of a new exception. This therefore created two additional alternative solutions.
- 1.12 DCP 406A was raised in order to introduce the new Exception and amend the existing Exception 1.
- 1.13 This therefore creates four possible solutions as per the table below:

	Demand/Generation definitions aligned with the TCR (option 1b as presented in consultation)	Demand/Generation definitions not aligned with the TCR (option 3b as presented in consultation)
Current Exceptions	DCP 406 Solution 1	DCP 406 Solution 2
New Exception 5 and changes to exception 1	DCP 406A Solution	DCP 406A Solution

2 Governance

Justification for Part 1 Or Part 2 Matter

- 2.1 This CP is considered to be a Part 1 Matter in accordance with DCUSA Clauses 9.4.1 and 9.4.6, being:
- 9.4.1 it is likely to have a significant impact on the interests of electricity consumers;
 - 9.4.6 it has been raised by the Authority or a DNO/IDNO Party pursuant to Clause 10.2.5, and/or the Authority has made one or more directions in relation to it in accordance with Clause 11.9A.
- 2.2 The DCUSA Panel have agreed that this CP is to be treated as an Urgent Change. It is important that this CP is submitted to Ofgem for approval by 03 November 2022 to allow DNOs to meet the obligation placed on them in the Access SCR Direction.
- 2.3 This CP cannot be withdrawn without the Authority's consent to do so. In accordance with Clause 11.9A, the Authority may also, by direction, specify and/or amend the relevant timetable to apply to each stage of the Assessment Process.

Requested Next Steps

- 2.4 The Panel considered that the Working Group has carried out the level of analysis required to enable Parties to understand the impact of the proposed amendment and to vote on DCP 406.
- 2.5 The DCUSA Panel recommends that this CP:
- be issued to Parties for voting

3 Why Change?

Background of DCP 406

- 3.1 As noted, this CP has been prepared in response to specific requirements set out in the Access SCR Direction, and modifications to the DCUSA in relation the CCCM to implement the changes to the connection charging boundary arrangements set out in the Access SCR Decision. Specifically, this change has been raised to address paragraphs 12 to 15 and paragraph 17 of the Access SCR Direction, which have been set out below for reference:

Distribution connection charge boundary¹

12) *Reforms to distribution connection Cost Allocation rules² as defined in the Common Connection Charging Methodology (CCCM) under DCUSA Schedule 22³ are explained under 'Details of our Decision' in Chapter 3 of the Access SCR Decision (Decision on the Distribution Connection Charging Boundary), specifically in the following sections:*

¹ Reforms set out under 'Distribution connection charge boundary' pertain to Part B of Electricity Distribution Standard Licence Condition 13A, which does not apply to IDNOs

² Informally referred to as the distribution connection charge boundary in the Access SCR Decision

³ DCUSA Schedule 22 (the CCCM) is available here: <https://www.dcusa.co.uk/dcusa-document/>

- i) *'Definition of Demand and Generation Connections', paragraphs 3.37 – 3.42*
- ii) *'DUoS mitigations: the high-cost cap', paragraphs 3.50 – 3.67*
- iii) *'DUoS mitigations: speculative developments', paragraphs 3.68 – 3.79*
- 13) *The Proposal(s) must set out definitions of:*
 - i) *Demand Connection which should encompass all connections which would be classed as a Final Demand Site for the purposes of Schedule 32 of the DCUSA, and any other terms considered necessary for purposes of connection charging.*
 - ii) *Generation Connection which should encompass all connections which would not be classed as a Final Demand Site for the purposes of Schedule 32 of DCUSA, including Non-Final Demand Sites, and any other terms considered necessary for purposes of connection charging.*
 - iii) *Generation high-cost project threshold⁴ set at £200/kW, calculated using Reinforcement at the voltage at Point of Connection plus the voltage above, which will supersede the informal definition in DCUSA Schedule 22 Clause 1.15.*
 - iv) *Demand high-cost project threshold set at £1720/kVA, calculated using Reinforcement at the voltage at Point of Connection plus the voltage above.*
 - v) *Any additional terms considered necessary to give effect to this Direction.*
- 14) *The Proposal(s) should result in cost allocation for Generation Connections as follows:*
 - i) *The costs of Reinforcement at the voltage of the Point of Connection should be apportioned between the customer and the DNO using the existing cost apportionment factor methodology set out in the CCCM⁵, excepting where the Generation high-cost project threshold is exceeded, or where other exceptions⁶ apply.*
 - ii) *Where the Generation high-cost project threshold is exceeded, the sum of Reinforcement costs at the voltage of the Point of Connection and the voltage above in excess of the threshold should be paid in full by the customer. Reinforcement costs below the threshold should be apportioned between the customer and the DNO using the existing cost apportionment factor methodology set out in the CCCM, including where these costs are at the voltage above the Point of Connection.*
 - iii) *For the avoidance of doubt, Reinforcement costs at one or more voltages above the Point of Connection should be paid in full by the DNO, and the cost of Extension Assets will continue to be paid in full by the connecting customer.*
 - iv) *The above cost allocations will be superseded where exceptions apply.*
- 15) *The Proposal(s) should result in cost allocation for Demand Connections as follows:*
 - i) *The cost of Reinforcement should be paid in full by the DNO, excepting where the Demand high-cost project threshold is exceeded, or where other exceptions¹⁸ apply.*
 - ii) *Where the Demand high-cost project threshold is exceeded, the sum of Reinforcement costs at the voltage of the Point of Connection and the voltage above in excess of the threshold should be paid in full by the customer. Reinforcement costs below the threshold will be paid in*

⁴ A high-cost project threshold for generation is defined for generation in DCUSA Schedule 22, Clause 1.15, and is informally referred to as a high-cost cap or HCC in the Access SCR Decision.

⁵ The existing cost apportionment factor methodology is set out in DCUSA Schedule 22, Clause 1.23

⁶ By way of example, but not limited to, the treatment of Speculative Developments, as outlined in paragraph 16 of the Access SCR Direction.

full by the DNO, including where these costs are at the voltage above the Point of Connection.

iii) For the avoidance of doubt, the cost of Extension Assets will continue to be paid in full by connecting customers.

iv) The above cost allocations will be superseded where exceptions apply.

17) The Proposal(s) should ensure that:

i) Terms are reflected throughout Schedule 22 (the CCCM) of the DCUSA, including worked examples.

ii) For the avoidance of doubt, the following terms will continue to reflect their current purpose under the new connection charging boundaries:

- a) Three phase connections
- b) The Minimum Scheme
- c) An Enhanced Scheme
- d) Point of Connection

3.2 Failure to develop these proposals and implement associated change by 01 April 2023 will result in failure to implement the Access SCR Decision, and in doing so could result in DNOs being in breach of the distribution licence.

4 Initial Working Group Assessment

*** The below Section details the Working Group analysis as issued in the DCP 406 consultation. References to any attachments are as per the consultation document and not this Change Report. To access these attachments, please refer to the DCP 406 consultation found in Attachment 6.**

DCP 406 Working Group Assessment

4.1 The DCUSA Panel established a Working Group to assess DCP 406. This Working Group consists of Supplier, DNO, IDNO representatives and other interested industry participants. Meetings were held in open session and the minutes and papers of each meeting are available on the DCUSA website – www.dcuda.co.uk.

Introduction

4.2 The Working Group met on a weekly basis to review the Access SCR Decision and Access SCR Direction relating to changes that are needed to the CCCM. Ofgem stated that the CP must set out the definitions of:

- i) Demand Connection which should encompass all connections which would be classed as a Final Demand Site for the purposes of Schedule 32 of the DCUSA, and any other terms considered necessary for purposes of connection charging.
- ii) Generation Connection which should encompass all connections which would not be classed as a Final Demand Site for the purposes of Schedule 32 of DCUSA, including Non-Final Demand Sites, and any other terms considered necessary for purposes of connection charging.

