




DCUSA Change Report		At what stage is this document in the process?
<h2>DCP 404:</h2> <h3>Access SCR: Changes to Terms of Connection for Curtailable Customers</h3> <p><b>Date raised:</b> 06 May 2022</p> <p><b>Proposer:</b> Tom Selby</p> <p><b>Company Name:</b> Electricity North West</p> <p><b>Company Category:</b> DNO</p>		01 – Change Proposal
		02 – Consultation
		03 – Change Report
		04 – Change Declaration
<p><b>Purpose of Change Proposal:</b></p> <p>The purpose of this change proposal (CP) is to implement parts of Ofgem's Access SCR Decision in respect of Non-firm Access Rights. This CP seeks to address paragraphs 18 to 22 of the Access SCR Direction. The full Access SCR implementation will also change other parts of the DCUSA and other industry documents</p>		
	<p>This document is issued in accordance with Clause 11.20 of the DCUSA, and details DCP 404 'Access SCR: Changes to Terms of Connection for Curtailable Customers.</p> <p>DCP 404 is considered to be a Part 1 Matter and therefore requires Authority approval prior to being implemented and thus, the result of the Party vote on this Change Report will act as a recommendation to the Authority.</p> <p>Parties are invited to consider the proposed amendment (Attachment 1) and submit their votes using the voting form (Attachment 2) to <a href="mailto:dcusa@electralink.co.uk">dcusa@electralink.co.uk</a> or via the online voting form which can be found via the following link: <a href="#">Access SCR: Changes to Terms of Connection for Curtailable Customers</a>.</p> <p>Responses are requested <b>by 12 pm</b> on <b>03 November 2022</b>.</p> <p>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.</p>	
	 <p><b>Impacted Parties:</b></p> <p>Suppliers, DNOs, IDNOs and CVA Registrants</p>	
	 <p><b>Impacted Clauses:</b></p> <p>New Schedule (Curtailable Connections), Schedule 22 (Common Connection Charging Methodology)</p>	

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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	<b>12pm on 03 November 2022</b>
Change Declaration issued to Authority	03 November 2022
Authority Decision	TBC
Implementation Date	01 April 2023

# 1 Summary

## What?

- 1.1 On 3<sup>rd</sup> May 2022 Ofgem published their final decision (the 'Access SCR Decision') and direction (the 'Access SCR Direction') regarding the Access and Forward-Looking Charges Significant Code Review (the 'Access SCR'). Ofgem believe the Access SCR reforms will be an enabler of Ofgem's strategic priorities, including enablement of investment in low carbon infrastructure at a fair cost, and the delivery of a more flexible electricity system. 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.
- 1.2 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:-
  - the definition of curtailment;
  - setting curtailment limits;
  - obligations on the DNO if curtailment is required above accepted limits; and
  - end dates for curtailable access.

## Why?

- 1.3 The Access SCR Direction places an obligation on DNOs to bring forward the necessary code changes to implement the decision. Failure to implement the decision may lead to DNOs breaching their licence ('Distribution Licence') obligations.

## How?

- 1.4 The implementation of the Access SCR Decision requires changes to a number of industry documents. Whilst the main parts of the decision will be implemented through changes to the DCUSA, other aspects of the decision will be implemented through amendments to the model form of the DNO Statements of Methodology and Charges for Connection, the Distribution Licence, and the Electricity Connection Charge Regulations (ECCR).
- 1.5 Non-firm access options for distribution connected users are not available to Small Users or unmetered users. Small Users are defined as "*households and non-domestic users that are billed on an aggregated and non-site-specific basis or who are metered directly using whole current meters*". Therefore, changes to the connection terms are needed for users who have connections with 'C/T metering' and thus, are affected by the Access SCR Decision. These terms are currently documented in Schedule 2B Section 3 (National Terms of Connection) and Schedule 2C (Suggested Bespoke Connection Agreement).
- 1.6 Whilst the Access SCR Decision refers to arrangements for 'non-firm' access, it is proposed to use terms Curtailable and Non-Curtailable in this CP. This is to aid clarity as the term 'non-firm' has different meanings in different situations.

- 1.7 The Working Group considered that a new DCUSA Schedule was required to cover the provisions for a Curtailable Connection, that covers the following areas:-
- the bilateral arrangements between a DNO/IDNO Party and a Customer to reflect the curtailment arrangements;
  - the methodology for determining the Curtailment Limit;
  - how the DNO/IDNO Party will measure Curtailment;
  - how the DNO/IDNO Party will report Curtailment to the Customer;
  - measures taken to avoid, and what happens if the Curtailment Limit is exceeded;
  - the methodology for setting the Exceed Curtailment Price where a DNO/IDNO Party exceeds the Curtailment Limit; and
  - end dates for converting a Curtailable Connection into a Non-Curtailable Connection
- 1.8 The CP also includes minor changes to Schedule 22 (Common Connection Charging Methodology) to ensure the costs of any equipment needed to manage the Curtailment are borne by the Customer.
- 1.9 The impact of the Access SCR Decision on the connections application process will be addressed in changes to Sections 1 to 3 of the DNO Statements of Methodology and Charges for Connection. Each DNO is required to publish such a statement and the form of this statement is approved by Ofgem. DNOs have collectively developed the current form of the statement and it is used by all DNOs. DNOs will collectively amend the form of the statement as required and seek form approval from Ofgem. This is out of scope of this CP.
- 1.10 The Access SCR Decision will also need to be reflected in connection offer terms made by a DNO/IDNO Party to a Customer. For competition reasons these terms are specific to each DNO/IDNO Party and not agreed collectively. Each DNO/IDNO Party will therefore be responsible for amending their own terms and this is out of scope of this CP.
- 1.11 The changes to access arrangements will be the same regardless of whether a customer connects to a DNO or IDNO network and this is covered by this CP. There will however need to be changes to the bilateral arrangements between DNOs and IDNOs which are set out in Section 2B (Terms and Conditions) and Schedule 13 (Bi-lateral Connection Agreement). For reference, DCP 405 'Access SCR – Managing curtailable connections between licensed distribution networks' has been raised to cover these changes.
- 1.12 The other major aspect of the Access SCR Decision is changes to the Connection Charging Boundary. Implementation of these changes will require significant modification to Schedule 22 (Common Connection Charging Methodology). This is being progressed principally via DCP 406 'Access SCR: Changes to CCCM, and where necessary, close liaison with the DCP 406 Working Group is taking place as both changes are impacting the same sections of DCUSA.

## 2 Governance

- 2.1 DCP 404 is considered to be a Part 1 Matter as it meets a number of the criteria set out in Clause 9.4, namely:-
- 9.4.1 it is likely to have a significant impact on the interests of electricity consumers;
  - 9.4.2 it is likely to have a significant impact on competition in one or more of:
    - (A) the generation of electricity;
    - (B) the distribution of electricity; and
    - (D) any commercial activities connected with the generation, distribution or supply of electricity; and
  - 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.

### Next Steps

- 2.2 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 404.
- 2.3 The DCUSA Panel recommends that this CP, be issued to Parties for Voting.

## 3 Why Change?

### Background of DCP 404

- 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 are needed where it does not cover the non-firm arrangements set out in the Access SCR Decision. Specifically, this CP has been raised to address paragraphs 18 to 22 of Ofgem's Access SCR Direction, which are set out below for reference:

#### Non-firm Access Rights

- 18) *Reforms to the definition and choice of access rights are explained under 'Details of our Decision' in Chapter 4 of the Access SCR Decision - Decision on Access Rights (in the case for change section), specifically in the following sections:*
- i) *'The definition of curtailment', paragraphs 4.35 – 4.44*
  - ii) *'Setting curtailment limits', paragraphs 4.45 – 4.47*
  - iii) *'Obligations on the network operator if curtailment is required above accepted limits', paragraphs 4.48 – 4.62*
  - iv) *'End dates for curtailable access', paragraphs 4.63 – 4.75*
- 19) *The Proposal(s) must set out a definition of Curtailment which captures any action taken by the network operator to restrict a user's access to the distribution system, explicitly excluding interruptions caused by a fault or damage to the distribution system which results in loss of supply to the customer, and excluding distribution network actions resulting from constraints on*

the transmission network.

- 20) *The Proposal(s) should include restrictions on the circumstances in which a connection offer can include a provision for Curtailment, referred to here as a Curtailable Connection. Those circumstances must include:*
  - i) *A Curtailable Connection is only offered where the network operator has identified a requirement for Reinforcement to facilitate a connection*
  - ii) *A Curtailable Connection is not available to small users, which should capture households and non-domestic users that are billed on an aggregated and non-site-specific basis or who are metered directly using whole current meters, and is not available to unmetered users.*
  - iii) *A Curtailable Connection offer should be accompanied by supporting information on the expected costs of the counterfactual non-Curtailable Connection, to enable the customer to make an informed decision.*
- 21) *The Proposal(s) should set out a standardised approach to the application of parameters which would apply to connection offers for Curtailable Connections, including:*
  - i) *The capacity that is curtailable, which could be anything up to and including the full capacity requested by the customer ("Curtailable Capacity").*
  - ii) *Calculating the number of hours for which a customer has been subject to Curtailment, as the number of hours the customer has been curtailed multiplied by proportion of Curtailable Capacity which was Curtailed ("Curtailment Hours")*
  - iii) *Setting a limit on the maximum number of Curtailment Hours ("Curtailment Limit") which should:*
    - a) *be applied in respect of Curtailment Hours over a rolling 12-month period.*
    - b) *be set by the DNO via a defined process on the basis of maximising network benefit, taking into account network availability and forecast time-profiled levels of demand/generation associated with the relevant network constraint, as well as a probabilistic assessment of the level of Curtailment required.*
    - c) *be applied consistently across all network operators.*
  - iv) *The steps the network operator must take in order to avoid exceeding the Curtailment Limit, namely the provision of required network capacity or the procurement of flexibility in line with the requirements of Electricity Distribution Standard Licence Condition 31E.*
  - v) *The steps which will be taken if the network operator is unable to avoid exceeding the Curtailment Limit, including specifying requirements for notifications from the network operator to the customer prior to exceeding the Curtailment Limit, and payments to the customer at a set price ("Exceeded Curtailment Price") when the Curtailment Limit is exceeded. The Exceeded Curtailment Price should:*
    - a) *be sufficiently high so that network operators are disincentivised to exceed the Curtailment Limit.*
    - b) *be markedly higher than contracted market prices of flexibility in the licence area under the requirements of SLC 31E, or the cost of Reinforcement required to provide a connection where contracted market prices are unavailable.*
    - c) *be calculated consistently across all network operators.*
  - vi) *The date by which the provisions of the Curtailable Connection will cease ("End Date"), and at which point the user will be provided firm access on their full requested capacity. If the customer requests enduring non-firm access, then the Curtailable Connection arrangements will endure.*
- 22) *The Proposal(s) should be based on several principles:*

- i) The process should be as simple as possible whilst achieving the Direction's*
- ii) stated objectives.*
- iii) The processes implemented must be common to all DNOs and be repeatable.*
- iv) Limits accepted by customers will be included in both their Curtailable Connection offer and connection agreement.*
- v) Customers subject to Curtailment will receive regular reporting on the level of curtailment relative to their accepted limits.*

3.2 Failure to develop these proposals and implement associated change by 1 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.

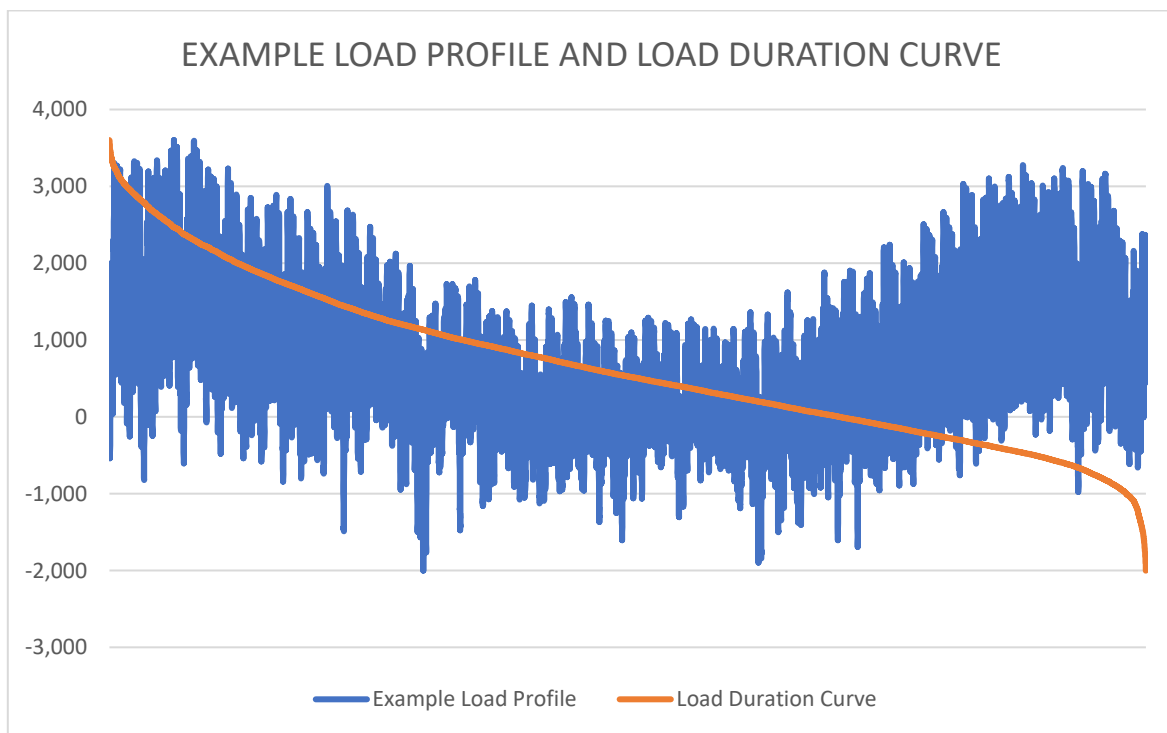
## 4 Working Group Assessment

### DCP 404 Working Group Assessment

- 4.1 The DCUSA Panel established a Working Group to assess DCP 404. This Working Group consisted of Supplier, DNO, IDNO and generation representatives, as well as observers from consultancies and Ofgem. Meetings were held in open session and the minutes and papers of each meeting are available on the DCUSA website – [www.dcusa.co.uk](http://www.dcusa.co.uk).
- 4.2 Following the initial meetings of the Working Group, members agreed that the following items should be addressed:
- Methodology for setting the Curtailment Limit
  - Methodology for Measuring Curtailment
  - Curtailment Reporting
  - Exceeding Curtailment Limits
  - Methodology for setting the Exceeded Curtailment Price
    - The Flexibility Market Price
    - Markedly higher: uplift of the Exceeded Curtailment Price
    - Alternative approaches to calculating the Flexibility Market Price
    - Clean Energy Package
    - Flexibility Market Price Statement
    - Calculating the Reinforcement Cost
    - Fixed vs Variable Exceeded Curtailment Price
    - Consolidated or Separate Exceeded Curtailment Price for import/export
  - Curtailable End Date
    - Enduring Curtailable Connections
  - Form of Curtailable Connection Agreement
  - Appendix 2 - Amendments to The Applicable NTC Section
  - Modifications to Schedule 22 – Common Connection Charging Methodology

