

Periodic Consultation on the Reference Price Methodology

**As required by the Gas (Security of Supply
and Network Codes) (Amendment) (EU
Exit) Regulations 2019**

February 2023

Contents

Introduction	3
Requirement to conduct the periodic consultation required under Article 26 of the Tariff Network Code	3
UNC Change Process	3
Background	4
Scope of this Consultation	4
Consultation Timeline	5
How to Respond	5
Introduction	6
Postage Stamp Methodology	7
Forecasted Contracted Capacity	7
Existing Contracts	8
Reserve Prices, Multipliers and Discounts	8
Conditional NTS Capacity Charge Discount	8
Revenue Recovery Charge	9
Cost Allocation Assessment	9
Capacity Weighted Distance Comparison	9
Zero Reference Prices	10
Commodity Based and Non-Transmission Tariffs	10
Commodity Based Transmission Tariffs	10
Non-Transmission Services	10
Consultation Questions	12
Appendix 1: The GB Gas Transmission Network	13
Appendix 2: Article 26 of TAR NC Consultation Requirements	14
Appendix 3: Assessment of RPM against Article 7(a)-(e) of TAR NC	27

Introduction

Requirement to conduct the periodic consultation required under Article 26 of the Tariff Network Code

This is the “periodic consultation” in accordance with Article 26 of Commission Regulation (EU) 2017/460 establishing a network code on harmonised transmission tariff structures for gas (TAR NC)¹ as retained in UK law by the Gas (Security of Supply and Network Codes) (Amendment) (EU Exit) Regulations 2019² and should be read in conjunction with the ‘Article 26 Data Tables’³ that have been published alongside this document.

Article 26 of TAR NC provides details on the content and process of the periodic consultation(s) which should take place “at least every five years”. It states that “one or more consultations shall be carried out by the National Regulatory Authority or the transmission system operator(s), as decided by the National Regulatory Authority”

Article 27(5) of TAR NC provides details on the subsequent periodic consultations to be carried out under Article 26 and states that these “shall be repeated at least every five years starting from 31 May 2019”

Article 5 of TAR NC requires the National Regulatory Authority or the Transmission System Operator (TSO), as decided by the National Regulatory Authority, to undertake cost allocation assessments, the results of which must be published as part of the periodic consultation required under Article 26(1)(a)(iv).

On 04 December 2023 Ofgem in its role as National Regulatory Authority published a decision letter⁴ stating that National Gas Transmission (NGT), in its capacity as TSO, should carry out the cost allocation assessments under Article 5 of TAR NC and the periodic consultation under Article 26 of TAR NC. Ofgem in its role as National Regulator Authority will then take and publish a final motivated decision on all items set out in Article 26 before 31 May 2024 to meet the timelines detailed within Article 27 (5)

UNC Change Process

The Uniform Network Code (UNC)⁵ is subject to an open industry governance process, meaning that in most instances it is changed through an industry-led change management process, with UNC Modifications being proposed by industry parties. Proposed modifications are usually subject to a workgroup process, where they are developed and assessed according to whether, and how well, they further the applicable relevant objectives outlined in the UNC. The proposed

¹ [Commission Regulation \(EU\) 2017/460](#)

² Now incorporated into UK law by the European Union (Withdrawal) Act 2018 and the European Union (Withdrawal Agreement) Act 2020, as amended by [Schedule 5 of the Gas \(Security of Supply and Network Codes\) \(Amendment\) \(EU Exit\) Regulations SI 2019/531](#)

³ [Article 26 Data Tables](#)

⁴ [Decision that National Gas Transmission plc \(“NGT”\) conducts the periodic consultation required under Article 26 of the Tariff Network Code \(“TAR NC”\).](#)

⁵ [Uniform Network Code](#)

Modification is then sent for consultation to the wider industry and is then considered by the UNC Panel, the members of which vote on whether the proposal or proposals meet the applicable UNC objectives, both against the ‘status quo’ scenario and against the other proposals if applicable. For Modifications that are subject to self-governance, UNC Panel makes a determination as to whether or not the Modification should be implemented. In the case of Authority Direction Modifications, the recommendation of the UNC Panel is submitted to the Authority as part of the Final Modification Report for consideration in its final decision.

Background

In 2015, Ofgem undertook its Gas Transmission Charging Review (GTCR)⁶ of gas transmission entry charging arrangements, in light of significant and ongoing changes to the patterns of gas flows on the NTS and the emergence of TAR NC. As a consequence of the GTCR and TAR NC, the industry was invited to lead work on the development of the charging arrangements via the UNC code modification process. NGT and the industry developed UNC0621 and 10 alternative proposals (UNC0621, A – L)⁷. In December 2018, Ofgem concluded that none of the UNC0621 proposals were compliant with TAR NC, and therefore could not be implemented.

In 2019 NGT raised UNC0678 which aimed to build on UNC0621 and ensure compliance with TAR NC. Subsequently ten alternative proposals (UNC0678/A/B/C/D/E/F/G/H/I/J)⁸ were raised.