- iii) Generation high-cost project threshold set at £200/kW, calculated using Reinforcement at the voltage at Point of Connection plus the voltage above, which will supersede the informal definition in DCUSA Schedule 22 Clause 1.15.
- iv) Demand high-cost project threshold set at £1720/kVA, calculated using Reinforcement at the voltage at Point of Connection plus the voltage above.
- v) Any additional terms considered necessary to give effect to this Direction.
- vi) The costs of Reinforcement at the voltage of the Point of Connection should be apportioned between the customer and the DNO using the existing cost apportionment factor methodology set out in the CCCM, excepting where the Generation high-cost project threshold is exceeded, or where other exceptions apply.
- vii) Where the Generation high-cost project threshold is exceeded, the sum of Reinforcement costs at the voltage of the Point of Connection and the voltage above in excess of the threshold should be paid in full by the customer. Reinforcement costs below the threshold should be apportioned between the customer and the DNO using the existing cost apportionment factor methodology set out in the CCCM at the Point of Connection only, in line
- viii) For the avoidance of doubt, Reinforcement costs at one or more voltages above the Point of Connection should be paid in full by the DNO, and the cost of Extension Assets will continue to be paid in full by the connecting customer.
- ix) The above cost allocations will be superseded where exceptions apply.

4.3 Ofgem also stated that the proposal must ensure that the Terms are reflected throughout Schedule 22 (the CCCM) of the DCUSA, including worked examples.

4.4 During the Working Group meetings, members agreed that the best approach to developing the solution would be to break it down into four key areas:

1. Definitions of Demand Connection/Generation Connection
2. High-cost project threshold drafting
3. Drafting of a proposed new Exception
4. CCCM Examples of a Demand Connection and a Generation Connection

4.5 This Consultation will provide further details of the four key areas around the discussions held and the proposed solutions for each of the relevant sections below.

Definitions of Demand Connection/Generation Connection

Alignment with the TCR

- 4.6 The Access SCR Decision specifies alignment of connection charging for a Demand Connection and Generation Connection to the defined terms Final Demand Site and Non-Final Demand Site⁷ respectively. These terms were developed to implement Ofgem's Targeted Charging Review (TCR).
- 4.7 A Non-Final Demand Site is essentially a site (as identified by a single bilateral connection agreement) which consumes electricity only for the purposes of generating and exporting or storing electricity, which must have both a registered import and export Meter Point Administration Number (MPAN). This does allow for ancillary load, such as heating and lighting, to be used and deemed to be for the purposes of generating or storage but this needs to be certified to meet the criteria of Non-Final Demand. A Non-Final Demand Site must 'certify' that it meets the criteria in Schedule 32 to the DNO/IDNO Party, and therefore effectively has to 'opt in'. The benefit to the generator of opting in is that they do not have to pay 'residual' Distribution Use of System (DUoS) charges in relation to its import (as it is solely for the purposes of generation or storage).
- 4.8 A Final Demand Site is essentially a site where any electricity is consumed other than for the purposes of generating or storing electricity. Any such demand is referred to as Final Demand, as defined in the Schedule 32 and aligned to the TCR.
- 4.9 A Final Demand Site is ultimately defined as anything which is not a Non-Final Demand Site. As noted a Non-Final Demand Site must 'certify' that it is a Non-Final Demand Site to the DNO/IDNO Party; therefore a generator may not provide certification and therefore would be classed as a Final Demand Site by default. This leads to the situation where the generator can choose to be either a Non-Final Demand Site (by opting in to avoid the residual charges) or a Final Demand Site (by choosing to not opt in and accepting the residual charges). A generator that does not opt in would thereby benefit from the reduced connection charges associated with a shallow rather than shallower connections boundary, albeit would face higher enduring charges for use of the network.

Co-located generation

- 4.10 The Working Group agreed that it is clear in the Access SCR Decision that, where the site has been classified as a Final Demand Site, connections to that site should be subject to a 'shallow boundary' i.e. where the customer pays no reinforcement (subject to the high-cost project threshold). The policy intent set out in paragraph 3.37 of the Access SCR Decision refers to "a site whose primary purpose for a connection to the network is to consume other than for the purposes of generation or export onto the electricity network should be charged under a shallow boundary"
- 4.11 This policy position suggests that a Final Demand Site connecting generation should not pay any reinforcement, even if caused by the connection of the generation. This includes where demand and generation are co-located i.e. a Final Demand Site connecting any generation would not pay associated reinforcement (again subject to the high-cost project threshold).

⁷ As defined in DCUSA Schedule 32 'Residual Charging Bands' ('Schedule 32').

- 4.12 However, if a new site was seeking to connect the same generation – perhaps even adjacent to the Final Demand Site – then that connection would be subject to a ‘shallow-ish boundary’ i.e. where the customer pays towards the reinforcement at the voltage of connection only (subject to the high-cost project threshold). The Working Group noted that whilst the generation may cause the same impact on the network and require the same reinforcement, this creates a different charging treatment where the generation connecting directly would be charged for any reinforcement at the same Voltage Level, but there would be no charge if it was connected behind the meter and co-located with a Final Demand Site.

Consideration of primary purpose

- 4.13 Whilst the Access SCR Direction makes reference to the alignment with TCR, paragraph 3.37 of the Access SCR Decision states that policy intent relates to the ‘primary purpose’ of the site as noted in paragraph 4.10.

“3.37The policy intent is that sites whose primary purpose for a connection to the network is to consume other than for the purposes of generation or export onto the electricity network should be charged under a shallow boundary. Sites that do not meet these criteria, including generation, should be charged under a shallow-ish boundary”

- 4.14 However, it is the explicit requirement to consider a site’s “primary purpose” that presents an inherent conflict with the TCR.
- 4.15 For example, a windfarm, whose primary purpose is to generate electricity and where it has some import could be eligible to be classed as a Non-Final Demand site. However, if that site chooses not to provide the necessary certification, it would be deemed to be a Final Demand Site. Despite the primary purpose of this site being to export, and therefore would be treated as a Generation Connection for the purposes of connections charging, strict alignment with the TCR definitions would result in it being a Demand Connection and therefore not subject to any costs of reinforcement.
- 4.16 The Working Group considered two key issues with alignment to the TCR; namely fairness and practicalities.
- 4.17 In terms of fairness, the Working Group were concerned that it would create gaming opportunities where, for example, a generator may be incentivised to be a Final Demand Site to avoid paying reinforcement. The Working Group undertook analysis to understand how much of a risk this represents, which is discussed in paragraph 4.40 to 4.45.
- 4.18 In terms of practicalities, the Working Group recognise that Non-Final Demand Site certification presents a practical barrier for the purposes of connection charging for a new site. Whilst certification could be included as part of the new connection process, it relies upon an MPAN having been created and registered to satisfy the definition. Therefore, the Working Group believe that all new sites would, strictly speaking, be classed as a Final Demand Site regardless.
- 4.19 Due to this conflict and its concerns about aligning to the TCR in strict terms, the Working Group agreed that it would be pragmatic to develop different options for defining Demand Connection and

Generation Connection, to (i) align with the TCR and (ii) consider the primary purpose of a site. The Working Group agreed that the Authority should consider the options when making its decision on the CP, in line with the provisions of the DCUSA (Clause 11.24).

Treatment of battery storage

- 4.20 It is clear from the policy intent that storage should be treated as a Generation Connection. This is consistent with the TCR and definition of Non-Final Demand Site. Therefore, storage will be treated consistently with generation, and where storage triggers reinforcement it will be charged a proportion of any reinforcement at the same voltage level of the Point of Connection irrespective if the Reinforcement is caused by the import or export.
- 4.21 Also consistent with the TCR is that storage co-located on a site which consumes electricity other than for the purposes of generating then exporting or storing that electricity, would be a Final Demand Site. This is supported by paragraph 3.48 of the Access SCR Decision and therefore if the storage is connected behind the meter then it will not be subject to charges for reinforcement.

Options for defining Demand Connection and Generation Connection

- 4.22 The Working Group considered six options in total: four core options plus two sub-options, and narrowed down to three for the purposes of this consultation:
- i) Option 1(a) Alignment with the TCR;
 - ii) Option 1(b) Alignment with the TCR in principle; and
 - iii) Option 3(b) Objective consideration of a site's primary purpose.
- 4.23 A full assessment of the six options considered by the Working Group can be found in attachment 2. The attachment includes:
- (i) a review of the relevant extracts from the Access SCR Decision;
 - (ii) working Group views on the issues the Access SCR Decision creates;
 - (iii) an explanation of the various options considered by the Working Group;
 - (iv) how the options would result in different outcomes for illustrative connection applications; and
 - (v) the Working Group's views on advantages and disadvantages of each of the three options it is seeking views on from this consultation.
- 4.24 Option 1(a) is aligned with the Access SCR Direction and differs from option 1(b) only insofar as it does not use the defined terms Final Demand Site and Non-Final Demand Site. Instead, it introduces additional defined terms but to make it more transparent and easier to understand for the customer without cross referencing to a separate document. The Working Group consider these two options to be 'fully compliant' with the Access SCR Direction.
- 4.25 Option 3(b) retains the principles of the TCR insofar as the concept of Final Demand is prevalent, but again does not utilise such terms defined by the TCR and requires a DNO/IDNO Party to consider the Primary Purpose of the site via an objective assessment. The Working Group consider

this option be 'non-compliant' with the Access SCR Direction, but consider this option to be justifiable on the basis it better meets the Access SCR Decision.