## Methodology for setting the Curtailment Limit

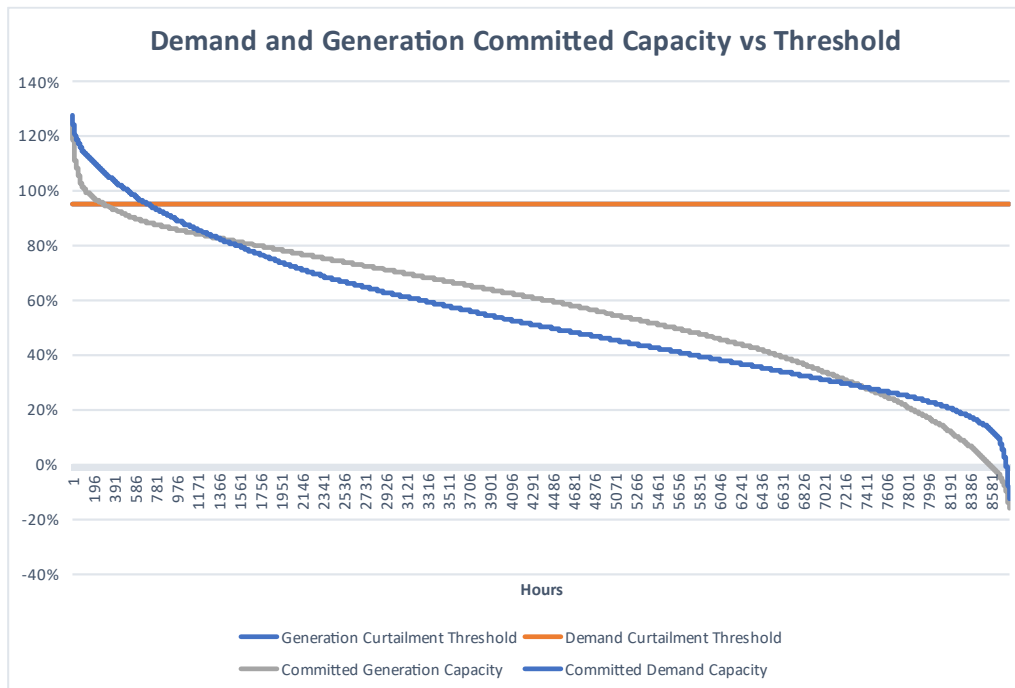
- 4.3 The methodology for setting the Curtailment limit is described in paragraph 2 of the proposed new Schedule and an illustrative calculation can be found as **Attachment 5**.
- 4.4 Paragraph 21 and specifically limb (iii) of the Access SCR Direction requires that a standardised approach is developed to determine the Curtailment Limit. The basic approach that the Working Group propose is to take the annual current load profile of the asset that requires reinforcement, add capacities for (i) accepted connection offers, (ii) connection offers that have been issued but not yet accepted or declined, and (iii) the new connection being requested. The capacities are adjusted for a 'coincidence' factor to represent the likelihood of the inflight connections materialising (see paragraphs 4.10 to 4.11 for more information).
- 4.5 To aid the analysis, an example load profile of a network user over the course of a year is also presented as a load duration curve, see illustration below.



- 4.6 A load duration curve is a standard approach for analysing load profile information for a specific part or section of the electricity network. Rather than displaying the data in time sequenced order (as per the blue 'oscillating' load profile shown above), the data is sorted with the highest values on the left and the lowest on the right (as per the orange 'smooth' curve). Displaying the data in this way better illustrates for how long the load is above a certain level and hence may be subject to curtailment by clearly indicating the duration of time that the network load may exceed network capacity.
- 4.7 Prior to submitting this CP, the outline methodology was presented to the Open Networks working group. Whilst more complex modelling tools are sometimes used to assess curtailment, the underlying approaches are the same and no other simplified approaches were identified.

- 4.8 For the Import Curtailment Limit, the underlying 'true demand profile' is used to assess the current demand. This includes adjustments for generation and battery storage. This was set out in paragraph 2.3 of the DCP 404 legal text that was consulted on.
- 4.9 For the Export Curtailment Limit, the generation profile is added to the underlying 'true demand profile' to assess the effect of existing generation. This includes adjustments for generation and battery storage. This is set out in paragraph 2.4 of the DCP 404 legal text that was consulted on.
- 4.10 In order to assess the effect of connections that are inflight (i.e. either under or awaiting construction or a connection offer that has been issued but not yet accepted), the Working Group considered how these should be treated in the calculation of the Curtailment Limit. The Working Group proposal was that for accepted connection offers and the two largest inflight connection offers, 100% of the requested capacities are used. For other inflight connection offers a confidence factor of 50% is used to reflect the probability that not all connection offers will be accepted.
- 4.11 The rationale for this approach was that it is a reasonable assumption that accepted offers will utilise their requested capacity once connected. The Working Group recognise that not all connection offers would necessarily be accepted. However, assuming not all the capacity from 'large' inflight offers would be used could result in the Curtailment Limit being set artificially low, and expose a DNO/IDNO Party to risks of failing to meet obligations not to exceed the Curtailment Limit.
- 4.12 It was therefore proposed that 100% of the two largest offers would be assumed to connect but subsequent offers would be subject to a confidence factor. The Working Group considered whether acceptance rates could be used to determine this confidence factor. However, this approach added a lot of complexity as there were different acceptance rates for different types of connection. Acceptance rates also varied over time. It was also questioned whether historic acceptance rates are a good predictor of the future given the effect e.g. COVID-19 may have had an effect on historic rates and the unknown impact of the Access SCR, which represents a fundamental change to the commercial arrangements for new connections.
- 4.13 Adding the effect of inflight connections on to the current utilisation gives an indication of how much capacity of an asset has been committed. This can be compared to the asset capacity. It was recognised that the above approach is an approximation and there are other factors, in particular general load growth from other users that could also utilise capacity i.e. the capacity 'headroom' may decrease due to an increase in demand from existing connections. To take account of this it was proposed to multiply the asset capacity by the Curtailment Threshold.
- 4.14 The Working Group proposed using a 95% Curtailment Threshold. The Curtailment Limit (in hours) is then the period of time that the committed capacity exceeds the Curtailment Threshold and hence when the connection would be subject to Curtailment. The methodology had only been subject to limited testing before the consultation was issued, but DNOs generally expected the approach to give satisfactory results, particularly for simple radial networks. It was recognised that the Access SCR Direction requires a simplified approach to ensure it can be applied consistently across each DNO/IDNO Party.

4.15 An illustration of the output of the example calculation tool is shown below.



4.16 Following discussions around concerns with following a common and perhaps simplified methodology for calculating the Curtailment Limit and recognising the potential complexities of different parts of a DNO/IDNO Party network, the Working Group agreed to include a provision which would allow the Authority to direct that the DNO/IDNO Party does not follow the methodology for calculating the Curtailment Limit. It was noted that this would allow parties to seek permission to amend how the Curtailment Limit is set, by exception only.

## Methodology for measuring Curtailment

4.17 Paragraph 21 of the Access SCR Direction requires that a standardised approach be developed to calculate the number of hours for which a customer has been subject to Curtailment. The Direction sets out that this is to be based on the number of hours the customer has been subject to Curtailment multiplied by the proportion of Curtailable Import Capacity/Curtailable Export Capacity<sup>1</sup> which was subject to Curtailment (i.e. the Curtailment duration is weighted relative to the amount of capacity that has been Curtailed).

4.18 The methodology for measuring Curtailment is described in Section 3 of the proposed new Schedule, where the following calculations are detailed:

- Full Import Curtailment Hours/Full Export Curtailment Hours i.e. the duration a Customer has been subject to Curtailment weighted proportionate to the capacity the Customer has been instructed to

<sup>1</sup> i.e. the proportion of the Customer's maximum import or export capacity which the Customer agreed with the DNO/IDNO Party can be subject to Curtailment.

limit (the Curtailment Instruction Value) relative to its Curtailable Import Capacity/Curtailable Export Capacity respectively; and

- The amount to be paid to the Customer should the Full Import Curtailment Hours/Full Export Curtailment Hours exceed the Import Curtailment Limit/Export Curtailment Limited respectively.

4.19 It was proposed that the Full Import Curtailment Hours/Full Export Curtailment Hours are measured on a quarterly basis at the end of each Quarter. The DNO/IDNO Party will do this by assessing the number of curtailment 'instructions' it issued to a Customer in the previous 12 months, and for each curtailment instruction the DNO/IDNO Party will:

- measure the duration (in hours) of each period of Curtailment;
- multiply the duration by the Curtailment Instruction Value; and
- divided by the Curtailable Import Capacity/Curtailable Export Capacity (as applicable).

4.20 Should the Full Import Curtailment Hours/Full Export Curtailment Hours exceed the respective Import Curtailment Limit/Export Curtailment Limit, the amount that the DNO/IDNO Party is obligated to pay a Customer within 30 days following the end of each Quarter will be determined by:

- taking the Full Import Curtailment Hours/Full Export Curtailment Hours;
- multiply by the Curtailable Import Capacity/Curtailable Export Capacity as appropriate (in MVA); and
- multiply by the Exceeded Import Curtailment Price/Exceed Export Curtailment Price as appropriate (the value of which is described in more detail in this consultation and set out in Section 6 of the proposed new Schedule).

## Curtailment Reporting

4.21 Paragraph 22 and specifically limb (iv) of the Access SCR Direction states that the "Proposal(s) should be based on several principles: ... Customers subject to Curtailment will receive regular reporting on the level of Curtailment relative to their accepted limits".

4.22 Paragraph 4 of the proposed new Schedule (at the time of consultation) described the proposed DNO/IDNO Party Curtailment obligations to report to a Customer the level of Curtailment it has been subject to each Quarter. The Working Group proposed that the DNO/IDNO Party shall provide notice of the number of Full Import Curtailment Hours and/or Full Export Curtailment Hours that the Customer has been instructed to make. It was noted that this aligns with the proposed obligations on measuring Curtailment detailed in paragraphs 4.18 to 4.20 i.e. the DNO/IDNO Party will notify the Customer in parallel with the measurement cycle.

4.23 Paragraph 21 of the Access SCR Direction states that the "Proposal(s) should set out a standardised approach to the application of parameters which would apply to connection offers for Curtailable Connections" including (limb v) "The steps which will be taken if the network operator is unable to avoid exceeding the Curtailment Limit, including specifying requirements for notifications from the network operator to the customer prior to exceeding the Curtailment Limit".

- 4.24 The Working Group also included a provision within paragraph 5.2 of the proposed new Schedule (at the time of consultation) to obligate a DNO/IDNO Party to use reasonable endeavours to notify a Customer in advance if it believes that the Full Import Curtailment Hours and/or Full Export Curtailment Hours will exceed the Import Curtailment Limit and/or Export Curtailment Limit respectively. The Working Group considered this to be a pragmatic approach to satisfy the requirement in the Access SCR Direction given the behaviour of a Customer may result in it being difficult to predict when/if the Curtailment Limit may be breached.

## Exceeding Curtailment Limits

- 4.25 Paragraph 4.51 of the Access SCR Decision states that DNOs must demonstrate that they have taken best endeavours to avoid the need to curtail a customer above their agreed limits. The Access SCR Direction requires DNOs to take steps to avoid exceeding the Curtailment Limit, either by providing the necessary capacity or procuring flexibility services from the market in line with condition 31E 'Procurement and use of Distribution Flexibility Services' of the Distribution Licence ('SLC 31E').
- 4.26 Subsequent clarification with Ofgem indicated a reasonable endeavours approach is in line with its policy intent. The Working Group considered that it would be unusual to include best endeavours provision in a contract as this appears excessively onerous on a DNO/IDNO Party, and potentially inconsistent with obligations set out in standard licence condition SLC 31E and general duties under the Electricity Act 1989.
- 4.27 The Working Group therefore proposed that the obligation not to exceed a Curtailment Limit is a reasonable endeavours obligation as set out in paragraph 5.1 of the proposed new Schedule (at the time of consultation).

## Methodology for setting the Exceeded Curtailment Price

- 4.28 Should exceeding a Curtailment Limit become unavoidable, for example if Distribution Flexibility Services are not available in the required location, a DNO/IDNO Party is required to pay the Customer at a set price for the Curtailment above the Curtailment Limit. The Access SCR Direction stated (paragraph 21) v)) that the "*Exceeded Curtailment Price should:*
- a) *be sufficiently high so that DNOs are disincentivised to exceed the Curtailment Limit.*
  - b) *be markedly higher than contracted market prices of flexibility in the licence area under the requirements of SLC 31E, or the cost of Reinforcement required to provide a connection where contracted market prices are unavailable.*
  - c) *be calculated consistently across all DNOs."*

### **Flexibility Market Price**

- 4.29 To address the requirement set out in the Access SCR Direction, the Working Group developed a methodology for setting the Exceeded Curtailment Price (in £/MWh). The full methodology is included in the proposed new Schedule (see legal text document which acted as Attachment 2 to the consultation) and is based on the following:

- Each DNO determines the highest Flexibility Market Price it has contracted for Distribution Flexibility Services during the applicable regulatory year and the two prior regulatory years.
- If a DNO has tendered but not contracted for Distribution Flexibility Services during the same three-year period, then the Flexibility Market Price will be based, where available, on the tendered ceiling price. This provision has been included in recognition that flexibility markets are at early stages of development and contracted prices may not always be available, but using tendered prices gives a good indication of the prices a DNO would be prepared to pay. This provides added protection for a Customer subject to a Curtailable Connection, on the premise that the Flexibility Market Price is assumed to be higher than the alternative Reinforcement Cost.
- If a DNO has not contracted or tendered for Distribution Flexibility Services, then the annuitized Reinforcement Cost for that connection will be calculated and applied. How the annuitized Reinforcement Cost is calculated is detailed further in paragraphs 4.46 to 4.51.