On 28 May 2020 Ofgem issued its direction⁹ that, of the proposals deemed to be compliant with TAR NC, UNC0678A best facilitated the achievement of the relevant methodology objectives of the UNC and should therefore be implemented. In October 2020 UNC Modification 0678A was implemented which fundamentally changed the Reference Price Methodology (RPM) from one that calculates capacity prices using the Long Run Margin Cost (LRMC) method, to one based on a Postage Stamp approach.

Incremental changes to the methodology implemented through UNC0678A have been introduced over time, through the normal UNC change process, but the underlying approach remains one based on a Postage Stamp methodology.

Scope of this Consultation

Given the open governance framework in Great Britain, UNC signatories wishing to amend any arrangements within UNC are able to raise a UNC code modification proposal via the usual industry led process as described above. For charging related proposals, this would typically consist of development through the National Transmission System Charging Methodology Forum (NTSCMF)¹⁰ workgroup, with changes being proposed to UNC Transportation Principal Document (TPD) Section Y – Charging Methodologies¹¹, and assessed against the relevant charging methodology objectives. Additionally, NTSCMF is also used as the primary forum for charging

⁶ [Gas Transmission Charging Review](#)

⁷ [0621/A/B/C/D/E/F/G/H/J/K/L - Amendments to Gas Transmission Charging Regime](#)

⁸ [0678/A/B/C/D/E/F/G/H/I/J \(Urgent\) - Amendments to Gas Transmission Charging Regime](#)

⁹ [0678/A/B/C/D/E/F/G/H/I/J \(Urgent\) - Amendments to Gas Transmission Charging Regime – Ofgem Decision Letter](#)

¹⁰ [NTS Charging Methodology Forum](#)

¹¹ [UNC – TPD Section Y – Charging Methodologies](#)

related industry discussion, identification of issues and methodology development in advance of a UNC Modification being raised.

When this consultation was last produced, in December 2019, significant changes were proposed to the charging arrangements at the time in order to produce stable and predictable transmission charges and ensure compliance with the newly implemented TAR NC. UNC Modification 0678: Amendments to Gas Transmission Charging Regime, and its ten alternatives (UNC678/A/B/C/D/E/F/G/H/I/J) were raised to replace the LRMC methodology that was in place at the time. UNC678 and alternatives were all fully developed at the time of the consultation, which was published as part of Ofgem's minded to decision and draft impact assessment on them¹². Unlike in 2019, there are currently no developed proposals in place to fundamentally change the charging methodology. The consultation will therefore lay out and seek views on the charging arrangements at the time of publication, without mention of any in flight changes or future discussion topics, rather than comparing an existing methodology to a new proposed methodology. This will be completed while ensuring that all the requirements of the consultation, as detailed in TAR NC, are met.

This consultation will therefore not replace the established UNC change process, with development through NTSCMF, as the primary vehicle for progressing industry change to charging methodologies. Rather, it will provide stakeholders with the opportunity to comment on different aspects of the RPM currently in place and any changes that have been developed or are being developed as part of the changes process. These comments will then be used to identify and inform areas of future discussion and improvement. Some of these views may link to previous discussions but views on other elements not previously mentioned are equally welcome.

Consultation Timeline

NGT is publishing this consultation in accordance with Article 26 of TAR NC on 16 February 2024. The consultation shall be open for two months as required under Article 26 (2) of TAR NC, closing on Tuesday 16 April 2024. Within one month following the end of the consultation, NGT will publish the consultation responses received and their summary. Ofgem in its role as National Regulator Authority will then take and publish a final motivated decision on all items set out in Article 26 before 31 May 2024 in order to meet the timelines detailed within Article 27 (5).

How to Respond

This consultation is open to any parties interested in gas transmission charging. As part of the consultation exercise, we have posed a number of questions (listed in the 'Consultation Questions' section). These questions are intended to guide responses on the items mentioned in Article 26 (1) and set out within this consultation document, but do not prevent consultees raising other charging related matters which they consider to be material.

Please send your response to box.gsoconsultations@nationalgrid.com. We will publish non-confidential responses on the Gas Charging Discussion pages of our website¹³ within one month following the end of the consultation, in accordance with Article 26 (3) of TAR NC.

¹² [UNC678/A/B/C/D/E/F/G/H/I/J: minded to decision and draft impact assessment](#)

¹³ [National Gas Website - Gas Charging Discussion Papers](#)

If you wish us to keep your response, or parts of your response, confidential, we'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do wish us to keep your response confidential, please clearly mark this on your response and explain why. If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you do wish to be kept confidential and those that you do not wish to be kept confidential. If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't link responses to respondents if we publish a summary of responses.

The Reference Price Methodology

Introduction

NGT owns and operates the NTS, a network of high-pressure gas pipelines which convey gas from NTS Entry Points to NTS Exit Points. NGT performs its role under licence from the Regulator, Ofgem, and is subject to Transmission Owner (TO) and System Operator (SO) price controls. This means that the amount of revenue that NGT can recover from those parties that use the NTS is regulated. Broadly speaking, TO Revenue relates to the costs associated with maintaining and investing in our network while SO Revenue relates to the costs of operating the network, such as the running of our compressor fleet.