- 4.26 The Working Group is therefore seeking views on these options and which should be taken forward.

Working Group Analysis

- 4.27 The Working Group carried out analysis to better understand the risk that a generator may seek to be classed as a Demand Connection for the purposes of connection charging i.e. to avoid reinforcement costs. In doing so, the Working Group considered the costs that a generator may therefore face once connected and which it otherwise would not i.e. costs which a generator (or Non-Final Demand Site) can avoid post-connection. For distribution-connected sites, such costs include:

DUoS residual charges – levied on a pence per day basis relative to import consumption/capacity unless Non-Final Demand Site certification is provided to the relevant DNO/IDNO Party;

Transmission Network Use of System (TNUoS) residual charges – levied on a pence per day basis relative to import consumption/capacity unless Non-Final Demand Site certification is provided to the relevant DNO/IDNO Party;

Balancing Services Use of System (BSUoS) charges – levied on a £/MWh basis relative to import or export usage unless Non-Final Demand Site certification is provided to the relevant DNO/IDNO Party; and

Policy costs such as Contracts for Difference (CfD) and the Capacity Market, converted to a £/MWh basis where necessary.

- 4.28 For annual fixed charges i.e. the residual charges, the Working Group used the latest published DUoS charges for the 2023/24 regulatory year and identified the average, minimum and maximum annual costs across each DNO Party given they can vary materially. TNUoS costs for the 2023/24 regulatory year were based on April 2022 forecasts published by the Electricity System Operator (ESO) and were added to each range of DUoS equivalent costs per 'charging band' for distribution connected sites, to derive a total annual fixed cost per customer.
- 4.29 For volumetric charges: BUoS, the Working Group used charges for the 2023/24 regulatory year based on July 2022 forecasts published by the ESO; and for policy costs the working group used the latest publicly available information; taking an average quarterly CfD rate for the 2023/24 regulatory year, and Capacity Market forecasts for the 2023/24 regulatory year from the Office for Budget Responsibility (OBR).
- 4.30 The Working Group considered four scenarios that represent typical import capacities associated with large generation connections (e.g. 30MW+), namely where the import connection is low voltage (LV) with a maximum import capacity (MIC) of 100kVA and 500kVA, and a high voltage (HV) import connection with a MIC of 500kVA and 1,000kVA.
- 4.31 For the volumetric charges (i.e. BSUoS and policy costs), the Working Group considered a range of load factors to quantify potential annual usage. The working group considered:

- i) In-house technical expertise and judgement;
- ii) Average LV and HV load factors derived based on 2023/24 published DUoS charges for Non-Final Demand Sites – which supported an average range across all DNOs between 3%-8% and 5% on average for both LV and HV combined; and
- iii) Site specific data for the 2021/22 regulatory year for Northern Powergrid Non-Final Demand Sites (around 160 sites) – which demonstrated that around 75% of all sites had a load factor <5%, and this increased to around 90% for <10% (albeit the Working Group recognised that some data showed a load factor of around 35%, with the average across all sites being around 4%).

4.32 The Working Group agreed to assess volumetric charges using a range of load factors, where:

- i) 2% represents typical minimum usage;
- ii) 5% represents average usage; and
- iii) 10% represents typical maximum usage.

4.33 To assess the commercial decision of a generator, when deciding whether it is economically beneficial to pay reinforcement and avoid some enduring costs, the Working Group considered a notional generator economic life of 20 years, and for simplicity assumed static annual residual charges and usage. A net present value (NPV) was derived based on an assumption of a 5% return on investment.

4.34 In total, mapping the minimum fixed charges to the lowest load factor etc, the maximum costs that a generator may need to pay post-connection, which could otherwise be avoided as a Demand Connection, ranged from an NPV of approximately £92k to £845k:

20 years NPV @ 5%	100kVA connected at LV	500kVA connected at LV	500kVA connected at HV	1000kVA connected at HV
Min	£29,447	£114,211	£246,582	£267,763
Ave	£55,524	£215,669	£445,848	£498,799
Max	£91,819	£364,249	£738,922	£844,824

4.35 The Working Group considered that this analysis gave a realistic indication of the annual charges that a generator currently avoids by being classed as Non-Final Demand Site. The analysis shows that if a 100kVA import capacity was adequate, then the costs that a generator can avoid amount to just over £55k on average. The Working Group considered that it would appear rational for a generator to seek to satisfy criteria to be deemed a Demand Connection for the purposes of connection charging, if around £55k of reinforcement charges (Cost Apportionment Factor (CAF) contribution) could be avoided. i.e. it would seek to avoid the greater cost of the reinforcement or the NPV of the annual charges. For a 1,000kVA import, then on average this would appear rational if around £500k of reinforcement charges were avoided.

4.36 The Working Group therefore considered how likely it would be and investigated how many connection offers were made to generators in the 2020/21 and 2021/22 regulatory years where their reinforcement contribution was greater than £50k.

4.37 The Working Group considered a range of reinforcement contributions and identified that just over half (54%) of all offers included a contribution <£50k. For these offers, the Working Group consider that the avoided reinforcement costs are lower than the NPV of the annual charges and therefore it is reasonable to assume that on average around half of all connection offers would not offer a strong enough incentive to avoid paying for reinforcement.

4.38 Therefore, around half (46%) may see a strong enough incentive to seek to avoid paying reinforcement costs at the expense of facing higher ongoing use of system and policy costs. The findings are summarised below:

Reinforcement contribution by Ofgem reporting category	£50k-£200k	£200k-£400k	£400k-£1m	>£1m	Total
DG132	4%	2%	4%	9%	20%
DGEHV	7%	3%	5%	4%	20%
DGHV	3%	1%	1%	0%	5%
DGLV	0%	0%	0%	0%	0%
Total	15%	7%	10%	13%	46%

4.39 The strength of the incentive varies relative to the cost of the reinforcement. The higher the reinforcement charges the more beneficial it is for the generator to pay the annual charges to avoid those reinforcement costs. However, there are fewer connections with larger connections charges as shown in the table above.

4.40 The table below shows the overall percentage of connections at the different levels of connection. This is the same data as shown above but presented in a cumulative way. Overall, 46% of connection offers with reinforcement have reinforcement costs greater than £50k. A around a quarter of connection offers (24%) may result in generators being incentivised to be a Final Demand Site and therefore pay the annual charges (as these are known) to avoid paying reinforcement contributions of around £400k. For 13% when contributions would be around £1m this would appear to be a very strong incentive to pay the annual charges:

Threshold	£50k	£200k	£400k	£1m
% of connection offers	46%	30%	24%	13%

4.41 Therefore, the Working Group consider that a significant proportion of generators will face a reasonable commercial decision as to whether they should seek to satisfy criteria of a Demand Connection for the purposes of connection charging. It is therefore essential that the terms Demand Connection and Generation Connection are appropriately defined to avoid introducing undue distortions that will result in DUoS customers facing higher than necessary costs, to recognise (e.g.) that a generator is principally a generator regardless of if it has a small amount of 'Final Demand' on site.

Mitigations against gaming

4.42 The Working Group recognise the risk that such generators may still be able to also avoid the enduring use of system and policy costs unless appropriate mitigation steps are implemented. One

such mitigation could be when a change in Non-Final Demand Site certification may be considered reasonable, and/or where retrospective contributions to reinforcement may become a liability to the connectee as a further protection to DUoS customers.