**Markedly higher: uplift of the Exceeded Curtailment Price**

- 4.30 An uplift of 20% was proposed to be applied to either (i) the Flexibility Market Price (if available) or (ii) the Reinforcement Cost, to meet the markedly higher requirement set out in the Access SCR Direction.
- 4.31 The Working Group discussed what uplift would represent 'markedly higher'. The Working Group first considered that a figure of 50%, but following discussion determined that such an uplift would be 'significantly markedly higher', and concluded that a figure of 20% would be a fair representation of markedly higher instead, having considered that a figure of say 10% would not be sufficiently markedly high.

**Alternative approaches to calculating the Flexibility Market Price**

- 4.32 The Working Group debated the use of the highest price for contracted Distribution Flexibility Services, with a number of Working Group members believing the methodology should ensure that the Flexibility Market Price reflects the appropriate market price, but raised concerns that the proposed approach may result in unintended consequences for the emerging flexibility market. As such, the Working Group considered alternative approaches that, whilst fully delivering policy intent set out in the Access SCR Decision, would mitigate against the risk of unfairly impacting Distribution Use of System (DUoS) customers by exposing them to exorbitantly high prices (i.e. when the DNO recovers costs associated with the Exceeded Curtailment Price).
- 4.33 In the Access SCR Decision, Ofgem recognised that its decisions on access rights are new arrangements, that shift risk from the connecting customer to the DNO, who will need to manage its network within the Curtailment Limit agreed with a Customer with a Curtailable Connection or be exposed to additional costs. Ofgem was clear that any new exposure to risk should be proportionate and protect against costs that are orders of magnitude above the value of the service provided to the network, and wider bill payers. Therefore the Working Group agreed to consult on the following alternative methodology for calculating the Flexibility Market Price:
- DNOs have a licence condition to contract for flexibility where it is efficient and economic to do so. Distribution Flexibility Services is very location specific, and in some locations it may be appropriate to contract for Distribution Flexibility Services for only a few hours, allowing a very high price to be paid but still meet the economic test. For example, one DNO has contracted for a short service for

around £7,500/MWh. Using such a price, uplifted by 20%, for when any Curtailment Limit is breached, for any Customer in that year, could place a significant burden on DUoS customers and also risk distorting flexibility markets, which may hinder a DNOs ability to place contracts for Distribution Flexibility Services in those locations. Applying a 95th percentile to prices for Distribution Flexibility Services – as opposed to always taking the maximum value – would remove such outliers and windfall gains for the a Customer with a Curtailable Connection, but still allow a premium price to be applied to all connections and provide the required disincentive.

- Exclude post-fault products when determining the contracted prices for Distribution Flexibility Services. The Access SCR Decision confirms that, when assessing Curtailment, the DNO/IDNO Party should not include faults or interruptions to the network, therefore some Working Group members consider that it is not appropriate to include such products when setting the Exceeded Curtailment Price.
- Only use the current regulatory year to determine the price, rather than include two prior regulatory years. The market for Distribution Flexibility Services is emerging, and setting prices based on initial years of tendering – when trials and service applications were being developed and tested – could result in the Flexibility Market Price being not reflecting current markets for Distribution Flexibility Services.

4.34 The Working Group noted that any and/or all of the above alternative approaches could be applied instead of the approach set out in the proposed new Schedule for the purposes of the consultation that they would be issuing.

### **Clean Energy Package**

4.35 The EU Clean Energy Package (CEP)<sup>2</sup>, Article 13(7) was raised as a consideration within the Working Group in relation to the proposed Exceeded Curtailment Price methodology. The CEP sets out that “Where non-market based redispatching<sup>3</sup> is used, it shall be subject to financial compensation” in a number of circumstances, and goes on to describe how such compensation should be calculated.

4.36 It was stated that if this CP solution was to result in a payment that was less than the higher of the CEP calculated element (as the mandated level of compensation), then an ‘uplift’ would need to be applied to the Exceeded Curtailment Price to bring it up to the equal of the CEP calculated value. It was also noted that as the CEP is retained UK law, it sits above both the licenses that either the Electricity System Operator (ESO) or DNOs operate under and it is also superior to the DCUSA.

4.37 An alternative position was that the applicability of the CEP was a consideration for Ofgem in coming to their Access SCR Decision and issuing the Access SCR Direction, and hence the CP should be restricted to delivering the changes as set out in the Access SCR Decision and Direction only without further consideration of the CEP.

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<sup>2</sup> [CEP Reg 2019/943](#)

<sup>3</sup> 'redispatching' meaning curtailment in this context

- 4.38 The Working Group discussed the CEP and could not reach an agreement around whether this needs to be considered when developing a solution as this was not mentioned within the Access SCR Decision or Access SCR Direction.
- 4.39 The Working Group agreed that Ofgem should be notified of this concern.

#### **Flexibility Market Price Statement**

- 4.40 The Flexibility Market Price Statement is set out within Appendix A to the proposed new Schedule and simply takes the form of a table as set out below:

£/MWh	Regulatory Year		
Flexibility Market Products	t-2	t-1	t
Product Name [e.g., Sustain]			

- 4.41 It was noted that the intent of having the Flexibility Market Price Statement is to provide greater transparency for industry (Customers) on each DNOs price for the various Flexibility Market Services that are utilised across the current regulatory year and the previous two regulatory years.
- 4.42 The Working Group considered the frequency of which DNOs should be expected to refresh such data, with potential options being quarterly, every six months or yearly. The Working Group considered that every six months was reasonable, and in order to standardise when that would be expected to happen, the Working Group agreed that it should be in April and October of each year, specifically, by the fifth Working Day of each respective month.
- 4.43 Next, the Working Group considered, how such data should be published, with options being that each DNO populates and publishes the table on their own websites, or populates and provides to the DCUSA Code Administrator to publish centrally on the DCUSA website. It was agreed that having all Flexibility Market Price Statements in one place would be beneficial for industry participants and thus the latter of the two options was considered to be best.
- 4.44 The Working Group therefore proposed that each DNO Party is obligated to update the Flexibility Market Price Statement with the Flexibility Market Price(s) for the relevant years and send the completed table to the Secretariat.
- 4.45 It was agreed that the Secretariat shall, within three Working Days of receiving each Flexibility Market Price Statement, collate and publish the Flexibility Market Price Statements on the DCUSA website. This approach is aligned with other DNO obligations such as those set out in Schedule 15 'Cost Information Table'.

#### **Calculating the Reinforcement Cost**

- 4.46 As noted in paragraph 4.29, where the Flexibility Market Price is unavailable, then the Reinforcement Cost is used to set the Exceeded Curtailment Price. The Working Group proposed to use the Reinforcement Cost in the Minimum Scheme<sup>4</sup> using the same approach that will be used to assess whether the high-cost project threshold is exceeded. This provides a capital cost expressed as £/MVA.
- 4.47 The Working Group discussed and agreed that a methodology needs to be created to convert this £/MVA capital cost and to £/MVAh to reflect time and to be the same unit of measurement as to which the Exceeded Curtailment Price needs to be expressed.
- 4.48 The Working Group discussed the two similar approaches of currently doing this conversion within (i) the Common Distribution Charging Methodology (CDCM) and (ii) the Common Evaluation Methodology (CEM) which could potentially be adopted within this change. After further review, the Working Group agreed to adopt the current methodology within the CDCM.
- 4.49 The main difference between an CDCM and the CEM is that the CEM is designed to evaluate and compare the total discounted cost over a 10-year period whereas the CDCM approach essentially allows a comparison on a marginal cost basis – i.e. by resolving everything to a £/MWh basis we can make relative comparisons at a point in time.

#### **Fixed vs variable Exceeded Curtailment Price**

- 4.50 It was noted that there may be a high chance of volatility within local flexibility markets, such that if DNOs set the Flexibility Market Price for a charging year based on the Distribution Flexibility Services within the previous charging year(s), there may be issues if the Flexibility Market Price significantly increases (meaning the price is no longer 'markedly higher' than the market for Distribution Flexibility Services).
- 4.51 Therefore, the Working Group discussed whether the Exceeded Curtailment Price should be fixed or variable whilst a Customer is connected via a Curtailable Connection. The Working Group considered that a fixed price would have the advantage of giving the Customer certainty at the time of accepting their connection offer, whereas a variable price would more closely reflect the market conditions at the time of the Curtailment. It was agreed to seek wider industry views.

#### **Consolidated or separate Exceeded Curtailment Price for import/export**

- 4.52 The Working Group discussed whether there should be separate figures for Exceeded Import Curtailment Price and Exceeded Export Curtailment Price, or whether a single Exceeded Curtailment Price only should be used.

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<sup>4</sup> See Schedule 22 'Common Connection Charging Methodology'.

- 4.53 Some Working Group members suggested that this could be down to the discretion of the DNO/IDNO Party based on the market data available, and this is the basis of the proposed new Schedule for the purposes of this consultation. However, the Working Group agreed to seek industry views.

## Curtailment End Date

- 4.54 Ofgem consider that time-limited, non-firm arrangements can be a useful tool for DNOs to plan and optimise the timing of network investments, leading to more efficient network development over time. End dates for non-firm arrangements would ensure that DNOs invest in network capacity in a timely way and provide certainty to customers on when their connection arrangements are likely to be made firm. An open-ended arrangement provides no incentive on DNOs to resolve the constraint and progress with reinforcement or procure flexibility in a timely manner. This does not mandate the DNOs to reinforce the network by this time. In line with current licence obligations, DNOs would still be able to consider if procurement of flexibility is the best way to make the required capacity available. Ofgem consider that end dates should only consider wider, known developments.
- 4.55 The end date for a Curtailable Connection is the date where reinforcement would be completed, or where alternatively the DNO provides the required capacity by procuring flexibility. A Curtailable Connection would not convert to a Non-Curtailable Connection until the necessary capacity had been made available.
- 4.56 The Electricity (Connection Standards of Performance) Regulations 2015 allow for dates of energisation for Customers with a Non-Curtailable Connection to be moved in accordance with rules set out within the regulations. The regulations include provision for payment to Customers where the date needs to be moved under certain circumstances. The Working Group proposed to link the provisions of a Curtailable End Date explicitly to these regulations where the Curtailment End Date needs to be changed. It was noted that this is to make a Customer subject to a Curtailable Connection and Non-Curtailable Connection equitable, to allow end dates to be moved in its similar circumstances as they can for a Customer subject to a Non-Curtailable Connection, and therefore apply the same protections to the Curtailment End Date.
- 4.57 A Customer will have an enduring Curtailable Connection if they decide not to pay Reinforcement in their connection charge.

### **Enduring Curtailable Connections**

- 4.58 Paragraph 4.65 of the Access SCR Decision states that:

*“... explicit end dates would not apply where a customer does not explicitly request a firm connection or is unwilling to accept the costs of firming up the connection at the point at which the connection agreement is reviewed. It would also not apply where the connection request triggers the HCC and the connecting customer does not agree to contribute to reinforcement costs above the cap. In such instances, non-firm arrangements can be made on an enduring basis with no set end date.”*

- 4.59 Therefore, where a customer does not agree to pay for excess costs above the high-cost project threshold (as determined in Schedule 22), then they may instead opt for an enduring Curtailable Connection. This requires a change to the wording in Schedule 22 relating to the high-cost project threshold, namely the existing paragraph 1.15. This paragraph is also being amended by DCP406 to reflect the Access SCR Decision with regards to changes to the connection boundary.
- 4.60 Whilst strictly following the scope of DCP404 and DCP406, such a change should be incorporated in this DCP404, it was proposed that the legal text changes might be better incorporated into the DCP406 legal text as otherwise there is potential for confusion if two CPs are proposing to amend the same paragraph at the same time.
- 4.61 This Working Group proposed that an additional paragraph, which would be placed after the current paragraph related to the high-cost project threshold to reflect the Access SCR Decision. The Working Group's proposed additional paragraph is set out below:

*If you choose not to pay the costs in excess of the high-cost project threshold, you can request a Curtailable Connection instead, then the connection will be Curtailable on an enduring basis with no end-date. If you subsequently require a Non-Curtailable Connection, then this would require a new connection request which may still be subject to excess costs.*

## Form of Curtailable Connection Agreement

- 4.62 DCP 404 proposes to make use of a form of 'Bespoke Connection Agreement' template, which is detailed under Appendix B of the proposed new Schedule and is titled 'Form of Curtailable Connection Agreement'. The Working Group developed the 'Form of Curtailable Connection Agreement' template based on that which is already contained in Schedule 2C 'Bespoke Connection Agreement' of the DCUSA.
- 4.63 It should be noted that at the time of consultation, the proposed Appendix B contained three appendices itself (where Appendices 1 and 3 are very closely aligned to that which is already contained in Schedule 2C of the DCUSA). The proposed Appendix 2 'Amendments to The Applicable NTC Section' is not something that is found in the current Bespoke Connection Agreement with Schedule 2C of the DCUSA, although it should be noted that the intent is for such a component to exist but that this would be added on a site by site basis, depending on the connection needs of each specific site. The contents of Appendix 2 is covered in more detail within this document further below (see paragraphs 4.66 to 4.70).
- 4.64 The Working Group considered different approaches to making a provision for some form of Bespoke Connection Agreement that could be made applicable to a Curtailable Connection, including, using 'sign-posting' that detailed what would need to be set out but not mandating a specific template. Following due consideration the Working Group settled on the creation of a specific template that a DNO will be obligated to use when entering into a Curtailable Connection Agreement.

4.65 The core rationale for adopting such an approach was on the basis that the Bespoke Connection Agreement contained in Schedule 2C of the DCUSA, is only a suggested template agreement whereas the new 'Form of Curtailable Connection Agreement' set out in Appendix B of the proposed new schedule is what DNOs are expected to follow to ensure there is consistency across DNOs, when entering a curtailable access arrangement.