The UNC (specifically TPD Section Y Part A - NTS Charging Methodologies) lays out the RPM, which prescribes how TO and SO revenues are recovered through transportation charges. It defines the creation of Transmission Services Revenue (recovered via Transmission Services Charges) and Non-Transmission Services Revenue (recovered via Non-Transmission Charges). Transmission Services and Non-Transmission Services broadly align to the TO and SO respectively.

NGT levies network charges in accordance with the NTS Charging Methodologies contained within the UNC. For the purpose of Transmission Services, network users pay for capacity, which gives the 'right' to inject gas onto the NTS (Entry) and the 'right' to offtake gas from the NTS (Exit). Entry and Exit Capacity is purchased separately through auctions which are pay as bid and subject to a minimum reserve price. The charges paid in these auctions are referred to as capacity charges and the minimum reserve price is referred to as the capacity reserve price. Capacity charges are payable regardless of whether a user exercises its right to flow gas. The NGT Capacity Guidelines¹⁴ provide more information on NTS Capacity.

We aim to recover 100% of our Transmission Services Allowed Revenue through capacity charges and this is split equally between Entry and Exit, with 50% of our Transmission Services Allowed Revenue aimed to be recovered through Entry charges and 50% through Exit charges.

¹⁴ [NGT Capacity Guidelines](#)

As we currently operate a Postage Stamp RPM (See ‘Postage Stamp Methodology’ section), there is a single uniform Reference Price for Entry Capacity and a single Uniform Reference Price for Exit Capacity. Discounts to these charges are subject to certain conditions which are described in more detail in the ‘Reserve Prices, Multipliers and Discounts’ section.

Users also pay separate Non-Transmission Charges through a number of specific flow-based commodity charges, these are described in more detail in the ‘Non-Transmission Services’ section.

Together, Transmission and Non-Transmission charges allow NGT to recover its allowed revenue, set through the price controls.

Postage Stamp Methodology

The implementation of UNC 0687A in October 2020, fundamentally changed the RPM to one where capacity reserve prices are based on a Postage Stamp methodology. This is a single uniform Reference Price applied to all Entry Points and a single uniform Reference Price applied to all Exit Points. It is a simple RPM in comparison to alternatives considered in the past as it does not include any reference to the distance between Entry and Exit Points.

The methodology relies principally on Entry or Exit Target Revenue and Forecasted Contracted Capacity (FCC), which is determined for each Entry Point and each Exit Point. This is a forecast of the volume of capacity that will be purchased at each Entry Point and Exit Point for the forthcoming gas year. For more detail on the FCC and how it is calculated see ‘Forecasted Contracted Capacity’ section below.

To calculate the Reference Price for Entry, the Entry Target Revenue is divided by the Net FCC (the total Entry FCC, less the Existing Contracted Capacity, see ‘Existing Contracts’ section). To calculate the Reference Price for Exit, the Exit Target Revenue is divided by the total Exit FCC. The FCC is therefore the key variable that can impact Reference Prices.

The Reference Price is calculated as an annual figure and there are a number of discounts that can be applied to it under specific circumstances. Once the Reference Price is converted to a daily figure and any applicable discounts have been applied, it is referred to as the reserve price. Available discounts are described below in the ‘Reserve Prices, Multipliers and Discounts’ section.

Forecasted Contracted Capacity

In order to derive the Reference Price and therefore reserve price, a forecast of contracted capacity is required. The FCC Methodology¹⁵ is used to forecast the volume of capacity that will be purchased at Entry Points & Exit Points for the forthcoming gas year. The purpose of this methodology is to determine an annual value for each Entry and Exit Point that will be used as part of the Reference Price and reserve price calculations. The FCC Methodology is referenced in UNC and the review process for the FCC Methodology is also defined within UNC. The FCC excludes capacity which is included within Existing Contracts

¹⁵ [FCC Methodology](#)

The FCC Methodology is important as the FCC has a material impact on the amount of revenue that NGT will recover via capacity charges. Critically, the closer the FCC value is to actual capacity bookings, the less NGT will rely on reconciliations in future years or subsequent revenue adjustments via Transmission Services Revenue Recovery Charges, explained under the “The Revenue Recovery Charge” section.

Existing Contracts

The implementation of UNC0678A on 01 October 2020, saw a move to a capacity-based regime for the recovery of Transmission Services Revenues. A proportion of Entry Capacity that was held at this time was covered by what are known as existing contracts. Existing contracts are Long Term Entry Capacity allocated before the introduction of the EU Tariff Network Code (TAR NC) on 6 April 2017. They have fixed prices and as such, the determination of Reference Prices for Transmission Services Entry Capacity is calculated net of any capacity or revenue associated with Existing Contracts.

Reserve Prices, Multipliers and Discounts

Under the TAR NC, discounts or multipliers can subsequently be applied to the Reference Price. Once applied, the resulting price is referred to as the reserve price and as such, the reserve price is determined based on the Reference Price, plus any applicable discounts. The reserve price is effectively the auction floor price for a specific Entry or Exit Point and the minimum amount an NTS user would need to pay in a capacity auction to secure capacity at a particular point.