- 4.43 The Working Group raised concerns about unintended consequences and complexities of seeking retrospective reinforcement contributions, where for example a generator is treated as a Demand Connection for the purposes of connection charging, but later certifies as a Non-Final Demand Site for use of system charging (i.e. avoiding significant enduring costs as well as upfront reinforcement costs).
- 4.44 The Working Group considered that it would be reasonable to amend the definitions of Final Demand Site/Non-Final Demand Site in Schedule 32 to reference whether, since 1 April 2023, that site was subject to the demand or generation connection boundary.
- 4.45 This could take the form of an additional criteria, added to the definitions e.g. (with potential changes in red font and underlined):

“Final Demand Site means: (a) Domestic Premises; or (b) a Single Site (as defined in Schedule 32) at which there is Final Demand, as determined in accordance with Paragraphs 1.10 and 5 of Schedule 32, or (c) a Single Site that has needed reinforcement but not paid for it relating to a connection application since 1 April 2023.”

- 4.46 The Working Group recognise that there may also be a need to review the ‘exceptional circumstances’ in Schedule 32 to reflect when a change in Non-Final Demand Site certification is appropriate.

High-Cost Project Thresholds

- 4.47 In the Access SCR Decision and Access SCR Direction, Ofgem set out its intention to retain the high-cost project threshold for a Generation Connection and introduce a similar approach for a Demand Connection. The specific values of the thresholds are included in paragraphs 13(iii) and 13(iv) of the Access SCR Direction; £200/kW for a Generation Connection and £1720/kVA for a Demand Connection.
- 4.48 These high-cost project thresholds are applied to any connections where there is Reinforcement to ascertain whether the cost of the Reinforcement at the same voltage as the Point of Connection plus the Voltage Level above is greater than the appropriate high-cost project threshold. Note that this assessment includes costs of Reinforcement that are not included in the charges for connection where the high-cost project threshold is not reached.
- 4.49 If the cost of this reinforcement is greater than the appropriate high-cost project threshold, then the connecting customer pays for all the costs above the threshold.
- 4.50 The Working Group identified a contradiction between the Access SCR Decision and Access SCR Direction, and between parts of the Access SCR Direction in terms of the treatment of costs below the high-cost project threshold for a Generation Connection. The Access SCR Decision is clear that the policy intent is for any costs under the high-cost project threshold to be treated consistent with the new charging arrangements, see extract below:

3.56Reinforcement below the cap will be paid for according to the new connection boundary arrangements, such that generation connections will pay an apportioned contribution, and demand connections will pay no contribution (subject to applicable exceptions).

4.51 The Working Group raised this issue to Ofgem and Ofgem's policy intent was clarified on 4 August 2022; confirming that the Access SCR Decision set out the correct policy intent as opposed to the Access SCR Direction. This clarified the intent, and the Working Group has developed the legal drafting to follow this policy intent such that for reinforcement below the high-cost project threshold, the connecting customer pays the costs appropriate to whether it is a Demand Connection or a Generation Connection ie:

- For a Demand Connection, reinforcement costs below the high-cost project threshold will be paid in full by the DNO; and
- For a Generation Connection,
 - Reinforcement costs at the same Voltage Level as the Point of Connection will be apportioned between the customer and the DNO using the existing cost apportionment methodology; and
 - Reinforcement costs at the Voltage Level above the Point of Connection will be paid for in full by the DNO.

4.52 As the policy intent for the reinforcement costs that are considered in assessing the applicability of the high-cost project threshold are different to those used for both a Demand Connection and a Generation Connection, the Working Group has developed a new table to clearly indicate what costs are included in the assessment (please see paragraph 1.16 in attachment 3).

Changes to Exceptions

4.53 The changes to the connection boundary caused the Working Group to review some of the existing charging principles to check alignment with Ofgem's policy intent. Two situations were identified that would result in potentially inequitable treatment of connection customers.

4.54 In the current charging methodology, Exception 1 covers a situation where there is interconnection downstream of the Point of Connection (and is illustrated in example 2B of the current version of Schedule 22 – Attachment 6). In this scenario, the addition of the interconnection results in what were Extension Assets (and fully funded by the new connection) become treated as Reinforcement and the costs shared between the connecting customer and DUoS customers. With the changes from the Access SCR Decision, for a Demand Connection, this would result in no charges being made for the assets that actually connect the site. This creates a different charging outcome, whereby:

- without the interconnection, the connection customer would pay for the assets as Extension Assets; or
- With the interconnection the costs would be fully borne by DUoS customers and the connecting customer would not pay anything.

4.55 In order to address this anomaly, changes have been made to Exemption 1 so that the Extension Assets are paid for by the connection customer as they are necessary for the new connection to the site. The costs of the interconnection are then borne by whichever party request it;

- if the customer requests it, they pay or
- If the DNO requests it, it pays.

4.56 A similar anomaly was identified by the Working Group when it reviewed Exception 5 as illustrated in Example 8B. Exception 5 covers the situation where assets to connect a site are considered to be Reinforcement (as they create capacity). The Exception considers that the new network that is within the site boundary is to provide connectivity within the new development and therefore should be treated as Extension Assets and paid in full by the new connection. With the changes due to the Access SCR Decision, for a Demand Connection, this scenario would again result in a situation where the new connection was not charged for the assets to connect it to the existing network. This would create an anomaly whereby a new connection that was teed into the network (ie connected by a single circuit) would pay for those assets, but if it was looped in (ie connected by two circuits) then it would not be charged and the costs would be borne by DUoS customers.

4.57 In order to address this, a new Exception is proposed that extends the principle from the current Exception 5 so that the new connection pays for the assets that connect it to the network. This would be done by assessing the cost of the two circuits that connect the new connection and the lower cost circuit would be treated as Extension Assets (and paid by the connecting customer) and the other circuit treated as Reinforcement and not charged.

4.58 This new Exception has been numbered Exception 5 and therefore the existing Exception 5 has been renumbered to become Exception 6 within Attachment 3. The reason for this is that it flows better within the legal text.

CCCM examples of a Demand Connection/Generation Connection

4.59 The Working Group has reviewed all the current examples in the CCCM to assess their applicability with the revised connection boundaries. Each existing example was reviewed and assessed against the following criteria:

- The example is still needed to illustrate an unchanged policy;
- The example only applies to a Generation Connection and therefore needs to be changed;
- The example is not needed as the policy has changed or is illustrated in another example; and
- A new example is needed to illustrate the revised policy.

4.60 In addition the Working Group has made some proposed presentational changes to simplify the examples:

- The order of the examples has been changed into a logical sequence;
- The split of contestable and non-contestable costs has been removed;
- The CiC (Competition in Connections) charges have been removed;

- An index of examples has been added;
- A purpose has been added to each example to explain what it seeks to do; and
- The costs included in the example have been updated.

4.61 A tracked version of the examples has not been provided due to the extent of the changes, however a summary list of the new examples, their purpose, the categorisation and a cross reference to the existing CCCM examples is included in Attachment 4. Note that many of the diagrams need updating, and these will be done for the final version contained within the DCP 406 Change Report but have not been completed in the consultation. Notes are added in Attachment 4 to explain where changes will be needed.

Overall

4.62 As stated above, the Working Group considered four key areas when developing this solution; Definitions of Demand Connection/Generation Connection, high-cost project threshold drafting, drafting of new Exception, and CCCM Examples of a Demand Connection/Generation Connection. The Working Group also considered and added a definition for Voltage Level.

5 Summary of Consultation and Responses

Summary of responses to the DCP 406 Consultation

- 5.1 The DCP 406 Working Group issued a consultation on 12 August 2022 which sought views from industry on the proposed solution and legal text for DCP 406.
- 5.2 There were 12 respondents to the consultation comprising of DNOs, IDNOs, Suppliers, Generators and other interested parties. Set out below are the questions that the Working Group sought views on, and a summary of the responses received. A copy of the consultation document alongside the Party responses and Working Group conclusions can be found as Attachment 6.
- 5.3 The responses to the comments raised within the consultation can be found in section 6

Question 1 Do you understand the intent of DCP 406?

- 5.4 Other than one respondent that stated 'n/a', all respondents to the Consultation confirmed that they understood the intent of the CP.

Question 2 Are you supportive of the principles of DCP 406?

- 5.5 Other than one respondent that stated 'n/a', all respondents to the Consultation confirmed that they were supportive of the principles of DCP 406.

Question 3: Out of the options that align with the TCR, do you have a preference for option 1(a) or option 1(b), and why?

- 5.6 The majority of the respondents (nine) showed a preference for Option 1(b). One respondent showed a preference for Option 1(a) and two responders showed no preference for either Option 1(a) or 1(b).