## Appendix 2 - Amendments to The Applicable NTC Section

4.66 As noted above, Appendix B 'Form of Curtailable Connection Agreement' of the proposed new schedule contains three appendices itself, which are titled as follows:

- Appendix 1 - General Particulars of The Connection
- Appendix 2 - Amendments to The Applicable NTC Section
- Appendix 3 - Technical Conditions

4.67 The Working Group considered how best to reflect the fact that the standard National Terms of Connection (set out within Schedule 2B of the DCUSA) would need to be updated to reflect specific elements that only relate to Curtailable Connections. Specific consideration was given to the belief that the majority of Curtailable Connections will be time limited and therefore, there isn't need to have ongoing arrangements once a connection becomes a Non-Curtailable Connection.

4.68 As set out in paragraph 1.5 above, the Proposer had identified that changes to the connection terms are needed for users who have connections with 'C/T metering' and these terms are currently documented in Section 3 of Schedule 2B (National Terms of Connection) and Schedule 2C (Suggested Bespoke Connection Agreement) of the DCUSA.

4.69 Following a review of Section 3 of Schedule 2B, the Working Group determined that amendments would need to be made to the following clauses of Section 3 of the National Terms of Connection:

1. DEFINITIONS & INTERPRETATION;

5. DE-ENERGISATION;

12. LIMITATION OF CAPACITY;

15. LIMITATION OF LIABILITY; and

22. VARIATIONS.

4.70 The Working Group agreed that instead of proposing direct amendments to Section 3 of Schedule 2B itself, they would instead incorporate the amendments within Appendix 2 of Appendix B in the proposed new schedule. There were a number of reasons for this being the preferred approach, namely:

- There is a defined process for amending the National Terms of Connection (Schedule 2B of the DCUSA) such as publishing notification of modification in the London Gazette and as such, there was as view that this could potentially cause delays to the implementation of DCP 404;

- With the above in mind there was also a view that having the amendments self-contained within the new proposed schedule would also be more flexible, in case there was a need to update, should these proposed amendments not be quite right;
- Modifying the National Terms of Connection would also change the terms for thousands of customers and the changes for curtailable customers and it's uncertain how many customers will actually want curtailable access.

## Modifications to Schedule 22 - CCCM

- 4.71 Schedule 22 includes provisions covering the funding of control equipment for flexible connections and these provisions allow for the equipment that is connected at the customers premises to be funded by the customer, but equipment that may be used more widely can either be shared or funded solely by the DNO.
- 4.72 It is proposed that any on site equipment that is required to manage a Curtailable Connection is dealt within the same way and appropriate wording is proposed to be added to paragraphs 1.32A and 1.32B of the CCCM to apply this.

## 5 Summary of Consultation and Responses

### Summary of responses to the DCP 404 Consultation

- 5.1 The DCP 404 Working Group issued a consultation on 12 August 2022 which sought views from industry on the proposed solution and legal text for DCP 404.
- 5.2 There were 14 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 in Attachment 3.

#### Question 1 Do you understand the intent of DCP 404?

- 5.3 The Working Group confirmed that all respondents to the consultation confirmed that they understood the intent of the CP.

#### Question 2 Are you supportive of the principles of DCP 404?

- 5.4 The Working Group confirmed that all responders were supportive of the principles of this CP.
- 5.5 One responder noted that the current definition of 'Customer' may need to be reviewed and amended by the Working Group (either creating two new terms, 'Demand Customer' and 'Generation Customer', or replace the current definition of 'Customer' to 'User'.

- 5.6 The Working Group reviewed the current definition of Customer and agreed to amend – the term ‘Customer’ remains, but now with a DCUSA definition of User (as opposed to a DCUSA definition of Customer).

**Question 3: Do you agree that the underlying methodology for determining the Curtailment Limit is appropriate? If not, please detail an alternative methodology that could be considered.**

- 5.7 The Working Group confirmed that the responses were generally supportive. A number of responders stated that additional steps may be needed to address more complex situations.
- 5.8 One responder provided suggestions to amend the methodology to allow for adjustments to be made without seeking derogations.
- 5.9 The Working Group noted that the proposed methodology may not work fully for meshed networks, and therefore a DNO/IDNO Party may bring forward further modifications to this in the future. The Working Group agreed that a number of alternative approaches may be required for meshed networks, however, it was agreed that this may be out of scope of this CP. Following feedback, the methodology was refined to better reflect meshed networks (see sections 6 and 7 of this Change Report for more information).

**Question 4: Do you agree that the proposed profiles for assessing the Import Curtailment Limit and Export Curtailment Limit are appropriate? If not, please provide your reasons why.**

- 5.10 The Working Group confirmed that the majority of responders that answered (ten) agreed that the underlying methodology for determining the Curtailment Limit is appropriate. Two responders did not provide any comments, one responder was not supportive and one responder did not provide any comments.
- 5.11 The responses were supportive of the proposed approaches though some respondents asked for greater clarity in parts. The Working Group have reviewed the methodology in Paragraph 2 of the legal text and provided more explanation to address the concerns raised.
- 5.12 A more substantial issue was raised by one respondent who had analysed the methodology and believed the approach to assessing the impact of accepted, inflight and for photovoltaic (PV) connections could significantly overstate the Curtailment hours. The methodology has been amended so that for PV connections such that their impact is only assessed during daylight hours (see sections 6 and 7 of this Change Report for more information).

**Question 5: Do you agree with the approach for including inflight connections into the assessment of the Curtailment Limit? If not, please provide your reasons why.**

- 5.13 Responses (twelve) supported the approach to inflight connections given this is a new process but recognised the confidence factors are to an extent arbitrary with no underlying analysis to justify the numbers used. Whilst it introduces an element of risk to a DNO/IDNO Party, as there could be circumstances where all offers are accepted, in other cases all offers may not be accepted or the full requested capacity isn't used so on balance it was deemed a reasonable approach. Two responders did not provide any comments.
- 5.14 The Working Group noted that there were further shortcomings identified in the approaches, however, it agreed that due to the time constraints, there is not enough time to develop changes to meet these shortcomings and no additional data to support others.
- 5.15 The Working Group outlined in the consultation that assessing historic acceptance rates would add complexity and is unlikely to be more accurate due to the fundamental changes to connection charging set out in the Access SCR Decision.
- 5.16 Whilst the majority of respondents did support the approach, many suggested that it should be periodically reviewed and should a change be justified then a CP can be raised to better reflect the reality of connection offers. The Working Group acknowledges that it may be appropriate to review the legal text and methodologies, however, it believes that its current form meets the current requirements set out in the Access SCR Direction and any changes can be made under a future CP. The Working Group accept that whilst this should be reviewed periodically, there is no such mechanism currently within the DCUSA to facilitate this and therefore it is down to individual parties to raise CPs as they see fit.
- 5.17 One respondent made a specific suggestion with regard to PV customers, proposing the methodology should include the ability to remove their impact overnight and therefore the current inclusion of all types of generation/import at full capacity all of the time should be changed to prevent the over estimation of Curtailment hours.
- 5.18 The Working Group considers that this is an appropriate amendment to the methodology as otherwise, in some circumstance the impact of PV generation could significantly increase the Curtailment Limit. Amendments have been made to Paragraph 2.2(c) of the legal text to identify generation as either PV Generation or Non-PV Generation. The approach has been amended so that PV Generation will only be added in daylight hours.

**Question 6: Do you agree that a 95% Curtailment Threshold is a suitable figure? If not, please provide alternate figures and explain why they are more appropriate.**

- 5.19 Nearly all respondents (twelve) supported the 95% Curtailment Threshold. One responder provided made suggestions in order for 95% Curtailment Threshold to be appropriate for use, and other responder did not provide any comments.

- 5.20 While generally supportive, another respondent suggested that further explanation is needed as to why a Curtailment Threshold (other than 100%) has been included in the Curtailment calculations, and why this has been set at 95%. The use of a Curtailment Threshold less than 100% has the effect of increasing the Curtailment Limit, thereby reducing the amount of Curtailment hours which a Customer can be paid for. In practice, this could mean that the Curtailment Limit is not low enough to disincentivise Curtailment.
- 5.21 One respondent justified their support for the use of 95% as it recognised that there remain uncertainties around the simplified approach for setting the Curtailment Limit, for example consideration of natural load growth over time, and this factor provides a means to account for these in setting the Curtailment Limit.
- 5.22 Another respondent believed that consideration should be given to a lower figure than 95%, but certainly not higher, as the expected increase in low carbon technologies could cause the base load to increase by more than 5% (than assumed when assessing the Curtailment Limit).
- 5.23 A DNO respondent stated that they had carried out analysis and found that changing the Curtailment Threshold has less impact on the outcome of the Curtailment hours than would be expected with other data inputs having a bigger effect.
- 5.24 Another respondent said that a Curtailment Threshold of 95% gives a clear simple figure that can be applied uniformly across DNO/IDNO Party(ies) and, as with other areas of this process, should it prove to be inappropriate “in the real world”, a future CP can be raised to adjust it.
- 5.25 In summary, the Working Group considers that the 95% Curtailment Threshold remains appropriate. As illustrated above, there are other factors that can affect Curtailment that are not addressed within the methodology, e.g., underlying load growth, though it should remain under review along with other aspects of the methodology.
- 5.26 A responder also asked whether there had been consideration as to whether the Curtailment Threshold should be locational, so set by each DNO relative to its Distribution Services Area (DSA). The Working Group noted that adding a locational approach could increase the level of inconsistencies. As it is to an extent arbitrary with no clear process for setting the Curtailment Threshold, there is no justification to have different values for each DNO. The Working Group believe that a locational approach is out of scope of this CP as the Access SCR Direction requires a simple approach.

**Question 7: Are there any other factors or steps you believe are required to calculate the Curtailment Limit, and why?**

- 5.27 Most respondents (nine) did not identify any other factors or steps that are needed to determine the Curtailment Limit. Three responders provided other factors that may be required and two responders did not provide any comments.

- 5.28 A respondent suggested that consideration should be given to where existing Active Network Management (ANM) zones are actively being used, and the time this would take to reinforce these networks to remove the ANM. The Working Group believes this is out of scope as existing ANM arrangements would be in place until the affected customers requested a Non-Curtailable Connection.
- 5.29 A couple of respondents proposed the ability to reassess the Curtailment Limit if a material change in circumstances to the background demand or generation on the network was to occur. Reference to the possibility should be included in the connection offer and Connection Agreement with the connecting Customer advised via a formal Notification. The Working Group agreed that it would be appropriate to allow for this additional flexibility. The change should be agreed between the parties or referable to the Authority for determination as with other connection terms.
- 5.30 The Working Group have implemented this by the inclusion of wording to paragraph 2.5 of the legal text (see sections 6 and 7 of this Change Report for more information).
- 5.31 The Working Group do not believe any changes are required to the Curtailable Connection Agreement/ National Terms of Connection which already contain the following provisions which allow for such variations:
- 5.32 “22.2 Either Party may, at any time, ask the other to enter into an alternative connection agreement in respect of the Premises if it believes an alternative agreement is needed because of the nature or use of the Connection Point and/or the Premises. Each Party shall negotiate in good faith the terms of any such alternative agreement. If an alternative agreement has not been agreed within 1 month of its being proposed, either Party may refer the matter to the Authority for determination pursuant to section 23 of the Act. The Parties shall give effect to any such determination, and shall enter into any agreement as shall be necessary to give effect to any such determination.”
- 5.33 Finally, a respondent suggested that consumers may appreciate analysis from the DNO/IDNO Party suggesting when Curtailment is most likely to occur. This would not be binding in any way, but will help consumers understand and balance the risks of Curtailment with regards to their own circumstances (e.g. if Curtailment is more likely to be outside of operating hours, it will have a lesser impact).
- 5.34 Whilst the Working Group recognised there is merit in a DNO/IDNO Party providing more information to a Customers, this should be part of a DNO/IDNO Party’s customer service offering and a standard approach should not be mandated though the DCUSA.

**Question 8 Do you agree that specific provision should be made where a DNO/IDNO Party should not follow the methodology for setting the Curtailment Limit where directed by the Authority not to? If not, please provide your reasons why.**

- 5.35 All but one of the responses were supportive of this approach. The one response that was opposed did not think it had been demonstrated as to why this would be necessary.

- 5.36 Whilst responses were generally supportive, some responders highlighted that this approach is untested in the real-world and may fail to adequately assess all network configurations and thought it may be prudent to have the ability to vary from the methodology on occasions. Others supported this approach as any modifications would be directed by the Authority and would therefore limit its application. Another noted that if such a provision is included, then it is important to codify an obligation on a DNO/IDNO Party to publish information on what methodology or exemption for the calculation of the Curtailment Threshold they are following.
- 5.37 Another noted that the draft legal text did not currently include such a provision but they would, however, support such a provision if it clearly states that network users are also able to seek exemption from the Authority in the same way as a DNO/IDNO Party, in order to ensure equality of treatment. The Working Group did not agree with this comment and noted that the provision is included in paragraph 2.1 of the draft legal text (as was consulted on) and this does not limit the ability to request a direction to a DNO/IDNO Party only.
- 5.38 Some DNOs were concerned should a specific situation require a different approach, an appeal to the Authority may carry a disproportionate administrative burden and not be completed in time to meet the timescales as set out in the Electricity (Connection Standards of Performance) Regulations 2015 and the Distribution Licence. They proposed instead that this should be a blanket direction to enable a DNO/IDNO Party to apply the provision as required rather than seek Authority direction on a case-by-case basis. This could include a requirement for transparency when deviating from the common methodology or adopting alternatives by agreement with the Customer, which may be more proportionate to the circumstances. However, the Working Group agreed that including additional legal text to allow a DNO/IDNO Party to apply a different unspecified approach in some circumstances is at odds with paragraph 21 of the Access SCR Direction which requires the Curtailment Limits to be set via a defined process which is “applied consistently across all network operators”.
- 5.39 The Working Group have considered the responses to the consultation and believed that it would be appropriate to include additional wording so that if an Authority direction is given, that there is an obligation to provide details to the Customer on how the Curtailment Limit has been determined (see sections 6 and 7 of this Change Report for more information).