All reserve prices for non-Existing Contract capacity at Entry Points are the same, with the exception of a 10% discount on the Reference Price for Interruptible capacity, an 80% discount on the Reference Price at Storage sites (Article 9 of the TAR requires a minimum 50% discount) and a 10%-90% Conditional NTS Capacity Charge discount available to eligible NTS users.

All capacity prices for Exit Points are the same with the exception of a 10% discount on the Reference Price for Off-Peak capacity, an 80% discount on the Reference Price at Storage sites (Article 9 of the TAR requires a minimum 50% discount) and a 10%-90% Conditional NTS Capacity Charge discount available to eligible NTS users.

Under TAR NC the granting of discounts should also be considered for Entry Points from LNG facilities. Although there is provision in UNC for a “Specific Point Discount” for LNG Import Terminal Points, this discount is set at 0%.

Conditional NTS Capacity Charge Discount

The Conditional NTS Capacity Charge Discount (CNCCD), sometimes referred to as the short-haul discount, is a capacity discount available when NTS users wish to flow gas from an Entry Point to an Exit Point that are located close together. This is to encourage the use of the NTS rather than the construction of a separate and privately owned pipeline, referred to as ‘inefficient bypass.’ The CNCCD was introduced on 01 October 2021 through the implementation of UNC0728B¹⁶ and the discounts available are subject to specific eligibility criteria. The maximum

¹⁶ [0728/A/B/C/D - Introduction of a Conditional Discount for Avoiding Inefficient Bypass of the NTS](#)

eligible route distance permitted between the nominated Entry and Exit Points is 28km. The maximum discount available is 90%, this reduces as the distance increases, with the minimum discount available being 10%.

Revenue Recovery Charge

The charging methodology allows for a Revenue Recovery Charge (RRC) which acts as a mechanism to manage any under or over recovery of revenues at Entry and Exit within the Gas Year. This capacity charge can be applied at all points, apart from capacity classified as Existing Contracts. The RRC is calculated separately for Entry and Exit and can be either a debit or a credit. It is a means to recover or return a large forecasted under/over recovery and can be adjusted mid Gas Year. By default, the RRC is set to 0.0000 p/kWh and this has been the case since October 2021.

Cost Allocation Assessment

Article 5 of TAR NC requires that the National Regulatory Authority or TSO shall perform a Cost Allocation Assessment (CAA) to be published as part of the Article 26 periodic consultation. The specific requirements for this are detailed within Article 5 of TAR NC. The calculations for the CAA have been completed by NGT and can be found in the 'Article 26 Consultation Data Tables' spreadsheet that has been published as a subsidiary document to this consultation. The specific calculations for the CAA are accessible in the worksheet "CAA".

Capacity Weighted Distance Comparison

Article 26 1 (a) (vi) of TAR NC requires that, where the RPM is not the Capacity Weighted Distance methodology described in Article 8 of TAR NC, then a comparison should be completed between the RPM and the CWD methodology including indicative reference prices under each methodology.

The CWD methodology is based on the principle that the Reference Price at each Entry or Exit Point should be based on the capacity and distance of each Entry Point to all Exit Points where flows may occur and of each Exit Point to all Entry Points where flows may occur. The 'weight' of each Entry or Exit Point is measured by its capacity-weighted distance from all Exit or Entry Points. The end result is a specific Reference Price for each individual Entry Point and each individual Exit Point rather than a single uniform Reference Price applied to all Entry Points and a single uniform Reference Price applied to all Exit Points as is the case under the Postage Stamp methodology.

As we use, and propose to continue using, a Postage Stamp methodology rather than the CWD methodology in GB, the comparison between the two RPMs has been completed as required by TAR NC. For the purposes of this comparison, we have provided both adjusted and unadjusted CWD indicative prices. The unadjusted prices follow the methodology as set out in Article 8. Due to the discounts available in GB such as Storage and CNCCD, following this methodology as written would not recover the target revenue for Transmission Services. An additional charge would therefore be necessary to account for this difference which has been included as an additional projected RRC. The adjusted prices account for the necessary adjustments within the

Reference Prices, and therefore do not have an RRC associated with them. We have assumed the same discounts available under the current methodology for the CWD methodology.

Current and future indicative Reference Prices are available in the ‘Article 26 Consultation Data Tables’ spreadsheet that has been published as a subsidiary document to this consultation. The indicative tariffs under the current methodology are accessible in the “Entry Data” and “Exit Data” worksheets. The CWD indicative tariffs for comparison are accessible in the “CWD Entry” and “CWD Exit” worksheets. For easy comparison of indicative tariffs under the two methodologies, the indicative prices under the CWD methodology, expressed as a percentage of the prices under the current methodology are provided in the “Entry Percentage Difference” and “Exit Percentage Difference” worksheets.