- 5.7 The respondent that favoured option 1(a) considered that option 1(b) introduces new terminology rather than reference defined terms such as Final Demand, Final Demand Site and Non-Final Demand Site (as defined in DCUSA Schedule 32).
- 5.8 The same respondent set out further views in support of option 1(a) being used as the basis of defining Demand Connection and Generation Connection:
1. It being unnecessary to define new terms with the implementation of the TCR having created the terms Final Demand Site etc fairly recently;
 2. That Non-Final Demand Site certification does not present an insurmountable barrier for the purposes of connection charging for a new site; and
 3. That the 'gaming' (fairness) issues identified by the Working Group, whilst theoretically possible, could easily be overcome.
- 5.9 Another respondent set out the view that option 1(b) was more appropriate as option 1(a) relies upon quite a complex definition of Non-Final Demand Site, and that changes could be made to Schedule 32 without being visible for users in the context of connection charging.
- 5.10 The Working Group has set out its views in relation to defining Demand Connection and Generation Connection in line with the Access SCR Direction (i.e. TCR alignment) in paragraphs 6.2 to 6.3.

Question 4: Do you agree that an alternative option (which is not TCR-aligned) is necessary, and do you agree that the option proposed is suitable? If not, please provide your rationale.

- 5.11 Nine respondents agreed that an alternative option (which is not TCR-aligned) is necessary and suitable for this CP. Two respondents did not agree that an alternative solution is necessary stating that this option introduces a greater element of subjectivity and therefore a greater risk of an inconsistent approach being applied by DNOs. A third respondent did answer this question as not agreeing but this conflicted with their answers to subsequent questions within the consultation.
- 5.12 One respondent, whilst agreeing an alternative solution was necessary raised two points as below:
1. In the list of considerations, the first relates to Electricity Storage only. If the storage was co-located with generation it would seem logical that the overall site would also be considered as a Generation Connection. The respondent sought for this to be clarified in the definition.
 2. It is unclear on the rationale as to why Electricity Generation for back up purposes only is treated as a Generation Connection. If the generation was connecting behind the meter for the purposes of exporting then this would be treated as a Demand Connection.
- 5.13 Another respondent agreed that an alternative option is needed and whilst they considered the option proposed to suitable, proposed further changes to the definition of Generation Connection in option 3(b) to add further clarity. The respondent proposed the following definition:

“means a connection to a Premises where the primary purpose of that Premises is wholly or mainly Electricity Generation or Electricity Storage and where, in determining the primary purpose of the Premises, we will take into account:

- (i) *whether the Maximum Capacity of the connection of the Premises to the Distribution System for export is greater than the Maximum Capacity for import;*
- (ii) *whether the owner or occupier of the Premises holds a licence to carry out the activity specified in Section 4(1)(a) of the Act;*
- (iii) *whether the owner or occupier of the Premises benefits from an exemption from holding a licence to carry out the activity specified in Section 4(1)(a) of the Act under the Electricity (Class Exemptions from the Requirement for a Licence) Order 2001; and*
- (iv) *any other information that may be relevant to determining the primary purpose of that Premises."*

5.14 The Working Group has set out its views in relation to defining Demand Connection and Generation Connection in line with the Access SCR Decision (i.e. consideration of the 'primary purpose' of a site as well as TCR alignment) in paragraphs 6.10 to 6.17.

Question 5: Which of these three definitions do you believe is most suitable to meet Ofgem's policy intent and why?

- 5.15 The majority of respondents (eight) showed a preference for option 3(b) when considering all potential options (including options 1(a) and 1(b)). One respondent showed a preference for option 1(a), two respondents for option 1(b), and one respondent would be happy with any chosen option.
- 5.16 One respondent stated that although they show a preference for option 3(b), they do not believe that a Customer with an export capacity greater than an import capacity should necessarily be considered a Generation Connection.
- 5.17 The Working Group has set out its views in relation to defining Demand Connection and Generation Connection in paragraph 6.17.

Question 6: Can you provide any better options other than the options considered by the Working Group?

- 5.18 The Working Group noted that no respondents provided any other options for consideration but that some modifications were proposed.

Question 7: Do you agree with the Working Group that there is a risk that the options for defining Demand Connection and Generation Connection may incentivise a customer to ensure that it satisfies the definition of Demand Connection? If not, please provide your rationale.

- 5.19 All respondents agreed that how the terms Demand Connection and Generation Connection are defined may incentivise a customer to ensure that it satisfies the definition of Demand Connection i.e. to not pay reinforcement costs (subject to the High-cost project threshold).
- 5.20 Two respondents considered that the risk is theoretical. One of those respondents considered that, for the risk to materialise, the customer would have to intentionally not declare the true primary purpose of their site, and which could result in potential Ofgem intervention.

- 5.21 One respondent suggested that the Working Group should consider the risk that different parties may be liable for connection costs and ongoing charges for a particular site (e.g. a developer and an operator).
- 5.22 The Working Group has set out its views in relation to risks and mitigations in paragraphs 6.5 to 6.9.

Question 8: What mitigations do you consider appropriate and why, and how would any be implemented?

- 5.23 Three respondents stated the need for clear definitions that do not allow for interpretation.
- 5.24 One respondent stated that whilst they acknowledge that it's theoretically possible that generators may attempt gaming, they consider the risk to be low and if this was found to occur in practice, it would be possible to raise a modification and/or for Ofgem to intervene. They therefore do not believe that any mitigations are required and so do not support the potential change to Schedule 32 set out by the Working Group in paragraphs 4.44 to 4.46.
- 5.25 Another respondent also stated that if it proves to be an issue then it could be dealt with through a future CP.
- 5.26 One respondent stated that they agreed that the proposed changes to Schedule 32 should be progressed so that a new connection cannot avoid both connection charges (if applicable) and also residual DUoS charges (and by virtue of being a Non-Final Demand Site, other costs too). Three other respondents also supported the proposed changes to Schedule 32. However, one did not believe that a change to Schedule 32 is in scope of this CP and would therefore require approval from the DCUSA Panel to amend it.
- 5.27 Another respondent stated that any proposed changes to whether the site is deemed 'final demand' or 'final generation' (i.e. a Final Demand Site or a Non-Final Demand Site) should only be considered if the applicant requests such a change up to the energisation date. Beyond energisation then it's by DNO discretion and under exceptional circumstances only. These circumstances are undefined.
- 5.28 A couple of respondents stated they believe that Option 3(b) largely addresses the need for additional mitigations.
- 5.29 The Working Group has set out its views in relation to risks and mitigations in paragraphs 6.5 to 6.9, and specifically in relation to changes to Schedule 32 in paragraphs 6.18 to 6.19.

Question 9: Do you believe that the legal drafting delivers Ofgem's Direction (as clarified in Ofgem's letter dated 04 August 2022)? If not, please provide your rationale.

- 5.30 All respondents who answered this question (11) believe that the legal drafting delivers the requirements set out in Access SCR Direction. One respondents did not provide any comments.
- 5.31 One respondent suggested that the inclusion of the text "the definition of Voltage Level is included within the Glossary of Terms" is superfluous, as all capitalised terms are defined within the

Glossary. Another respondent noted that it had proposed some amendments for the Working Group to consider but that it did not believe the changes to alter the intent.

5.32 The Working Group has set out its views in relation to these points in paragraphs 6.29 to 6.31.

Question 10: Is the inclusion of the table helpful?

5.33 The majority of respondents (11) agreed that the inclusion of the High-Cost Project Threshold table is helpful. One respondent commented that the table is not helpful – it was stated that the intent of the table is understood, however, it was not clearly articulated. Another respondent suggested that further modifications were needed for it to be helpful, and set out such changes to be considered by the Working Group.

5.34 The Working Group has set out its views in relation to the High-Cost Project Threshold table in paragraph 6.30.

Question 11: Do you support the Working Group's rationale for the changes to Exception 1 and addition of a new Exception 5? If not, please provide your rationale.

5.35 The majority of respondents (10) support the Working Group's rationale for the changes to Exception 1 and addition of a new Exception 5. One respondent did not support the Working Group's rationale, and one respondent did not provide a comment.

5.36 The respondent that did not support the changes stated that they believe that the current approach should apply and the asset should be treated as reinforcement and fully funded by the DNO/IDNO Party.

5.37 One respondent that supported the changes suggested that the legal drafting needs additional review, and that referring to proving connectivity to the "Premises" rather than the "connection(s)" may be more appropriate.