**Question 9: Do you agree with the proposed methodology for measuring Curtailment? If not, please provide your reasons why.**

- 5.40 All responses were supportive of the approach to measuring Curtailment, though a number of responses raised some points which they thought required clarification.
- 5.41 A respondent thought it was unclear how a Customer’s curtailable capacity is to be determined. The respondent believed this to be the capacity which can be accommodated on the network without reinforcement but did not believe that this is explicit in the legal text. The Working Group agreed with this observation and has added the words, “*This is determined as the amount of capacity which can be connected at the Point of Connection without the need for network Reinforcement*” to the definitions of Non-Curtailable Export Capacity and Non-Curtailable Import Capacity.

- 5.42 Another respondent suggested that the Curtailment start and end times should be rounded to the nearest whole Settlement period for ease. The Working Group did not support this approach. This could mean that a short period of Curtailment of say 5 minutes could be rounded to 30 minutes, and potentially to 60 minutes if the period straddled a Settlement period boundary. This approach also appears contrary to the Access SCR Direction which (in paragraph 21 and specifically limb (ii)) states that the time is “the number of hours the customer has been curtailed” with no reference to any rounding.
- 5.43 Another respondent noted that the Curtailment Instruction Value, as it is written, is the difference between the Curtailable Import/Export Capacity and the instructed limit. It suggested that an explanatory note added to the legal text may aid wider understanding. The Working Group did not agree with this interpretation, as (in simple terms) the Curtailable Import Capacity/Curtailable Export Capacity is the maximum capacity that a DNO/IDNO Party can Curtail a Customer by before exceeding the Curtailment Limit (subject to the frequency and duration of Curtailment), whereas the Curtailment Instruction Value can be a value from zero up to the Curtailable Import Capacity/Curtailable Export Capacity, as applicable.
- 5.44 For example, a Customer could seek a Maximum Export Capacity of 10MVA, but the DNO/IDNO Party may agree with that Customer a Non-Curtailable Export Capacity of say 8MVA (which would increase to 10MVA from the Curtailment End Date, subject to exceptions). As such, the Curtailable Export Capacity would be 2MVA (i.e. the difference between the Maximum Export Capacity and the Non-Curtailable Export Capacity), as the DNO/IDNO Party can Curtail the Customer down to 8MVA despite it seeking 10MVA. However, the DNO/IDNO Party may not need to Curtail the customer by 2MVA, therefore the Curtailment Instruction Value may be say 1MVA.
- 5.45 However, when reviewing the definition of Curtailment Instruction Value in relation to the consultation response, the Working Group identified an inconsistency which it considered necessary to resolve.
- 5.46 The definition of Curtailment Instruction Value in the legal text for Schedule 2D as consulted on was:-
- “means the value by which the Company instructs the Customer to limit its Maximum Import Capacity or Maximum Export Capacity.”
- 5.47 However, the definition in the Curtailable Connection Agreement as consulted on was:-
- *“Curtailment Instruction Value means the value by which the Company instructs the Customer to limit its Maximum Import Capacity and/or Maximum Export Capacity to the level of the Non-Curtailable Import Capacity and/or Non-Curtailable Export Capacity respectively;”*
- 5.48 This was an oversight as both definitions should be the same. Clause 12.17 of the Curtailable Connection Agreement within Appendix B of the legal text stated:-
- *“The Company shall not instruct the Customer to reduce its Maximum Import Capacity and/or the Maximum Export Capacity to less than the Non-Curtailable Import Capacity or the Non-Curtailable Export Capacity (as applicable) and the Customer is not obliged to reduce its Maximum Import Capacity and/or the Maximum Export Capacity to below these levels even if the Company instructs it to do so.”*

- 5.49 It is not necessary to also include these limitations in the definition of Curtailment Instruction Value. Whilst in theory, Customers could be asked to curtail both import and export at the same time, this would appear unlikely and, in any case, if this were required, it would probably be two separate instructions. The Working Group therefore proposed to use the definition in Schedule 2D in the Curtailable Connection Agreement.
- 5.50 Finally, a number of respondents commented that, whilst they agreed with the methodology for measuring Curtailment – which is an annual limit as required in the Access SCR Direction – the legal text (as consulted on) proposed to measure Curtailment on a quarterly basis and pay the Customer, if the Curtailment Limit was breached, also on a quarterly basis. As a result, the payment due would be overstated as each quarter would involve assessing Curtailment over a rolling 12-month period, with any exceedance of the Curtailment Limit recognised in four consecutive quarters. The Working Group agreed with these comments and considered options to resolve the over-payment issue, including:
- Divide the quarterly payment due to the Customer by four; or
  - Calculate and report Curtailment on a quarterly basis but pay the Customer once per annum.
- 5.51 The Working Group assessed the impact on payments due to a Customer based on a notional example covering a six year period and using two scenarios where the Curtailment is breached: (i) a seasonal profile, where the breach happens once per quarter – typically in winter, and (ii) a consistent profile, where the breach happens at the same level each quarter. The example was based on illustrative levels of (i) exceedance of the Curtailment Limit and (ii) an Exceeded Curtailment Price. Both profiles were based on a consistent level of breach of the Curtailment Limit in the same year i.e. over the 12-month period in any year the Curtailment Limit was exceeded by the same number of hours (a 2% exceedance was used for illustrative purposes). In the seasonal example, the Working Group assumed that in one year, the Curtailment Limit was breached in a 'non-winter' season such that the breach occurred in two quarters within the same 12-month period, whereas all other years included only one breach in a rolling 12-month period.
- 5.52 The Working Group included the baseline (i.e. the legal text as consulted on) to illustrate the issue. Based on the notional example, and relative to an annual payment, the seasonal profile illustrated the risk of significant over payment to the Customer based on the baseline (around 2,000%) and a lower, albeit still materially higher payment based on the baseline but dividing the quarterly amount due by four (around 400%).
- 5.53 For the consistent profile the difference between payments due relative to an annual option were significantly less material. The baseline illustrated a risk of over payment of around 250%, whereas the baseline but dividing the quarterly amount due by four illustrated a risk of an under payment of around 15%.

- 5.54 These profiles illustrate the impact of paying for Curtailment Limit breaches more than once e.g. it is perpetuated for four quarters, and the impact is significantly greater when more than one breach is experienced within a 12-month period. The Working Group recognise that the differences in amounts to be paid to a Customer between the options would be entirely dependent on the level of exceedance of the Curtailment Limit, when it occurs, how often and for how long, and the value of the Exceeded Curtailment Price.
- 5.55 However, the Working Group considered that the examples sufficiently demonstrate that an annual payment option was appropriate and ensured that a Customer will be paid the correct amount. Therefore, the Working Group amended the frequency of payment to a Customer, in the event of the Curtailment Limit having been exceeded, to once per annum (within 30 days following the end of the quarter in which the Customer was Energised). This change was made to the legal text in the new Schedule 2D as well as the Curtailable Connection Agreement (see sections 6 and 7 of this Change Report for more information).

**Question 10: Do you agree with the proposed approach for reporting Curtailment to a Customer?  
If not, please provide your reasons why.**

- 5.56 All responses were supportive of the approach to curtailment reporting, though several responses raised some additional points.
- 5.57 A number of respondents thought there was a gap in reporting requirements to a Customer, notably on timescales. The Working Group recognised that this is not specified in the consultation document or in the legal text and should be addressed to align customer expectations. A respondent highlighted that the reporting timeframe to the Customer which must be less than the timeframe set out in Paragraph 3 of the legal text, which specifies the timeframe for a DNO/IDNO Party having to make payment to a Customer if the DNO/IDNO Party has exceeded the Customer's Curtailment Limit – currently proposed to be 30 days after the exceedance. The Working Group agreed that the reporting should not be later than the payment, but they could happen at the same time. The Working Group therefore proposed that reports to a Customer should be issued within 30 days of the end of each quarter and this is reflected in the legal text (see sections 6 and 7 of this Change Report for more information).
- 5.58 A number of respondents thought that Paragraph 4 of the legal text should specify what is included in the reports to a Customer. A respondent set out that, in addition to the number of Curtailment hours a customer has been instructed to make, it would also be valuable to report the distribution of periods that Curtailment usually occurs in. Another respondent set out that the reporting should include Settlement periods and the Exceeded Curtailment Price to ensure full transparency to the Customer. The Working Group considered the views of the respondents and proposed that mandatory reporting should be limited to providing sufficient information to allow a Customer to be able to check any payments for exceeding the Curtailment Limit. This is to be reflected in Paragraph 4.2 of the legal text where the notification will include:-

- Each period of Curtailment over the quarter, with start and end dates and times; and

- The Exceeded Curtailment Price.

5.59 Finally, a respondent suggested that in order to also ensure full transparency to stakeholders at large about a DNO/IDNO Party's Curtailment activities, and in accordance with the work of the Energy Data Taskforce, a DNO/IDNO Party should be mandated to regularly publish a summary of their Curtailment activities, and that this obligation be codified in the DCUSA (see Question 33 below). The Working Group considered that whilst there may be merit in these suggestions, DSO reporting is being considered as part of the RIIO-ED2 process and hence these requirements should not be addressed as part of this CP.

**Question 11: Do you agree that the reasonable endeavours is appropriate to avoid exceeding a Curtailment Limit, or should best endeavours be used? Please provide your reasons.**

- 5.60 All respondents agreed that reasonable endeavours is appropriate. The Working Group noted all responses and highlighted two specific points:
- 5.61 One respondent proposed additional quarterly reporting requirements on a DNO/IDNO Party to inform a Customer of measures taken to avoid exceeding the Curtailment Limit e.g. procuring Distribution Flexibility Services. Whilst the Working Group understand the point made, it is considered beyond the scope of the Access SCR Direction and risks reporting becoming overly onerous at this stage: the directed requirement being to inform a Customer how much it has been Curtailed relative to how much it has agreed to be. The Working Group noted that there will be an obligation (reasonable endeavours) for the DNO/IDNO Party to not exceed the Curtailment Limit: this will be a DCUSA obligation, and where a DNO/IDNO Party has a licence condition to comply with the DCUSA – and therefore would represent a Distribution Licence breach.
- 5.62 Another respondent proposed that where the DNO/IDNO Party was unable to notify the Customer in advance of breaching their Curtailment Limit, the legal text be amended such that a DNO/IDNO Party will also use reasonable endeavours to notify the Customer that it has breached the Curtailment Limit as soon as possible after the event. The Working Group agreed that this should be included within the proposed solution and included as a specific obligation in the 'exceeding curtailment limits' section of the new schedule (see sections 6 and 7 of this Change Report for more information).

**Question 12: Do you agree with the proposed approach to utilising tendered (but not contracted) prices for Distribution Flexibility Services, which is additional to the Access SCR Direction requirements? If not, please provide your reasons why.**

- 5.63 All respondents agreed with the use of tendered prices for Distribution Flexibility Services, albeit one response appeared to contradict its support. The Working Group noted all responses and highlighted three specific points:
- 5.64 One respondent suggested that tendered prices are "more appropriate than contracted prices". The Working Group noted that the use of tendered prices is in addition to contracted prices, where contracts have not been placed i.e. it is only an 'or' where contracted prices are unavailable.

- 5.65 One respondent agreed with the proposal to use tendered prices where contracted are not available, but then stated the view that tendered prices should take precedent. The Working Group agreed that the Access SCR Direction specifically requires the use of contracted prices, and the use of tendered prices is the Working Group's supplementary proposal to take such tendered prices into account before defaulting to the Reinforcement Cost, in calculating the Exceeded Curtailment Price.
- 5.66 Another respondent proposed that the Flexibility Market Price Statement should be amended to add a field specifically for DNO/IDNO Party data on tendered prices if contracted prices are not available. The Working Group has since made significant improvements the Flexibility Market Price Statement which includes a separation of tendered and contracted prices.

**Question 13: Do you agree with the methodology for setting the Exceeded Curtailment Price? If not, please give your reasons.**

- 5.67 The majority (ten) of respondents agreed with the methodology for setting the Exceeded Curtailment Price, whereas two respondents did not agree – two respondents did not answer or the response was not clear. The Working Group noted all responses and highlighted three specific points:
- 5.68 One respondent disagreed and preferred the exclusion of outliers. The Working Group noted that other respondents agreed with the methodology whilst also supporting changes such as excluding outliers, to recognise that the proposed approach delivered the requirements set out in Access SCR Direction.
- 5.69 One respondent disagreed and considered that the requirement of the Access SCR Direction had been misinterpreted by the Working Group. The Working Group agreed to address the response to this representation in relation to question 15.
- 5.70 Another respondent did not agree with the use of a zero value for the Flexibility Market Price and proposed to use the maximum price for Distribution Flexibility Services across all 14 DSAs where no price is derived. However, the same respondent noted a concern that there may be extreme prices within a single DSA which may create a distortion, and therefore proposed to exclude outliers by disregarding prices that are greater than two standard deviations of the total contracted/tendered prices.
- 5.71 The Working Group noted the concern that locationality could create a distortion with extreme prices within a DSA but considered that this could be compounded by replacing zero values with the maximum across all DSAs.
- 5.72 Further, the Working Group noted that the proposed solution had intentionally moved away from the approach of using maximum prices across all DSAs given the Access SCR Direction is clear in the need to use contracted prices in the relevant DSA only, then use the Reinforcement Cost (noting the Working Group's proposal to supplement contracted prices with tendered prices within the relevant DSA).

**Question 14: Do you agree that an uplift of 20% meets the requirement of ‘markedly higher’? If not please give your reasons and advise what level you believe the uplift should be set at.**

- 5.73 The majority (twelve) of respondents agreed that 20% was appropriate as a markedly high uplift; one respondent proposed 50% and one respondents did not answer. The Working Group noted all responses and highlighted three specific points:
- 5.74 One respondent proposed the use of 50% to “truly embed the intention for a flexibility first approach” and set out concerns about no penalties if a DNO/IDNO Party does not do it. The respondent also proposed a mechanism should be developed to directly link Distribution Flexibility Services to flexible connections. The Working Group noted that it had previously considered 50% but agreed that it was above and beyond markedly higher and therefore discounted it, and also noted that there will remain a general obligation not to trigger the need to pay the Exceeded Curtailment Price, which should not be lost (i.e. it is a Distribution Licence obligation via the DCUSA to use reasonable endeavours). The Working Group considered the other points raised by the respondent but believed that changes would be needed outside of the DCUSA and which are not in scope of the Access SCR Direction.
- 5.75 Respondents recognised that 20% is an arbitrary figure and supported a regular review. The Working Group agreed this is sensible, but considered that an obligation to carry out the review may be achieved courtesy of the general open governance framework i.e. any DCUSA party can subsequently raise a CP.
- 5.76 One respondent suggested that 10% would also be markedly higher but did not formally propose it as an alternative. The Working Group noted that it had previously considered 10% but agreed that it was not sufficiently high to satisfy the ‘markedly high’ requirement.