Zero Reference Prices

The CWD methodology used to produce tariffs for the above comparison uses a calculation that divides total revenue by total Forecasted Contracted Capacity to yield a unit capacity price for each Entry and Exit Point individually. Due to various factors (e.g. points on the network where the FCC is zero) the CWD approach can result in zero Reference Prices at certain locations. Where this is the case, a correction has been applied, whereby the Reference Price at the closest non-zero priced Entry or Exit Point is used instead. As the capacity denominator under the Postage Stamp methodology is an aggregate figure for the whole system and not on the basis of individual points, this is not required under the current RPM.

Commodity Based and Non-Transmission Tariffs

TAR NC specifies the format of network charges depending on the ‘service’ they relate to. The TSO, which is NGT in GB, provides services for which it recovers Allowed Revenues. TAR NC divides these into ‘Transmission Services’ and ‘Non-Transmission Services’ and specifies the format of charges levied for each. TAR NC specifies that by default, revenues for Transmission Services are recovered via capacity-based tariffs, and only allows the use of commodity-based tariffs for recovering transmission services revenues by exception. When certain criteria, listed in the TAR NC, are met, commodity-based tariffs may be used for recovering flow-based costs and for managing revenue recovery. Separate ‘Non-Transmission’ tariffs may be levied to recover revenue for Non-Transmission services.

Commodity Based Transmission Tariffs

The charging methodology as prescribed in UNC does not include any provision for commodity-based Transmission Services charges (i.e. there is no flow-based Transmission Services charge). 100% of Transmission Services revenue is capacity-based.

Non-Transmission Services

Article 4 of the TAR NC sets out criteria that should be met for any service to be considered as a Transmission Service and these are collected through the Transmission Services tariffs as described above.

Non-Transmission Services revenue is recovered through the following Non-Transmission charges as laid out in UNC TPD Section Y:

- **General Non-Transmission Services Entry and Exit Charges;** These aim to collect the residual amount of Non-Transmission Services Target Revenue after the estimates for the below charges have been deducted.
- **St Fergus Compression Charge;** This is a charge in respect of the delivery of gas to the NTS at the North Sea Midstream Partners (NSMP) sub-terminal.
- **NTS Metering Charges;** A number of sites are directly connected to the NTS where National Gas owns and provides metering equipment used. National Gas NTS charges these specific end users for the provision and maintenance of this equipment.
- **DN Pensions Deficit charges;** This charge is payable by a DN to allow us to recover pension deficit costs associated with former employees of the DN Operator. The charge is currently zero.
- **Shared Supply Meter Point Administration charges;** These charges are payable by users of shared supply meter points. The charges comprise of a charge for establishing a Supply Meter Point as a Shared Supply Meter Point, a charge for a change in the registered user, and a daily charge.
- **Allocation Charges at Interconnectors** The Allocation charges that apply at Interconnectors are charges for initial set up for a user, and ongoing charges.

Revenue due for collection via General Non-Transmission Services Charges is equal to the Non-Transmission Services revenue minus the DN Pensions Charges, NTS Meter Maintenance Charges, St. Fergus Compressor Charges, Shared Supply Meter Point Administration Charges and Allocation Charges at Interconnectors. The vast majority of Non-Transmission Allowed Revenue is collected via the General Non-Transmission Services Charges. General Non-Transmission Services charges are flow-based and are a flat unit price for all Entry and Exit Points. The charges are applied to all flows excluding storage flows (unless it is flowed as “own use” gas at the storage point).

The General Non-Transmission Services Charges are calculated by forecasting the aggregate NTS quantity, which is the sum of the aggregate quantity of gas estimated to be delivered by network users to the NTS at all Entry Points, and the aggregate quantity of gas estimated to be offtaken by network users from the NTS at all Exit Points. The Allowed Non-Transmission Services Revenue, net of the amounts to be collected through the other Non-Transmission charges, is then divided by the aggregate NTS quantity to give the General Non-Transmission Services Charge.

Non-Transmission Services Entry and Exit Charges are reconciled within a single account. This includes the revenue from the DN Pensions Charges, NTS Meter Maintenance Charges, St. Fergus Compressor Charges, Shared Supply Meter Point Administration Charges and Allocation Charges at Interconnectors.

Consultation Questions

This consultation is open to any parties interested in gas transmission charging. The questions posed below are intended to guide responses on the items mentioned in Article 26 (1) and set out within this consultation document, but do not prevent consultees raising other matters which they consider to be material. The consultation will not replace the established UNC change process but provides stakeholders with the opportunity to express views on the charging methodology and its ongoing development on a periodic basis.

Please send your response to box.gsoconsultations@nationalgrid.com by **16 April 2024**.

Question 1: Do you have any views on the continued use of the current methodology based on a Postage Stamp approach as the proposed methodology going forwards?

Question 2: There are a number of topics that have been discussed and will be continued to be discussed through NTSCMF. Do you have any views on developments to any specific parts of the Reference Price Methodology and the reserve prices that are applied that you would like to be further explored?