5.38 The Working Group has set out its views in relation to changes to the exceptions in paragraphs 6.21 to 6.22.

Question 12: The Working Group has made a number of presentational changes to the CCCM examples, do you support this? If not, please provide reasons why they should not be changed.

5.39 All responders who answered this question (10) support the presentational changes to the CCCM examples that the Working Group has made. Two responders did not provide any comments.

Question 13: Do you believe that the proposed examples are sufficient to illustrate the key changes being proposed, or do you believe additional examples should be included? If so, please provide details.

5.40 A majority (eight) of the respondents believed that the proposed examples are sufficient to illustrate the key changes being made. Two respondents proposed changes and two respondents made no comment.

- 5.41 One respondent stated that an example to show a generator connection behind the meter to an existing demand customer would be treated as a Demand Connection would be useful. They also noted that: (i) the text explaining VA and W could be simplified, (ii) that example 16 is confusing as the text and the diagram do not obviously align or explain the network solution, (iii) that the title and purpose of examples 17 and 18 differ from the index, and (iv) that the Reinforcement costs in example 17 are inconsistent to the Apportionment percentage.
- 5.42 Another respondent noted that Examples 27 (A new Generation Connection with Fault Level Triggered Reinforcement and transmission works) and 28 (A new Generation Connection with Fault Level Triggered Reinforcement and transmission works) do not apply in Scotland (as 132kV is a transmission voltage) and requested an equivalent is provided that's reflective of the network in Scotland.
- 5.43 The Working Group has set out its views in relation to the CCCM examples in paragraphs 6.23 to 6.28.

Question 14: Overall, do you agree that the draft legal text delivers the intent of the Ofgem Direction? If not, please provide your rationale.

- 5.44 The majority of respondents (10) agree that the draft legal text delivers the intent of the Access SCR Direction, but one proposed changes to the text that did not alter the intent. One respondent stated that they believe option 1(a) should be adopted to define Demand Connection and Generation Connection, and that alternative solutions (e.g. option 3(b)) are not in line with the intent of the Access SCR Direction. One respondent did not provide any comments.

Question 15: Do you consider that the proposal better facilitates the DCUSA Charging Objectives?

If so, please detail which of the Charging Objectives you believe are better facilitated and provide supporting reasons.

If not, please provide supporting reasons.

- 5.45 The majority (10) of respondents agreed that this CP better facilitates the DCUSA Charging Objectives, however not all agreed that they were in line with the view set out by the Proposer in the consultation.
- 5.46 One respondent stated that if option 1(a) was adopted – for defining Demand Connection and Generation Connection – this CP would better facilitate the DCUSA Charging Objectives, otherwise it would not for DCUSA Charging Objective 1. The same respondent did not agree that DCUSA Charging Objective 6 was negatively impacted, which another respondent also stated. One responder did not provide any comments.
- 5.47 The final Working Group position in relation to the DCUSA Charging Objectives can be found in Section 9.

Question 16: Are you aware of any wider industry developments that may impact upon or be impacted by this CP?

- 5.48 The majority of respondents (nine) were not aware of any wider industry developments that may impact upon or be impacted by this CP. One respondent did not provide any comments.
- 5.49 One respondent stated that BEIS is currently seeking stakeholder views on how the ECCR 2017 should be amended to align with the Access SCR Decision as the ECCR legislation needs to be amended to allow the Connection Charging Boundary changes to be implemented from April 2023.
- 5.50 One respondent stated that the changes within this CP have a direct impact on Ofgem's proposed "network charging SCR" (the Working Group believe this refers to the DUoS charges SCR⁸).

Question 17: Do you agree with the Working Group's proposed implementation date? If not, please provide your rationale.

- 5.51 All of the respondents that provided a comment (11) agree with the Working Group's proposed implementation date. One respondent did not provide any comments.
- 5.52 One respondent raised a concern that the change will require two charging methodologies to be in use for a period of time.
- 5.53 Further details in relation to the Working Group position in relation to implementation of this CP can be found in Section 11.

Question 18: Any other comments?

- 5.54 One responder raised a concern around the time allowed to review and respond to the Consultation considering its importance. They stated that the timescales provided gave limited opportunity for scrutiny of the CPs and risks the proposals not being subject to adequate review.
- 5.55 The Working Group has set out its views in relation this point in paragraph 6.32.

⁸ <https://www.ofgem.gov.uk/publications/distribution-use-system-charges-significant-code-review-launch>

6 Working Group Conclusions & Final Solution

6.1 After consideration of the consultation responses, the Working Group identified the following areas for further consideration:

1. Definitions of Demand Connection/Generation Connection
2. High-cost project threshold drafting
3. Drafting of a proposed new Exception
4. CCCM Examples of a Demand Connection and a Generation Connection
5. Final Legal Text Drafting

1. Definitions of Demand Connection/Generation Connection

Alignment with the TCR

6.2 As noted in section 5, the majority of respondents favoured option 1(b), with only one respondent favouring option 1(a). The Working Group noted the concerns that 1(b) introduces new terminology, rather than reference terms already defined in Schedule 32. The Working Group noted that option 1(b) was created to avoid the need to reference complex terms such as Non-Final Demand Site in another document. The Working Group concluded that as option 1(b) describes what a Final Demand Site and Non-Final Demand Site is using terms already defined in Schedule 32, both options should achieve the same outcome and therefore no 'new' terms have been introduced to the DCUSA.

6.3 The Working Group concluded that, given the majority of respondents favoured option 1(b), and that both options should give the same outcome in defining a Generation Connection, the Working Group propose to put option 1(b) forward for Party Voting as the option for defining Demand Connection and Generation Connection that aligns with the Access SCR Direction.

6.4 The proposed legal text in relation to this option can be found in Attachment 2.

Mitigations against gaming

6.5 The majority of respondents agreed that an alternative to options 1(a) or 1(b) is necessary, and all respondents agreed that how the terms Demand Connection and Generation Connection are defined may incentivise a Customer to ensure that it satisfies the definition of Demand Connection and therefore not pay reinforcement costs (subject to the High-Cost Project Threshold).

6.6 One respondent considered that, for the risk to materialise, the Customer would have to intentionally not declare the true primary purpose of their site, and which could result in potential Ofgem intervention. The Working Group did not agree with this view. The default position is that a customer is deemed to be a Final Demand Site unless it satisfies the criteria of a Non-Final Demand Site. This requires the customer to meet defined criteria which can include self-

certification and which the DNO/IDNO Party can challenge. The approach is therefore one where the customer has to actively seek to 'opt in' to be a Non-Final Demand Site. The customer does not have to declare the 'primary purpose' as this is not a consideration in the TCR definitions in Schedule 32 and therefore applicable to options 1(a) and 1(b); the TCR is binary i.e. any Final Demand means the customer would be a Final Demand Site.

- 6.7 One respondent suggested that the Working Group should consider the risk that different parties may be liable for connection costs and ongoing charges for a particular site (e.g. a developer and an operator). The Working Group have previously considered this and agree with the implication that, where a party pays for the connection charge but not ongoing DUoS charges etc, it increases the risk that a site (via more than one 'owner') could avoid both upfront and enduring costs.
- 6.8 This is particularly a risk associated with options 1(a) and 1(b), where 'primary purpose' is not considered. This risk could be mitigated by changes to Schedule 32 as described in paragraph 4.44 to 4.46.
- 6.9 The Working Group noted the different views of some respondents and acknowledged that all outcomes were theoretical as the new set of circumstances does not yet exist. However, the Working Group considered that it has sufficiently demonstrated that the gaming/fairness concerns are a material risk, as evidenced in the consultation (see also 'Working Group Analysis' section in paragraphs 4.27 to 4.46). The Working Group consider that reliance on a future CP to resolve this issue would not be efficient and that a future CP would almost certainly be needed to address the risk that it has already identified. The Working Group agree that option 3(b) mitigates these risks.