**Question 15: With respect to paragraph 6.4 of the proposed new Schedule:**

- (a) should the Flexibility Market Price be the ‘highest of any Distribution Flexibility Service’ or should outliers be excluded? Do you have any alternative suggestions? Please give your reasons.
- (b) should this be of any Distribution Flexibility Services, or are there some services that should be excluded? Please give your reasons.
- (c) over what period do you believe prices for Distribution Flexibility Services should be used? Please give your reasons.

- 5.77 In relation to the exclusion of outliers, the majority (eight) of respondents supported the need to exclude them. In relation to the exclusion of certain services, the majority (eight) of respondents supported excluding post-fault services (albeit one response was unclear by proposing that the services should be limited to those which would be procured to avoid the specific Curtailment, therefore not ruling out any specific services in general). In relation to the assessment period, the majority (eight) of respondents supported the proposed period of the current regulatory year plus the two previous regulatory years: with five respondents supporting a shorter period and one respondent suggesting that the legal text was not sufficiently clear to answer the question. The Working Group noted all responses and highlighted six specific points.

- 5.78 One respondent commented that it could not tell from the consultation what the impact would be removing certain types of Distribution Flexibility Services to support exclusion of certain types of service (e.g. post-fault). The majority (eight) responders supported excluding post-fault services as post fault services are used to manage specific fault / loss of supply events on the network and interruptions due to faults are excluded from the exceeded curtailment limit calculations. Pre fault products are used to manage peak demand and pre-emptively reduce network load and are therefore considered to be the services to manage potential curtailment limit breaches. The Working Group agreed on this majority basis and amendments were made to Paragraphs 6.5 - 6.6 within Schedule 2D to clarify that only pre-fault services would be used to calculate the Flexibility Market Price. Due to the evolving nature of the flexibility markets and products it was agreed not to name individual products which may be used differently by individual DNOs, ensuring that all the relevant services are included and not excluded based on current product name alone. This would also allow new pre-fault products to be included should they be introduced.
- 5.79 One respondent considered there to be a lack of evidence that outliers exist and stated the view that a proposal to change the approach of using the highest price should accompany “detailed evidence and analysis”. The Working Group noted that the proposals do include necessary arbitrary assessment to deliver the requirements of the Access SCR Direction – but these have been reasoned and justified to the extent possible. The Working Group considered that any change should be considered based on similar levels of scrutiny but as noted, agreed to produce further analysis to illustrate the options for calculating the Exceeded Curtailment Price.
- 5.80 One respondent proposed an alternative approach to excluding outliers based on two standard deviations of the total prices contracted/tendered. The Working Group agreed to consider this option as part of its further analysis to illustrate the options for calculating the Exceeded Curtailment Price based on this data. However, the Working Group noted that the suggested approach could result in a higher price than the maximum price contracted/tendered.
- 5.81 In order to further assess the question of whether outliers should be excluded, the Working Group obtained pricing data from DNOs for flexibility services. An extract of this data showing the highest prices is shown in the table below:-

Recent Flexibility Utilisation Prices (£/MWh)												
ENWL	NGED-SWAE	NGED-SWEB	NGED-MIDE	NGED-EMEB	SSEN	NPgN	NPgY	SPD	SPM	EPN	LPN	SPN
6740.6	600	600	175	600	450	88	300	500	1000	5832.9	7561	2209.1
1456.3	600	600	175	600	450	18	300	500	1000	4757.2	5103.4	2209.1
1221.8	600	600	175	600	400		300	400	500	1835.7	1417	1104.5
1142.1	600	600	175	600	345		300	400	400	1375.1	1018.6	752.72

668.05	600	600	175	600	345		300	400	400	1200.9	975	654.54
449.41	600	600	175	600	345		300	400	400	1150	717.46	654.54
227.3	600	600	175	600	345		300	400	400	597	566.69	624.62

5.82 Visual observation of the data indicates that some values do appear to be outliers for some of the datasets. None of the datasets had a distribution that was similar to a normal distribution therefore the approach of using two standard deviations from the mean wasn't considered an appropriate response. The Working Group considered that if outliers were to be excluded then a mechanistic approach was needed to ensure consistent treatment. In discussions, a number of principles were proposed to identify which, if any, prices could be considered outliers. The identified principles are set out below:-

- There should be relatively few outliers. These could be identified through a percentile approach, the 95<sup>th</sup> percentile is proposed.
- The outliers should be significantly different from the next nearest price. For example, if the 95<sup>th</sup> percentile is say £90/ MWh, it would be hard to justify that this is an outlier if the next lowest price is say £89/MWh. The Working Group have recommended that for a price to be considered an outlier it should be more than 20% higher than the next lowest price.
- If a price appeared to be an outlier from the principles above, the Working Group didn't think it could be considered an outlier if it represented a large volume of the flexibility procured. The Working Group have proposed that the volume of flexibility procured from outliers should be a small proportion of the total volume procured. The Working Group have recommended that this should be less than 5% of the flexibility market based on the capacity that has been contracted.

5.83 The Working Group have included the determination of outliers in the proposed legal text and included this assessment in the Flexibility Market Price Statement. An illustrative worksheet with some example data is attached in Attachment 6.

5.84 One respondent supported a more locational approach i.e. more granular than a DSA. The Working Group noted that more locational granularity may severely limit the use of contracted/tendered prices in future (e.g. for a new location that requires a Distribution Flexibility Service) such that the Reinforcement Cost may be used the majority of the time in calculating the Exceeded Curtailment Price by default. The Working Group also noted that more granular approaches are considerably more complex and are less aligned with the Access SCR Direction to keep this as simple as possible.

5.85 One respondent commented that any trials/innovation projects should also be excluded from services, which may (e.g.) include facilitation payments which may inflate the price and therefore not reflect the market. The Working Group agreed that such trials/innovation projects should not be included in the information required to calculate the Exceeded Curtailment Price by default (i.e. would not be a Distribution Flexibility Service), therefore no change was needed to the legal text to accommodate this observation.

- 5.86 One respondent set out a detailed proposal for calculating the Exceeded Curtailment price underpinned by a different interpretation of the Access SCR Direction and a different approach to excluding outliers based on using certain services only. In terms of the interpretation, the respondent considered that the Access SCR Direction does not require an uplift to the highest price for contracted/tendered services, and instead the requirement would be achieved by uplifting a 'typical' market price. The respondent noted that a DNO Party already has a licence obligation to procure Distribution Flexibility Services. Whilst the Working Group understood the rationale set out by the respondent, it considered that it may not align to the 'spirit' of the Exceeded Curtailment Price to disincentivise a DNO/IDNO Party from ever breaching a Curtailment Limit, where the Exceeded Curtailment Price is "more often than not" cheaper than the market rate. The Working Group proposed seeking a view from Ofgem, and including the proposal in further analysis of how the Exceeded Curtailment Price may be calculated.
- 5.87 The Chair spoke to OFGEM regarding the removal of outliers from the Exceeded Curtailment Price calculation. This conversation was the result of a debate held in the Working Group meeting dated 15th September about the identification and removal of outliers when calculating the Exceeded Curtailment Price. OFGEM reminded the Chair that the introduction of the Exceeded Curtailment Price was at the request of the DNOs to limit their potential liability and that this price should, in almost all instance, never be needed. In the event that it is used the DNO would need to demonstrate reasonable endeavours that they attempted other avenues before exceeding curtailment. OFGEM recognised that there may be some instances where very high prices for flexibility are found and that it is fair that these should be excluded. However, any methodology or reasoning for allowing exclusions should be supported by evidence in this Change Report. OFGEM went on to say that determining what an outlier is may be appropriate and that they would very much like to avoid the Working Group presenting more than one alternative proposal in this Change Report.
- 5.88 The majority (eight) responders supported keeping the proposed three period (the current regulatory year, plus two previous regulatory years) for gathering prices for Distribution Flexibility Services for the purposes of calculating the Exceeded Curtailment Price. The Working Group agreed on this majority basis and no change was needed.

**Question 16: Do you believe there are any unintended consequences with respect to the proposed methodology for setting the Exceeded Curtailment Price? If so, then please provide details.**

- 5.89 Four respondents believed that there may be unintended consequences in relation to how the Exceeded Curtailment Price is set, therefore the majority did not. The Working Group noted all responses and highlighted three specific points:

- 5.90 In general, those that considered that there may be unintended consequences set out concerns that contracted prices for Distribution Flexibility Services in a developing market will be impacted by the Exceeded Curtailment Price. The responses set out concerns that setting the Exceeded Curtailment Price well in advance, and based on historical prices, could influence bids for future services based on historical information. One respondent proposed to monitor this risk and not address via the CP solution; noting that the risk cannot be quantified. The Working Group noted the concerns raised and links to how the Exceeded Curtailment Price is determined e.g. if outliers are excluded. The Working Group therefore recognised the need to take into account the concerns raised in finalising the methodology for calculating the Exceeded Curtailment Price, including how often the price is updated (i.e. question 20).
- 5.91 One respondent referred to the obligation to notify a Customer of an expected breach of a Curtailment Limit, and suggested that it may provide an opportunity for prices to be elevated in anticipation of the breach. The Working Group discussed the risk that signalling a need for flexibility at short notice and at a set price (based on historical data) may influence the price at which Distribution Flexibility Services may be willing to accept, but considered there to be a number of practical barriers which may not be quantifiable at this time. As above, the Working Group agreed that this risk can be mitigated in how the Exceeded Curtailment Price is set and how often it is updated – and ultimately the methodologies will be under open governance and therefore subject to change once this CP has been finalised, if the mitigations are not sufficient.
- 5.92 One respondent commented on the RIIO-ED2 Distribution Service Operation (DSO) incentive and it not being enough to incentivise the development of the flexibility markets. The respondent's concern is a DNO Party opting to Curtail a Customer by default if the incentive is not strong enough (including if the Exceeded Curtailment Price is not high enough). The Working Group noted the concern raised but agreed that it is out of scope of the DCUSA not just the Access SCR Direction.
- 5.93 One responder raised concerns around windfall gains, where the current proposed process could result in very large financial payments being made to an individual Customer in excess of the value of the additional Curtailment which will impact consumer bills.

**Question 17: Do you believe that the Clean Energy Package should be considered as distinct from the Access SCR Decision and Access SCR Direction when developing the solution for this CP? Please provide your explanation.**

- 5.94 The Working Group believed that the Direction is being followed in their response to this CP with the exclusion of the CEP. However, one responder to the consultation felt strongly that the CEP should be included when determining the Exceeded Curtailment Price. Therefore, the Working Group asked Ofgem to address this point in the Authority's decision.

**Question 18: Do you agree with the proposals in relation to the Flexibility Market Price Statement? If not, please provide your reasons.**

- 5.95 In general, with the exception of one respondent, all respondents supported the proposal in relation to the Flexibility Market Price Statement. The Working Group noted all responses and highlighted two specific points:

- 5.96 One respondent proposed that the table should clearly indicate whether a price is contracted or tendered, which as noted in relation to question 12 the Working Group agreed to address.
- 5.97 One respondent referred to the DNO Party obligation under standard condition 31E 'Procurement and use of Distribution Flexibility Services' of the electricity distribution licence ('SLC31E') to publish an annual report at the end of each April and set out the view that the report should be used to determine the data for the Flexibility Market Price Statement. The respondent also did not agree with a biannual update given the SLC31E requirement for an annual report. The respondent and Working Group engaged post-consultation in relation to the points raised and reached an agreed position that the underlying data from which the SLC31E report and the Flexibility Market Price Statement are based should be the same. As a result, this reduces the administrative burden of producing two separate reports and one on a biannual basis – it may even drive efficiencies in reporting. However, the respondent stated a preference to amend the legal text to align the requirements more clearly with the data fields in the SLC31E report. The Working Group discussed this and reached the conclusion that making the data source more specific risks either: (i) the two reports becoming misaligned unduly, or (ii) altering the requirements of the Flexibility Market Price Statement courtesy of changes to the Distribution Licence and which may not be transparent to stakeholders. As such, the Working Group agreed that no changes were needed.

**Question 19: Do you agree with the conversion from £/MVA to £/MVAh using the CDCM as opposed to the CEM? If not, please provide your reasons. Do you have any alternative suggestions that the Working Group should consider?**

- 5.98 The majority of respondents (ten) agreed with the conversion to an hourly unit of time; one respondent preferred the alternative (CEM) approach, and three respondents did not answer the question. The Working Group noted all responses and highlighted one specific point:
- 5.99 As noted, one respondent preferred the CEM approach as it is used in determining its prices for Distribution Flexibility Services. The Working Group noted that this is true for other DNO/IDNO Party(ies), but agreed to proceed in line with the majority in support of the CDCM approach.

**Question 20: Should the Exceed Curtailment Price be determined and fixed at the time of the Customer accepting their connection offer, or at the time the Curtailment occurs? Please provide your reasons.**

- 5.100 In relation to the frequency of updating the Exceeded Curtailment Price, half of respondents supported a dynamic price (e.g. at the time of exceeding the Curtailment Limit). Three respondents supported a price that is fixed at the time the connection offer is accepted; two respondents did not answer the question; and two respondents proposed a hybrid approach. The Working Group noted all responses and highlighted one specific point:

- 5.101 The two respondents that proposed a hybrid approach for consideration by the Working Group set out the potential to fix the Exceeded Curtailment Price for a period of time from the Customer accepting the connection offer, which would then either (i) change to a dynamic price thereafter, or (ii) be updated and fixed for another set period of time. The respondents did not suggest the periods of time applicable, but one did recognise the relative complexity of the approach. The Working Group agreed to consider a hybrid approach but recognised that the majority supported a dynamic price methodology.
- 5.102 The Working Group noted respondents' opinion that fixed prices could provide investor certainty but also noted the view that the Exceeded Curtailment Price wasn't conceived to be a determining factor in investment decisions. The Working Group also acknowledged that both a fixed price and a hybrid approach (during the fixed price period) would create a situation where customers within the same DSA would be subject to different Exceeded Curtailment Prices at any one point in time. This could result in a situation where, if a DNO had to consider Curtailment in excess of a customer's Curtailment Limit, they may choose to first select a customer who is subject to a lower Exceeded Curtailment Price. Further, where several customers have to be Curtailed in excess of their Curtailment Limit at the same time, each could receive payments based on differing Exceeded Curtailment Prices.
- 5.103 Based on these considerations, the Working Group concluded that dynamic pricing should be applied as this would best reflect current flexibility market conditions, and hence better facilitate effective competition, and deliver the most equitable outcome for customers at large.