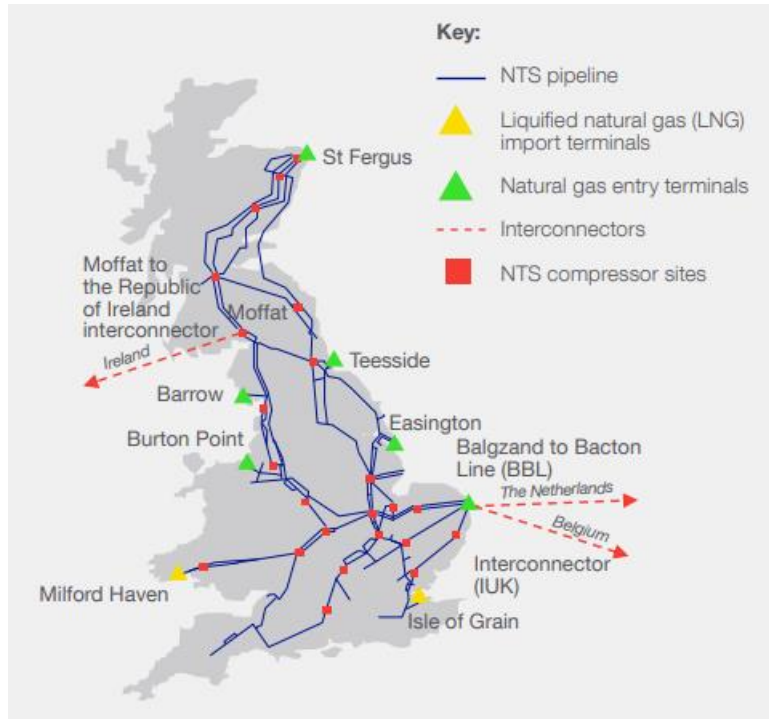
Question 3: Do you have any views on the Cost Allocation Assessment carried out as part of this consultation?

Question 4: Do you have any views on the Non-Transmission services provided to network users and the Non-Transmission tariff methodology?

Question 5: Are there any other charging related matters, not covered by the previous questions, which you would like to comment on?

Appendix 1: The GB Gas Transmission Network

NGT owns and operates the National Transmission System (NTS) in Great Britain, which is made up of approximately 7,666km of high-pressure pipelines and over 500 above-ground installations. The figure below is a high level representation of NTS



Additional maps of the NTS that provide additional information on supply terminals, NGT’s compressor fleet, network capability zones and NTS Exit capacity zones are contained in the Gas Ten Year Statement 2023¹⁷ and OS maps for individual areas of the NTS are available on our website¹⁸

¹⁷ [Gas Ten Year Statement 2023](#)

¹⁸ [National Gas Website: Network Route Maps](#)

Appendix 2: Article 26 of TAR NC Consultation Requirements

Article 26 of TAR NC states that the final consultation shall include the information contained in this provision. These requirements are presented below:

[A] ART. 26(1)(A): Proposed Reference Price Methodology		
[1] Information on the parameters used in the proposed RPM related to technical characteristics of the transmission system [Art. 26(1)(a)(i), Art. 30.(1)(a)]:		
Requirement	Description	Comments
[A] Description of the proposed reference price methodology: Article 26(1)(a)	For instance: (i) Choice of RPM; (ii) Cost drivers of the RPM; (iii) Entry/exit split. Cost reflectivity and application to the RPM; (iv) Capacity/commodity split. Cost reflectivity and application to the RPM; (v) Intra-system/cross-system split. Cost reflectivity and application to the RPM; (vi) Adjustments (benchmarking, equalisation and rescaling); and (viii) Use of inter-TSO compensation mechanism. Brief note on the application of the RPM in multi-TSO E/E system and reference to the inter-TSO compensation mechanism consultation. Only if applicable.	<p>The current (and proposed) RPM requires two main inputs: (i) The target revenue required to be recovered from Transmission Services, split between Entry and Exit; and (ii) The Forecasted Contracted Capacity (“FCC”).</p> <p>The RPM produce a unit price that will be the same for all Entry Points and a separate unit price that will be the same for all Exit Points. The FCC is calculated subject to the FCC Methodology.</p> <p>The RPM produces Reference prices annually and, subject to specific adjustments, Reserve Prices for the applicable capacity auctions and allocation processes.</p> <p>The RPM is used to recover the Transmission Services Revenue, ensuring that 100 of Transmission Services revenue is recovered through Capacity charges.</p> <p>A 50/50 split is applied between Entry and Exit.</p> <p>Intra-system/cross-system split is detailed within the calculations for the Cost Allocation Assessment (CAA) and can be found in the ‘Article 26 Consultation Data Tables’ spreadsheet published as a subsidiary document to this consultation. The specific calculations are accessible in the worksheet ‘CAA’.</p> <p>No adjustments (benchmarking, equalisation and rescaling) are proposed.</p>