Consideration of 'primary purpose'

- 6.10 The Working Group agreed with some respondents that option 3(b) may risk an inconsistent approach being applied in determining what is a Generation Connection, however it considered that this risk could be mitigated.
- 6.11 There are existing fora within the Energy Networks Association (ENA) where DNOs can discuss interpretation and changes to the CCCM can be raised if further clarity is required. The Working Group considered that the risk of a generator not paying for reinforcement - because it can relatively easily satisfy the requirement of a Demand Connection via a binary assessment - represents a more undesirable outcome and not aligned with the Working Group's understanding of Ofgem's policy intent (i.e. the connection boundary for a Generation Connection is intentionally not 'shallow' like for a Demand Connection).
- 6.12 The Working Group reviewed the proposed changes by respondents to the drafting of option 3(b) to mitigate risk of different interpretations. The majority of the points raised were incorporated into the revised drafting.
- 6.13 The Working Group recognised one respondent's concern that a Customer with an export capacity greater than an import capacity should not be considered by default a Generation Connection. No specific example was provided by the respondent to support this view and the Working Group agreed that this should be retained as a criteria on the basis that it should provide a simple test that the purpose of the site was more export than import. The Working Group noted that the addition of

‘any other relevant information’ into the list of considerations would give latitude to the DNO/IDNO Party if a real situation arose where it did not seem appropriate to treat the site as a Generation Connection. If such situations did occur, then a CP could be raised to encompass it in the DCUSA.

- 6.14 The Working Group concluded that the inclusion of “wholly or mainly” removed the need for Electricity Storage to be explicitly mentioned in the list of considerations and also provided clarity on how Electricity Storage co-located with Electricity Generation would be treated.
- 6.15 In response to one respondent’s suggestion, the Working Group agreed to add clarity as to what a generation licence is by including Generation Licence as a defined term. The Working Group also agreed with the respondent to cater for a scenario where a generator may hold an exemption for needing a Generation Licence and therefore included an additional defined term Generation Licence Exemption.
- 6.16 The Working Group also reviewed the inclusion of back up generation as a criteria for defining the primary purpose of a Generation Connection, as commented on by two respondents. The Working Group concluded that back-up generation should not be a criteria, as it may (e.g.) be connected behind the meter of a Demand Connection.
- 6.17 Ultimately, the Working Group believe that it is necessary to present the Authority with options which align with both the Access SCR Direction (i.e. TCR alignment) and Access SCR Decision (i.e. TCR but considering the ‘primary purpose’ of a site), and therefore remain of the view that it can meet the requirements of the Access SCR Direction via options 1(a) or 1(b), but will offer Ofgem an alternative that is justified by better meeting the Access SCR Decision (i.e. option 3(b)).

Changes outside of the scope of this CP – Schedule 32

- 6.18 The Working Group recognised that some respondents supported making changes to Schedule 32, as set out in the consultation (see also paragraphs X to Y in this Change Report), to prevent a Customer avoiding both connection charges and residual DUoS charges (and charges others as a result of being a Non-Final Demand Site).
- 6.19 The Working Group agreed that, as written, the scope of this CP does not provide for changes to be made to Schedule 32 without agreement from the DCUSA Panel to amend it. Whilst this was not considered a barrier as such, the Working Group agreed that a DNO Party would raise a change to Schedule 32 following the Authority’s decision on this CP, if that decision implemented the definition of Demand Connection and Generation Connection in line with option 1(a).

2. High-cost project threshold drafting

- 6.20 The Working Group made some minor changes to the legal drafting.

3. Drafting of a proposed new Exception

New Exception 5 and amendment to Exception 1

- 6.21 The Working Group noted that the majority of respondents supported this change and only one respondent did not. The Working Group concluded that these changes were in line with Ofgem’s broad policy intent in its Decision but as these were not explicitly identified in the Direction, these should be presented as alternative options for Ofgem to opine on.

- 6.22 The Working Group accepted the proposed change to the wording of the legal text for Exception 5 in line with ENWL's suggestion.

4. CCCM Examples of a Demand Connection and a Generation Connection

- 6.23 The Working Group carried out a review of the CCCM examples proposed by some respondents to ensure that titles, capitalisation and general expressions are consistent throughout the examples. This also included a replacement of all diagrams within the examples to apply consistent formatting.
- 6.24 Minor amendments have been made to the text in examples 3, 6, 7, 8, 9, 11, 12, 13, 14, 18, 19 and 20 (all example numbers in Section 6 refer to the consultation version of examples) to improve clarity without changing the purpose or logic of the example.
- 6.25 Example 16 was found to have conflicting purposes detailed between the summary and body of the CCCM Examples document. This example illustrates the application of a Storage connection and has been redrafted and simplified, as requested by one respondent. The Working Group also considered an example to illustrate generation connected behind the meter of a Demand Connection in line with the request of one respondent but did not progress it.
- 6.26 Errors were found in examples 17 and 24 which required amendment to accurately reflect the application of the CCCM. The changes made in these examples did not change the purpose or logic of the example.
- 6.27 Examples 27 and 28 have been updated with a statement acknowledging the different boundaries between Distribution and Transmission that exist in England, Scotland and Wales.
- 6.28 Errors were found in example 30 which required amendment to accurately reflect the application of the CCCM. The changes made in this example did not change the purpose of the example but required a change to the logic to accurately reflect the application of the CCCM.

5. Final Legal Text Drafting

- 6.29 The Working Group agreed that 'the definition of Voltage Level is included within the Glossary of Terms' is superfluous as all capitalised terms are defined within the Glossary and therefore deleted it in the revised legal text.
- 6.30 The Working Group discussed reviewing the High-Cost Project Threshold table and agreed to make no further amendments and it will remain within the legal text due to the majority view of the responders supporting it.
- 6.31 The Working Group noted the above impacts on wider industry developments potentially impacted by this CP but made no changes as a result.

Other considerations/clarification requests that came out the consultation.

6.32 The Working Group noted the concern regarding the consultation period; however, this is an urgent CP with a deadline for completion provided by Ofgem to which the Working Group had to meet.

7 Summary of Solutions

- 7.1 Throughout the development of DCP 406 it became apparent that there was a need to develop four potential solutions. This was based on both the Working Group and Ofgem's request.
- 7.2 DCUSA governance only allows for two alternative solutions to be presented in a single CP. It was therefore determined that an additional CP (DCP 406A) would be raised to allow for all four options to be presented to Ofgem, when determining their decision.
- 7.3 DCP 406 presents two solutions:
- Demand/Generation definitions aligned with the TCR (option 1b as presented in consultation)
 - Demand/Generation definitions not aligned with the TCR (option 3b as presented in consultation)
- 7.4 In the first solution (DCP 406 Solution 1) the definitions of Demand and Generation align with the TCR. The Working Group consider this to be consistent with the Access SCR Direction.
- 7.5 The second solution (DCP 406 Solution 2) retains the principles of the TCR but takes into account the 'primary purpose' of a site in line with the Access SCR Decision.
- 7.6 As stated earlier in this Change Report, the changes to the connection boundary caused the Working Group to review some of the existing charging principles to check alignment with Ofgem's policy intent. Two situations were identified that would result in potentially inequitable treatment of connection customers. In order to address this anomaly, changes have been made to Exception 1 so that the assets remain Extension Assets and are paid for by the connection customer as they are necessary for the new connection to the site. A similar anomaly was identified by the Working Group when it reviewed the existing Exception 5. In order to address this, a new Exception is proposed that extends the principle from the current Exception 5 so that the new connection pays for the assets that connect it to the network.
- 7.7 After discussions, the Working Group agreed that DCP 406 solutions 1 and 2 above should also be presented with the changes to exception 1 and the introduction of a new exception. This therefore created two additional alternative solutions.
- 7.8 DCP 406A was raised in order to introduce the new Exception and amend the existing Exception 1.
- 7.9 Therefore DCP 406 will ask DCUSA Parties to vote on their preferred solution in relation to Solution 1 and 2 above (alignment/ non-alignment with TCR definitions of Demand and Generation). DCP 406A will ask DCUSA Parties whether they wish to accept or not the introduction of a new Exception and the amendment of Exception 1 (as detailed in Section 6 above).
- 7.10 This therefore creates four possible solutions as per the table below:

	Demand/Generation definitions aligned with the TCR (option 1b as presented in consultation)	Demand/Generation definitions not aligned with the TCR (option 3b as presented in consultation)
Current Exceptions	DCP 406 Solution 1	DCP 406 Solution 2
New Exception 5 and changes to exception 1	DCP 406A Solution	DCP 406A Solution

7.11 Ultimately, the Authority will need to determine whether to accept DCP 406 solution 1 or 2 and then based on that decision, determine whether they include the new and amended Exceptions or not. In order for them to make that decision, the Working Group has produced four sets of legal text for their review as below:

- Attachment 2: DCP 406 Legal text (Solution 1)
- Attachment 3: DCP 406 Legal Text (Solution 2)
- Attachment 4: DCP 406A Legal Text (based on DCP 406 Solution 1, with new and amended exceptions added)
- Attachment 5: DCP 406A Legal Text (based on DCP 406 Solution 2, with new and amended exceptions added)

7.12 For ease of reference and to aid in voting, DCP 406 and DCP 406A have been presented in a single Change Report and DCUSA Parties will be asked to articulate their votes on one voting form provided in Attachment 1.