**Question 21: Do you believe that a separate Exceeded Curtailment Price should be applied for import and export? Please provide your reasons.**

- 5.104 The majority (seven) of respondents that commented support a single Exceeded Curtailment Price; six respondents support a separate Exceeded Curtailment Price; and one respondent did not comment. The Working Group noted all responses and highlighted three specific points:
- 5.105 One respondent agreed in principle that separate prices could be used but commented that in practical terms it cannot currently be done. For the avoidance of doubt, this respondent was included in support of a single Exceeded Curtailment Price. The Working Group noted that the legal text (as consulted on) allows for separate or single prices, and as such the solution already caters for this preference i.e. it can be a separate price when practical.
- 5.106 One respondent preferred separate prices regardless of whether the price is the same for both import and export. As such, consideration of a single price would be removed, albeit the price would only vary for import and export when possible/justified.
- 5.107 One respondent proposed that it is made clear what is meant by 'insufficient data' and therefore define the term.

- 5.108 The Working Group discussed the responses and agreed that the proposed approach to determining separate prices for import and export should be more transparent such that where a DNO Party can determine separate prices, then separate prices will be used. The Working Group agreed that, for the relevant assessment period (i.e. the three years being the current regulatory year and two previous regulatory years) where a DNO Party contracts (or perhaps only tenders for):
- (i) Distribution Flexibility Services for demand turn up/generation turn down, the Flexibility Market Import Price will not be zero; and
  - (ii) Distribution Flexibility Services for demand turn down/generation turn up, the Flexibility Market Export Price will not be zero, and will not be based on the Flexibility Market Import Price.
- 5.109 However, the Working Group retain the view that practicality will mean that the Flexibility Market Export Price is likely to remain zero based on current requirements and data provisions. Therefore the Working Group proposed that if it is zero, and where the Flexibility Market Import Price is not zero, the Flexibility Market Export Price shall assume the value of the Flexibility Market Import Price.
- 5.110 The Working Group consider that this approach satisfies the three respondents whose points have been drawn out from the consultation, and in doing so (i) removes references and therefore a need to define 'insufficient data' via a transparent methodology which removes discretion, (ii) ensures that a single Exceeded Curtailment Price can prevail, and (iii) as such, increases the likelihood that the Exceeded Curtailment Price(s) will be determined other than by the Reinforcement Cost – which the Working Group consider to be in favour of a Customer (i.e. the value is likely to be higher).

**Question 22: Should the choice of a separate Exceeded Curtailment Price be at the discretion of the DNO/IDNO Party?**

- 5.111 The majority (ten) of respondents did not agree that a DNO/IDNO Party should have discretion to apply a separate Exceeded Curtailment Price for import and export, at least not without providing supporting rationale (set out by two respondents) – this includes one respondent who proposed that a separate price should always be used regardless of whether the price is different; and four respondents agreed that a DNO/IDNO Party should have discretion. The Working Group noted all responses and highlighted two specific points:
- 5.112 One respondent who agreed that a DNO/IDNO Party should have the discretion, noted that an IDNO cannot make a choice in accordance with the legal text (as consulted on) which specifies that an IDNO must use the price in the relevant DSA. The Working Group agree that this is a necessary sacrifice to ensure that a Customer connected to an IDNO is treated the same as if connected to the host DNO.
- 5.113 Two respondents proposed that any discretion needs to be transparent and justified.
- 5.114 The Working Group consider that it has addressed these concerns in the revised approach to calculating the Exceeded Curtailment Price(s), as set out above in response to the feedback received in relation to question 21.

**Question 23: Do you agree the provisions of these Regulations should apply to the Curtailment End Date? If not, please provide reasons why.**

- 5.115 The Working Group confirmed that all bar two respondents agree with the provisions of these Regulations should apply to the Curtailment End Date.
- 5.116 One responder stated that delaying energisation for a new project does not affect profitability, but extension of Curtailment does; therefore, the same Regulations are not appropriate. The Working Group discussed this comment and did not agree with this response – if the energisation date is delayed then the whole project cannot start whereas the Curtailment End Date does not impact energisation, rather represents the date at which the Customer's Non-Curtailable Import Capacity/Non-Curtailable Export Capacity will be equal to is Maximum Import Capacity/Maximum Export Capacity respectively (regardless of whether the DNO/IDNO Party has addressed the need for Curtailment elsewhere). The Working Group agreed that no further changes were made.
- 5.117 It was also suggested that any movement due to the DNO/IDNO Party not meeting their reinforcement dates should be compensated – the Working Group discussed this and agreed this is out of scope of this change.
- 5.118 One responder proposed revised wording based upon the 'Extensions of Time' provision within the Electricity (Connection Standards of Performance) Regulations 2015. The Working Group reviewed the proposed changes and made the necessary amendments to the draft legal text. One responder raised a concern around the use of the Electricity (Connection Standards of Performance) Regulations 2015. It was queried whether Paragraph 16 can be applied in the context of this CP and whether the definition of 'Customer' applies to both Demand and Generation Customers.
- 5.119 The Working Group discussed the above concern and agreed to remove the reference to the Electricity (Connection Standards of Performance) Regulations 2015 and made the necessary updates to the legal text including the provisions about the 'Extensions of Time' in Section 16 of the Electricity (Connection Standards of Performance) Regulations 2015, including in the legal text Paragraph 7.3.

**Question 24: Should these provisions be repeated in full in the 'Form of Curtailable Connection Agreement' which is set out in Appendix B of the proposed new Schedule? Please provide your reasons.**

- 5.120 The Working Group confirmed that there was a split between responses as to whether these provisions should be repeated in the 'Form of Curtailable Connection Agreement' which is set out in Appendix B of the proposed new Schedule – five responders agreed, one responder agreed but only if 'Customer' refers to both Demand and Generation Customer, and five responders did not agree (suggesting that they can be referenced/linked).
- 5.121 One responder suggested that the provisions should be repeated in full in the 'Form of Curtailable Connection Agreement' as it will be clearer for the User but does create the risk of drift. The Working Group discussed this response, and although the majority of the Working Group did not agree, the comment was noted.

**Question 25: Do you agree that this additional paragraph satisfies the intent of the Access SCR Decision?**

- 5.122 The Working Group confirmed that the majority of responders (ten) agree that this additional paragraph satisfies the intent of the Access SCR. Two responders did not agree and two responders did not provide any comments.
- 5.123 One responder stated that they believe that this paragraph satisfies the intent of the Access SCR; however, it is not fully clear from this paragraph, or the Access SCR Decision that all the same terms of the Curtailable Connection (including the Exceeded Curtailment Price) would apply in perpetuity. The Working Group agreed to include additions to the legal text that a Curtailable Connection can continue in perpetuity if a Customer does not want/will not pay to convert to a Non-Curtailable Connection.
- 5.124 One responder stated that the proposed paragraph only caters for a Customer choosing not to pay costs when the high-cost project threshold is exceeded, and not where reinforcement is required but the costs do not trigger the high-cost project threshold. The Working Group agreed that the legal text needed to be changed to address this in line with the Access SCR Decision, and whereby if a Customer does not pay applicable reinforcement costs it can accept an enduring Curtailable Connection (subject to their being a 'network benefit' in doing so), and if it later wants a Non-Curtailable Connection, it will require a new application. The Working Group amended the text to be inserted into the new Part B of Schedule 22 accordingly (see sections 6 and 7 of this Change Report for more information).

**Question 26: Do you agree that the required changes to the wording in the CCCM should be included in the legal text changes for DCP406?**

- 5.125 The Working Group confirmed that the majority of responders (ten) are happy for the text to be included within the DCP 406 legal text and one responder did not agree; however, one responder proposed separating the elements relevant to this CP and DCP 406, keeping them in their respective CPs. Two responders did not provide any comments.
- 5.126 The Working Group noted the responses and added that if one CP is rejected by the Authority, the Authority will need to make this clear within the other CPs response as both CPs have alternatives that include the elements from the other CP to ensure there is a full solution. Progressing changes to Schedule 22 that relate to a Curtailable Connection via this CP, as opposed to DCP 406, ensures that all relevant legal text changes will be approved or rejected by the Authority relating to the relevant CP only. The Working Group recognised the views from respondents that it is not uncommon for separate CPs to amend the same legal text and that this can be managed and consolidated accordingly upon finalisation of the respective text,
- 5.127 Whilst the majority of responders believe that the required changes to the wording within the CCCM should be included within the DCP 406 legal text changes, the Working Group agreed that additional changes were needed to Schedule 22 which will then be inserted into the legal text that will be amended courtesy of DCP 406, but via this CP. These amendments were updated and are now completed.

**Question 27: Do you agree with the Working Group in relation to the form of Curtailable Connection Agreement? If not, please provide your reasons.**

- 5.128 The Working Group confirmed that all responders agree with the Working Group in relation to the form of Curtailable Connection Agreement, although one responder did provide suggested minor changes to the wording without altering policy intent, which the Working Group reviewed and accommodated where appropriate.

**Question 28: Do you agree with the Working Group in relation to the approach used for incorporating amendments of the applicable NTC section into Appendix 2 of the form of Curtailable Connection Agreement? If not, please provide your reasons.**

- 5.129 The Working Group confirmed that all responders agree with the Working Group in relation to the approach used for incorporating amendments of the applicable NTC section into Appendix 2 of the form of Curtailable Connection Agreement.

**Question 29: Do you agree that a Customer subject to a Curtailable Connection should be required to fund any end control equipment as is applicable to arrangements for Flexible Connections in accordance with Schedule 22? Please provide your rationale.**

- 5.130 The Working Group confirmed that the majority of responders (nine) agree that a Customer subject to a Curtailable Connection should be required to fund any end control equipment as is applicable to arrangements for Flexible Connections in accordance with Schedule 22. Two additional responders also agreed but stated that additional clarity is needed. One respondent stated it would be appropriate in certain situations (however, this may need further consideration), and two responders did not provide any comments.
- 5.131 Two of the responders stated that additional clarity is required to outline the costs involved for a typical connection and the treatment of control equipment at the Curtailment End Date. The Working Group discussed this and believed that this is out of scope of this CP and stated that the CCCM is a methodology which does not include costs, however, costs are shown within the Connection Charging Statement.
- 5.132 One responder stated that there may be circumstances where a Customer wishes to install equipment at their cost to manage the impact of a Curtailable Connection, in which case this proposal is appropriate – however, this may need further consideration. The Working Group discussed this and believe that this is out of scope of the CP.

**Question 30: Do you consider that the proposal better facilitates the DCUSA General Objectives? If so, please detail which of the General Objectives you believe are better facilitated and provide supporting reasons.**

**If not, please provide supporting reasons.**

- 5.133 The Working Group confirmed that all bar one responder agree that the principles better facilitate the DCUSA General Objectives.

- 5.134 One responder stated that they do not agree that DCUSA General Objective one is better facilitated due to the proposal to use the highest Flexibility Market Price of the DNO licence area as this is not economical. Post-Consultation, the Working Group have mitigated the concerns raised by introducing a process for excluding outliers. The Working Group believe that doing this better maintains and develops an efficient Distribution System as it supports Ofgem's Direction. These prices only come into play in limited circumstance where Curtailable Limits are breached.

**Question 31: Are you aware of any wider industry developments that may impact upon or be impacted by this CP?**

- 5.135 The Working Group confirmed that seven responders were unaware of any wider industry impacts, whereas six responders noted areas that could be impacted by this CP. One responder did not provide any comments.
- 5.136 The Working Group note below the potential wider industry impacts:
- *Funding Mechanisms via RIIO-ED2 proposals*
  - *Development of DSO incentives in the ED period*
  - *Open Networks, Workstream 1A Product 5 Primacy Rules (may impact how DSOs utilise Flexibility Services)*
  - *EU Clean Energy Package*

**Question 32: Do you have any comments on the proposed legal text?**

- 5.137 The Working Group confirmed that the majority of responders (ten) did not have any further comments on the proposed legal text. Three responders provided additional comments and one responder did not provide any comments.
- 5.138 One responder stated that in relation to Paragraph 1.2, they consider that 'network benefit' should be defined, as this is key to determining when a DNO/IDNO Party must offer a Curtailable Connection in line with the Access SCR Decision. The Working Group noted that this term has numerous definitions and it is not possible to define it within this CP. The Working Group also added that if 'network benefit' is not defined by the Authority, then this will be open to interpretation.
- 5.139 One responder suggested including a statement within the legal text that allows for a DNO/IDNO Party to provide additional Curtailment assessments for the Customer's own benefit where applicable. The Working Group agree that this is not a legal text issue as the legal text addresses the case requirement of the CP. The Working Group stated that anything above or beyond the requirements of the CP falls at the discretion of the DNO/IDNO Party.

**Question 33: Do you have any other comments on DCP 404?**

- 5.140 The Working Group confirmed that the majority of responders (ten) did not have any further comments on this CP. One responder did not comment. Three responders provided additional comments and one responder did not provide any comments.

- 5.141 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.
- 5.142 The Working Group noted the above concern; however, this is an urgent CP with a deadline for completion provided by Ofgem to which the Working Group had to meet, whilst the 'clock' could only start at the point the Access SCR Decision and Access SCR Direction were published.
- 5.143 One responder raised additional information around levels of Curtailment and ask that consideration should be given to how a Customer is best presented with information relating to the practical level of Curtailment they are likely to experience. The Working Group agree that this is beyond the scope of the CP and should fall under DNO customer service discretion.
- 5.144 One responder noted that allowance should be made for reviewing the Curtailment End Date should the solution identified within the Connection Offer no longer represent a cost-effective solution for UK Customers. The Working Group agree that this is covered by the exceptional circumstances Clause.
- 5.145 One responder suggested that Curtailment merit order be published – the Working Group agree that this is out of scope of this CP.
- 5.146 One responder suggested that clarity be given on additional Curtailment parameters in order to strengthen the benefits and transparency to network users of the CP and welcome an express requirement within the Curtailable Connection Agreement to set out the parameters around Curtailment. The Working Group agree that this is out of scope of this CP; however, the Working Group noted that this is an aspiration that should be worked towards.
- 5.147 One responder suggested public reporting by distributors on their Curtailment activities – the Working Group noted this comment; however, it was agreed that this is out of scope of this CP.