		More information about the RPM is available in UNC Section Y – Charging Methodologies
[B] Justification of the parameters used that are related to the technical characteristics of the system: Articles 26(1)(a)(i) and 30(1)(a)(i-v)	Justify the selection and use of the parameters listed in Art. 30(1)(a)(i-v) that are and input to the RPM, in view of the level of complexity of the transmission network related to the technical characteristics of the transmission system.	<p>The RPM for calculating Entry and Exit Capacity Reference Prices requires two main inputs: (i) Target Entry or Exit Transmission Services Revenue; and (ii) Forecasted Contracted Capacity (“FCC”).</p> <p>The FCC Methodology takes account of a range of inputs to inform a forecast for the gas year for which tariffs are to be generated (the relevant gas year). These inputs take account of both historical and forecast data such as, and not limited to, a forecast of GB demand, historical sold capacity and historical flows on the NTS applicable to each Entry and Exit Point. The FCC Methodology is published on the National Gas Website</p> <p>A structural representation of the transmission network is available in the ‘The GB Gas Transmission Network’ section of this document</p>
[C] Technical capacity at entry and exit points. Values: Articles 26(1)(a)(i) and 30(1)(a)(i)	Provide information when the parameter is an input to the RPM	N/A
[D] Forecasted contracted capacity at entry and exit points. Values: Articles 26(1)(a)(i) and 30(1)(a)(ii)	Provide information when the parameter is an input to the RPM	<p>The FCC is a forecast of capacity bookings. The values are determined in accordance with the FCC Methodology which is published on the National Gas Website</p> <p>FCC values for Gas Year 2023/2024 and indicative values for future tariff years are contained in this published ‘October 2023 Transmission Services Model’</p> <p>The data for FCC can be seen in the Entry Prices or Entry Prices tabs when modelling the specific year. Data has been produced as indicatives for the tariff years for illustration for 2023/24 – 2027-28 inclusive. Each tariff year runs from 01 October to 30 September. The values use the FCC Methodology outlined earlier in this document.</p>

[E] The quantity and the direction of the gas flow for entry and exit points. Values: Articles 26(1)(a)(i) and 30(1)(a)(iii)	Provide information when the parameter is an input to the RPM	N/A
[F] Structural representation of the transmission network with an appropriate level of detail: Articles 26(1)(a)(i) and 30(1)(a)(iv)	The representation should include an image of a simplified network depicting the transmission network and distinguishing the elements defined in Art. 2(1)(1) of the Regulation (EC) No 715/2009 The representation should include the transmission network elements included in the regulatory asset base.	A structural representation of the transmission network is available in the 'The GB Gas Transmission Network' section of this document. A list of NTS Entry and Exit Points can be viewed in this published ' October 2023 Transmission Services Model ' To see the Distance Matrix (used to produce CWD prices for the CWD comparison), please unhide the sheet "Distance Matrix" in the excel spreadsheet.
[G] Additional technical information about the transmission network, such as: the length and the diameter of pipelines and the power of compressor stations: Articles 26(1)(a)(i) and 30(1)(a)(v)	Provide pipeline pressure levels if available.	N/A
[2] The value of the proposed adjustments for capacity-based transmission tariffs pursuant to Article 9 [Art. 26(1)(a)(ii)]:		
Requirement	Description	Comments
[A] Proposed discount(s) at entry points from and exit points to storage facilities: Articles 26(1)(a)(ii) and 9(1)		There is an 80% discount applied at Entry Points from and Exit Points to storage facilities. This was implemented through UNC Modification 0727

[B] Proposed discount(s) at entry points from LNG facilities: Articles 26(1)(a)(ii) and 9(2)		There is no proposed discount at Entry Points from LNG facilities. It should be noted that a discount is allowed but is set to 0%.
[C] Proposed discount(s) at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States: Articles 26(1)(a)(ii) and 9(2)		None.
[3] Indicative reference prices subject to consultation [Art. 26(1)(a)(iii)]:		
Requirement	Description	Comments
[A] Indicative reference prices at each entry and at each exit point: Article 26(1)(a)(iii)		Reference prices at each Entry and Exit Point for Gas Year 2023/24 and indicative values for additional tariff years are contained in the ‘Article 26 Consultation Data Tables’ spreadsheet published as a subsidiary document to this consultation. The specific values are accessible in the ‘Entry Data’ and ‘Exit Data’ worksheets.
[4] Cost allocation assessment [Art. 26(1)(a)(iv), Art.5]:		
Requirement	Description	Comments
[A] Results of the cost allocation assessment: Articles 26(1)(a)(iv) and 5	Capacity / Commodity cost allocation assessment	The calculations for the Cost Allocation Assessment can be found in the spreadsheet ‘Article 26 Consultation Data Tables’ published as a subsidiary document to this consultation. The specific calculations are accessible in the ‘CAA’ worksheet.
[B] Components of the cost allocation assessment: Articles 26(1)(a)(iv) and 5	Capacity / Commodity cost allocation assessment	The calculations for the Cost Allocation Assessment can be found in the spreadsheet ‘Article 26 Consultation Data Tables’ published as a subsidiary document to this consultation. The specific calculations are accessible in the ‘CAA’ worksheet.
[C] Details of components of the	Capacity / Commodity cost	The calculations for the Cost Allocation Assessment can be found in the spreadsheet