8 Legal Text

8.1 Following the Working Group's review of the responses to the consultation, the Working Group presents four different versions of legal text found in Attachments 2-5.

Legal Text

8.2 Key aspects of the DCP 406 legal texts presented include the following:

Common to all legal text versions

- High-cost project threshold drafting
- Definition of Voltage Level
- A paragraph added to state that if a development is considered to be speculative then the reinforcement costs will be charged in full
- Paragraph added to state that for Demand Connections DNOs will fully fund all Reinforcement and for Generation Connections DNOs will fully fund Reinforcement carried out at a voltage greater than the voltage at the POC.

- As the policy intent for the reinforcement costs that are considered in assessing the applicability of the high-cost project threshold are different to those used for both a Demand Connection and a Generation Connection, the Working Group has developed a new table to clearly indicate what costs are included in the assessment.

Specific to each Legal Text Attachment

Attachment 2: DCP 406 Legal text (Solution 1)

- Definitions of a Demand Connection/Generation Connection aligned to the TCR
- CCCM Examples of a Demand Connection/Generation Connection without new and amended Exceptions)

Attachment 3: DCP 406 Legal Text (Solution 2)

- Definitions of a Demand Connection/Generation Connection not aligned to the TCR
- CCCM Examples of a Demand Connection/Generation Connection without new and amended Exceptions)

Attachment 4: DCP 406A Legal Text (based on DCP 406 Solution 1, with new and amended exceptions added)

- Definitions of a Demand Connection/Generation Connection aligned to the TCR
- Drafting of a new and amended Exception
- CCCM Examples of a Demand Connection/Generation Connection with new and amended Exception

Attachment 5: DCP 406A Legal Text (based on DCP 406 Solution 2, with new and amended exceptions added)

- Definitions of a Demand Connection/Generation Connection not aligned to the TCR
- Drafting of a new and amended Exception
- CCCM Examples of a Demand Connection/Generation Connection with new and amended Exception

* It is noted that [DCP 404 'Changes to Terms of Connection for Curtailable Customers'](#) and [DCP 407 'Speculative Development'](#) are making changes to Schedule 22 and therefore numbering of Schedule 22 may be subject to change post the Authority decision on all SCR related DCUSA CPs.

9 Relevant Objectives

Assessment Against the DCUSA Objectives

9.1 For a DCUSA Change Proposal to be approved it must be demonstrated that it better facilitates the DCUSA Objectives. There are five General Objectives and six Charging Objectives. The full list of objectives is documented in the DCUSA.

9.2 The list of DCUSA General Objectives is set out in the table below.

DCUSA Charging Objectives		DCP 406 Solution 1 Identified impact	DCP 406 Solution 2 Identified impact	DCP 406 Solution 1, with DCP 406A Identified impact	DCP 406 Solution 2, with DCP 406A Identified impact
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	Positive	Positive	Positive	Positive
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)	Negative	Neutral	Negative	Neutral
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	Neutral	Neutral	Neutral	Neutral
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	Neutral	Neutral	Neutral	Neutral

5.	That compliance by each DNO Party with the Charging Methodologies facilitates compliance with the EU Internal Market Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators; and	None	None	None	None
6.	That compliance with the Charging Methodologies promotes efficiency in its own implementation and administration.	Negative	Negative	Negative	Negative

- 9.3 This change is to comply with an Ofgem direction arising from its Access SCR Decision and Direction and therefore directly supports Charging Objective 1.
- 9.4 The Working Group considered that the choice of definition of a Generation Connection has a different bearing on the Charging Objective 2. The Working Group considered that DCP 406 Solution 1 and therefore also DCP 406A Solution 1 gives the potential for some generators to avoid charges and therefore has the potential to cause a distortion.
- 9.5 The changes result in less costs being charged to the connecting customer and therefore more costs recovered through DUoS. How DUoS costs are recovered is not in scope of this change proposal and therefore may require reviewing to ensure desired alignment and cost recovery and is therefore potentially negative in relation to Charging Objective 3. However, the Working Group recognise that the Access SCR Decision has determined that this change compared to the current arrangements is justified. The Working Groups view is that this CP is neutral to this objective.
- 9.6 The change also introduces different charging arrangements for a Demand Connection and a Generation Connection and therefore adds more complexity into the assessment of the type of connection so that the appropriate charging regime can be applied; therefore, there is a potentially negative impact in relation to Charging Objective 6. However, the Working Group recognise that the Access SCR Decision has determined that this change compared to the current arrangements is justified.

10 Impacts & Other Considerations

Significant Code Review (SCR) or other significant industry change projects

- 10.1 This CP is part of a suite of changes that will implement the Access SCR Decision, therefore the SCR phase shall be treated as having ended.

Cross Code Impacts

BSC..... ☐ REC..... ☐ Distribution Code.. ☐
 CUSC..... ☐ SEC..... ☐ Grid Code..... ☐
 None..... ☒

10.2 There are no cross-code impacts of this CP.

Consideration of Wider Industry Impacts

10.3 The focus of this CP has been subject to a number of industry consultations as part of the Access SCR process. In addition, the ENA held two briefing session for parties interested in joining a DCUSA working group on these changes.

10.4 It should be noted that in order to implement the Access SCR Decision/Access SCR Direction, four DCUSA CPs were raised in total. The other three CPs that relate to the SCR are detailed below:

- [DCP 404 'Changes to Terms of Connection for Curtailable Customers'](#)
- [DCP 405 'Managing Curtailable Connections between Licensed Distribution Networks'](#)
- [DCP 407 'Speculative Development'](#)

11 Implementation

11.1 Clause 11.9A(2) of the DCUSA, sets out that in respect of all Authority Change Proposals, which DCP 406 is considered to be, the Authority may by direction, specify and/or amend the date from which the variation envisaged by the CP is to take effect.

11.2 Within the Access SCR Direction, the Authority, in accordance with paragraph 22.9E(a) of SLC 22 directed the DNOs to raise one or more code modification proposals in the terms and for the reasons set out in the Annex of the Access SCR Direction in sufficient time to enable the modifications to be effective as of 01 April 2023.

11.3 As noted previously, this CP seeks to introduce processes that will implement the Access SCR Decision. Given this, the Working Group agreed that implementation date for this CP should be set for 01 April 2023.

11.4 The implementation applies to all new applications received on or after this date. There will therefore be a transition period where DNOs will continue to issue connection offers based on the existing CCCM for applications received before the Implementation Date. Therefore, both methodologies will be active for this transition period.

11.5 To enable this, the existing CCCM text will be identified to apply to applications before 1 April 2023. Which ever legal text is approved by Ofgem will be added as new sections 3 and 4. In time, an administrative change will be initiated to remove the transition text.

12 Code Specific Matters

Reference Documents

12.1 The Access SCR Decision and Access SCR Direction which can be found [here](#).

13 Recommendations

Panel's Recommendation

- 13.1 The Panel approved this Change Report on 19 October 2022. The Panel considered that the Working Group has carried out the level of analysis required to enable Parties to understand the impact of the proposed amendment and to vote on DCP 406 and DCP 406A.
- 13.2 The Panel have recommended this report be issued for voting for a period of two weeks and DCUSA Parties should consider whether they wish to submit views regarding these CPs. The Voting Form can be found in Attachment 1.

14 Attachments

- Attachment 1: DCP 406 and DCP 406A Voting Response Form
- Attachment 2: DCP 406 Legal text (Solution 1)
- Attachment 3: DCP 406 Legal Text (Solution 2)
- Attachment 4: DCP 406A Legal Text (based on DCP 406 Solution 1, with new and amended exceptions added)
- Attachment 5: DCP 406A Legal Text (based on DCP 406 Solution 2, with new and amended exceptions added)
- Attachment 6: DCP 406 Consultation, Industry Responses and Working Group Feedback
- Attachment 7: DCP 406 Change Proposal Form
- Attachment 8: DCP 406A Change Proposal Form