## 6 Working Group Conclusions & Final Solution

- 6.1 After consideration of the consultation responses, the Working Group identified the following areas for further consideration. However, the Working Group noted that, whilst it has made changes to the legal text as a result of consultation responses, and whilst it has satisfied itself with the changes in principle (e.g. to calculating the Curtailment Limit(s) and Exceed Curtailment Price(s)), and having done so in accordance with the Access SCR Decision and Access SCR Direction, it had not – in all cases – had sufficient time to test the impact.

### Methodology for setting the Curtailment Limit

- 6.2 As noted in paragraph 5.9 the Working Group discussed adding a 'sensitivity factor' to address the complexities of meshed networks. The Working Group introduced this additional factor within the methodology by amending paragraphs 2.3(b) and 2.4(b) of the legal text, with such factor to be determined by system powerflow analysis to reflect the extent to which the assets being assessed are utilised.

- 6.3 As noted in paragraph 5.12, the Working Group adjusted the calculation of the Curtailment Limit to better reflect the impact of PV generation connections, and introduced a requirement to consider the impact during daylight hours only. The Working Group amended paragraphs 2.3(c) and 2.5(b) of the legal text (and inserted relevant new defined terms) to separate the impact of PV generation for accepted and inflight connections plus the connection for which the Curtailment Limit is being assessed.
- 6.4 Minor changes were made to the legal text to ensure that it properly articulates how the spreadsheet works, as noted in paragraph 5.11.
- 6.5 As noted in paragraph 5.16, the Working Group considered including a periodic review of how the Curtailment Limit is calculated. However, the Working Group agreed not to address this within the legal text as it meets the requirements of the Access SCR Direction as is and the legal text will be subject to open governance such that any DCUSA Party can raise a CP to amend it in the future.
- 6.6 The Working Group agreed with respondents to the consultation that proposed that the Curtailment Limit should be reassessed due to a material change in circumstances, as set out in paragraph 5.29. The Working Group amended paragraph 2.6 of the legal text to allow for the Curtailment Limit to be changed in such circumstances and where either (i) the Company and the Customer agree to the change or (ii) the Authority directs that a change be made. Where a change is not agreed between the Company and the Customer, the matter is to be resolved via a dispute raised in accordance with the process set out in the connection agreement.
- 6.7 The Working Group also agreed that – as noted in paragraph 5.39 – where the Authority directs that a different methodology for calculating the Curtailment Limit in accordance with paragraph 2.1 of the legal text, the Company shall provide to the Customer with information as to how the Curtailment Limit has been determined and the data used. The Working Group inserted paragraph 2.2 of the legal text to accommodate this.

## Methodology for measuring Curtailment

- 6.8 As noted in paragraph 5.41, the Working Group agreed to add further clarity to the definitions of Non-Curtailable Import Capacity and Non-Curtailable Export Capacity to make it explicit that these terms represent the amount of capacity that is not subject to Curtailment as no Reinforcement is needed to make this available to a Customer.
- 6.9 The Working Group amended the legal text to prevent a situation arising where a Curtailment Limit is exceeded, and the Company overstates the payment due to the Customer. This is set out in paragraphs 5.50 to 5.55. The Working Group agreed it was appropriate to continue to measure Curtailment on a quarterly basis, but to pay a Customer on an annual basis, where the Curtailment Limit was exceeded. The Working Group amended paragraphs 3.3 and 3.4 of the legal text as well as in the form of Curtailable Connection Agreement.

## Curtailment Reporting

- 6.10 As noted in paragraphs 5.57 to 5.58, the Working Group agreed to add clarity to the reporting of Curtailment to a Customer on a quarterly basis. The Working Group amended the legal text to make it clear that, where the Customer has been subject to Curtailment, the Company will (i) specify the start and end dates and times for any period of Curtailment, (ii) specify the applicable Exceeded Curtailment Price, and (iii) do so within 30 days after the end of the relevant quarter. Changes were made to paragraph 4.2 of the legal text to accommodate this.

## Exceeding Curtailment Limits

- 6.11 As noted in paragraph 5.62, the Working Group agreed that the Company should use reasonable endeavours to notify the Customer where the Company has exceeded the Curtailment Limit as soon as possible after the event. This requirement is in addition to the Company using reasonable endeavours to notify the Customer before the event. Paragraph 5.3 was introduced in the legal text to accommodate this.

## Methodology for setting the Exceeded Curtailment Price

- 6.12 The Working Group agreed to change the Flexibility Market Price Statement (see Appendix A of the legal text and a worked example (Attachment 5) to this Change Report) to ensure that it is clear whether tendered or contracted prices are used for Distribution Flexibility Services, as noted in paragraphs 5.66 and 5.96.
- 6.13 As noted in paragraph 5.78, the Working Group agreed with the majority of respondents to exclude post-fault Distribution Flexibility Services in the calculation of the Flexibility Market Import Price and Flexibility Market Export Price.
- 6.14 As set out in paragraphs 5.80 to 5.83, the Working Group agreed that it needed to demonstrate different approaches to calculating the Exceeded Curtailment Price(s), including suggestions made in response to consultation to excluding price outliers. The Working Group considered various options for excluding outliers and agreed to implement a 'triple test' methodology (as set out in paragraph 5.82) that allows for a clear distinction of what defines an outlier.
- 6.15 As noted in paragraphs 5.100 to 5.103, the Working Group considered how often the Exceeded Curtailment Price(s) would change, and supported the majority position that the price should be updated biannually and for every Customer with a Curtailable Connection. The Working Group amended the definitions of Exceeded Import Curtailment Price and Exceeded Export Curtailment Price respectively to reflect this.
- 6.16 The Working Group considered changes necessary to implement a transparent approach to determining a separate Exceeded Curtailment Price for import and export: Exceeded Import Curtailment Price and Exceeded Export Curtailment Price respectively. As set out in paragraphs 5.108 to 5.110, the Working Group agreed such an approach which removes any discretion that a DNO Party may have otherwise been able to apply – and where having such discretion was not supported by the majority of respondents as set out in paragraph 5.111.

- 6.17 The Working Group made significant changes to paragraph 6 of the legal text in relation to the above points. A new Appendix A within the legal text and worked example Attachment 6 to this Change Report, were created which now includes both tendered and contracted prices, as well as the calculations for outliers.

### **Curtailment End Date**

- 6.18 As noted in paragraph 5.119, the Working Group agreed that the legal text should change to address concerns which were raised over the use of a reference to The Electricity (Connection Standards of Performance) Regulations 2015 with respect to an 'agreed date' for the purposes of the Curtailment End Date. The Working Group agreed to amended paragraph 7 of the legal text to include a modified version of the reasons an 'agreed date' could be moved which were set out under the heading 'Extensions of Time' within the provisions of The Electricity (Connection Standards of Performance) Regulations 2015. The Working Group agreed that this added the desired clarity and thus resolved the concern that had been raised.

### **Form of Curtailable Connection Agreement**

- 6.19 The Working Group generally made changes to the form of Curtailable Connection Agreement to maintain alignment with changes made to the proposed new Schedule 2D.
- 6.20 As noted in paragraph 5.49, the Working Group amended the form of Curtailable Connection Agreement to align with the definition of Curtailment Instruction Value as per the proposed new Schedule 2D – where previously the definitions were not aligned.

### **Modifications to the new Part B of Schedule 22 - CCCM**

As noted in paragraphs 5.123 to 5.124, the Working Group agreed to amend the proposed change to the new Part B of Schedule 22 (introduced by DCP 406) to make it clear that (i) a Curtailable Connection can apply in perpetuity and (ii) that this would happen where (assuming there is 'network benefit' to having a Curtailable Connection) the Customer (a) does not want a Non-Curtailable Connection and (b) will not pay to convert to a Non-Curtailable Connection; regardless whether the high-cost project threshold has been breached.

## **7 Legal Text**

### **Legal Text**

- 7.1 The legal text for this CP has been developed and refined by the Working Group and has been reviewed by the DCUSA legal advisors and which the Proposer has confirmed as satisfying the intent of the CP. The legal text for this CP is provided as Attachment 1 to this Change Report.

### **Text Commentary for New Schedule**

- 7.2 The new Schedule includes Paragraphs 1-9 which covers the provisions that a DNO/IDNO Party will need to follow with respect to a Curtailable Connection and is set out under the following headings:
- SCHEDULE 2D – CURTAILABLE CONNECTIONS

1. SCOPE
2. SETTING THE CURTAILMENT LIMIT
3. MEASURING CURTAILMENT
4. CURTAILMENT REPORTING
5. EXCEEDING CURTAILMENT LIMITS
6. EXCEEDING CURTAILMENT PRICE
7. CURTAILABLE CONNECTION END DATES
8. CURTAILABLE CONNECTION AGREEMENT
9. DEFINITIONS

7.3 There are also two appendices to the new Schedule, being

- APPENDIX A: FLEXIBILITY MARKET PRICE STATEMENT
- APPENDIX B: FORM OF CURTAILABLE CONNECTION AGREEMENT (which has three annexes itself):
  - ANNEX 1 - GENERAL PARTICULARS OF THE CURTAILABLE CONNECTION
  - ANNEX 2 - AMENDMENTS TO THE APPLICABLE NTC SECTION
    - DEFINITIONS & INTERPRETATION
    - DE-ENERGISATION
    - LIMITATIONS OF CAPACITY
  - ANNEX 3 - TECHNICAL CONDITIONS

7.4 The form of the Curtailable Connection Agreement included in the Appendices is just a set of words which will be cut and paste from the DCUSA to create a new agreement between the DNO/IDNO and the Customer subject to a Curtailable Connection. It is based on the standard 'Bespoke Connection Agreement' template Schedule 2C of the DCUSA holds but has been updated to be more specific to Curtailable Connections.

7.5 As noted above, Appendix B has three annexes itself, two of which (Annex 1 and 3) are quite generic in nature, with the remaining annex (Annex 2) being somewhat more specific. Annex 2 includes the amendments to Section 3 of the National Terms of Connection (which forms part of Schedule 2B of the DCUSA) which will essentially fall away when the connection becomes non-curtailable.

## Text Commentary for Amendments to the new Part B of Schedule 22 – Common Connection Charging Methodology

7.6 A new Part B of Schedule 22 will be introduced by DCP 406, which essentially replicates the existing text within Schedule 22 but which has been updated to implement Ofgem's Access SCR decision and will be applicable as of 01 April 2023. Paragraphs 1.32A and 1.32B of the existing text in Schedule 22 covers the funding of control equipment for flexible connections and these provisions allow for the equipment that is connected at the customers premises to be funded by the Customer, but equipment that may be used more widely can either be shared or funded by the DNO. The amendment proposed as part of DCP 404 to the relevant text in the new Part B of Schedule 22 will mean that the same provisions will be equally applicable to a Customer subject to a Curtailable Connection.

## 8 Relevant Objectives

### Assessment Against the DCUSA Objectives

8.1 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.

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

	DCUSA General Objectives	Identified impact
<input checked="" type="checkbox"/>	1. The development, maintenance and operation by the DNO Parties and IDNO Parties of efficient, co-ordinated, and economical Distribution Networks	Positive
<input type="checkbox"/>	2. The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent therewith) the promotion of such competition in the sale, distribution and purchase of electricity	Neutral
<input checked="" type="checkbox"/>	3. The efficient discharge by the DNO Parties and IDNO Parties of obligations imposed upon them in their Distribution Licences	Positive
<input type="checkbox"/>	4. The promotion of efficiency in the implementation and administration of the DCUSA	Neutral
<input type="checkbox"/>	5. 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.	None

8.3 The Working Group consider that DCP 404 will better facilitate General Objectives one and three for the reasons set out in the following paragraph.

8.4 The Access SCR proposals are designed to facilitate more efficient development of the electricity distribution systems and hence implementing these will have a positive impact on General Objective 1. As these changes are the result of an SCR and DNOs have received the Access SCR Direction to implement the necessary code changes, this CP has a positive impact on General Objective 3.

- 8.5 The Working Group noted that one responder to the consultation suggested that this proposal does not positively meet DCUSA Objective one, the Working Group discussed and agreed that this proposal supports all the relevant DCUSA General Objectives.

## 9 Code Specific Matters

### Reference Documents

- 9.1 Access SCR Decision<sup>5</sup> and Access SCR Direction<sup>6</sup>.

## 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.....	<input type="checkbox"/>	REC.....	<input type="checkbox"/>	Distribution Code..	<input type="checkbox"/>
CUSC.....	<input type="checkbox"/>	SEC.....	<input type="checkbox"/>	Grid Code.....	<input type="checkbox"/>
None.....	<input checked="" type="checkbox"/>				

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

### Consideration of Wider Industry Impacts

- 10.3 The issue has been subject to a number of industry consultations as part of the Access SCR process. In addition, the ENA held two briefing sessions 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 405 'Managing Curtailable Connections between Licensed Distribution Networks'](#)
  - [DCP 406 'Changes to CCCM'](#)
  - [DCP 407 'Speculative Development'](#)

<sup>5</sup> <https://www.ofgem.gov.uk/sites/default/files/2022-05/Access%20SCR%20-%20Final%20Decision.pdf>

<sup>6</sup> <https://www.ofgem.gov.uk/sites/default/files/2022-05/Access%20SCR%20-%20DCUSA%20Direction1651572952655.pdf>

## 11 Implementation Date

- 11.1 Clause 11.9A(2) of the DCUSA, sets out that in respect of all Authority Change Proposals, which DCP 404 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 C22 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 set for 01 April 2023.

## 12 Recommendations

### Panel's Recommendation

- 12.1 The Panel approved this Change Report on 20 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 404.
- 12.2 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 this CP. The Voting Form can be found in Attachment 2.

## 13 Attachments

- Attachment 1 – DCP 404 Legal Text
- Attachment 2 – DCP 404 Voting Response Form
- Attachment 3 – DCP 404 Consultation and Responses
- Attachment 4 – DCP 404 Change Proposal Form
- Attachment 5 – DCP 404 Curtailment Limit Calculator
- Attachment 6 – DCP 404 Flexibility Market Price Statement