cost allocation assessment: Articles 26(1)(a)(iv) and 5	allocation assessment	‘Article 26 Consultation Data Tables’ published as a subsidiary document to this consultation. The specific calculations are accessible in the ‘CAA’ worksheet.
[5] Assessment of the proposed reference price methodology in accordance to Art.7 and Art. 13 of the Regulation (EC) No 715/2009 [Art. 26(1)(a)(v)]:		
Requirement	Description	Comments
[A] The RPM should: enable network users to reproduce the calculation of reference prices and their accurate forecast: Articles 26(1)(a)(v) and 7 TAR NC and Article 13 Gas Regulation (715/2009)	The description of the RPM, together with the rest of elements listed in this template should be instrumental to allow replicating the calculation of reference prices. Provide the manner and the order in which these elements are used for the calculation of the RPM.	See Appendix 3 of this document
[B] The RPM shall into account the actual costs incurred for the provision of transmission services considering the level of complexity of the transmission network: Articles 26(1)(a)(v) and 7 TAR NC and Article 13 Gas Regulation (715/2009)	Evaluate the cost reflectivity of the RPM related to the level of complexity and the technical characteristics of the transmission network.	See Appendix 3 of this document
[C] The RPM shall ensure non-discrimination and shall prevent undue cross-subsidisation including by taking into account the cost allocation assessments set out in Article 5: Articles	Evidence for the assessment should take into account the cost allocation assessment, which checks the non-discrimination between two predefined groups of network users. Other	See Appendix 3 of this document

26(1)(a)(v) and 7 TAR NC and Article 13 Gas Regulation (715/2009)	means can be used to check non-discrimination between other groups of network users.	
[D] The RPM shall ensure that significant volume risk related particularly to transports across an entry-exit system is not assigned to final customers within that entry-exit system: Articles 26(1)(a)(v) and 7 TAR NC and Article 13 Gas Regulation (715/2009)	Explain how the variation in transit flows affects reference prices for final consumers.	See Appendix 3 of this document
[E] The RPM shall ensure that the resulting reference prices do not distort cross-border trade: Articles 26(1)(a)(v) and 7 TAR NC and Article 13 Gas Regulation (715/2009)	Refer, at least, to the effect of the E/E split on cross-border trade	See Appendix 3 of this document
[6] Comparison with the CWD methodology (Art. 8) Accompanied by the indicative reference prices subject to consultation set out in Art.26(1)(a)(iii):		
Requirement	Description	Comments
[A] Where the proposed reference price methodology is other than the capacity weighted distance reference price methodology detailed in Article 8, a comparison between both methodologies	The comparison should be performed with an appropriate level of detail and should enable stakeholders to identify the main differences, advantages and disadvantages of the	See the ‘Capacity Weighted Distance Comparison’ section of this document. Illustrative charges for both the current RPM and the CWD methodology as per Article 8 have been produced by NGT and are available in the ‘ Article 26 Consultation Data Tables ’ spreadsheet that has been published as a subsidiary document to this consultation. The specific charges are accessible in the ‘Entry

should be performed: Article 26(1)(a)(vi) and Article 8	compared methodologies.	Data', 'Exit Data,' 'CWD Entry' and 'CWD Exit' worksheets.
[B] Comparison of indicative reference prices at each entry point and at each exit point of the proposed RPM and the CWD detailed in Article 8: Article 26(1)(a)(vi) and Article 8		See the 'Capacity Weighted Distance Comparison' section of this document. Illustrative charges for both the current RPM and the CWD methodology as per Article 8 have been produced by NGT and are available in the ' Article 26 Consultation Data Tables ' spreadsheet that has been published as a subsidiary document to this consultation. The specific charges are accessible in the 'Entry Data', 'Exit Data,' 'CWD Entry' and 'CWD Exit' worksheets.
[B] ALLOWED OR TARGET REVENUE OF THE TSO [ART. 26(1)(B)]		
[7] Indicative information set out in Article 30(1)(b)(i), (iv), (v):		
Requirement	Description	Comments
[A] Allowed or target revenue, or both, of the transmission system operator: Articles 26(1)(b) and 30(1)(b)(i)		The RPM for calculating Entry and Exit Capacity Base Reference Prices requires Target Entry and Exit Transmission Services Revenue - Revenue which is Allowed Revenue net of known Existing Contracts revenue. This is published in the ' October 2023 Transmission Services Revenue Model '
[B] Transmission services revenue: Articles 26(1)(b) and 30(1)(b)(iv)		An example of the revenue values and how these are used to produce charges for any tariff year are contained in the ' October 2023 Transmission Services Revenue Model ' and the ' October 2023 Transmission Services Model ' which are published on the NGT website. The data for FCC can be seen in the Entry Prices or Entry Prices tabs when modelling the specific year. Units are in £ and p (and will be displayed accordingly for the particular step in the calculation) and the tariff year runs from 1 October to 30 September, inclusive.
[C] Capacity-commodity split of the transmission services revenue.		The charging methodology does not include any provision for commodity-based transmission charges. 100% of Transmission Services revenue is capacity-based.

<p>Breakdown between the revenue from capacity-based transmission tariffs and the revenue from commodity-based transmission tariff: Articles 26(1)(b) and 30(1)(b)(v)(1)</p>		
<p>[D] Entry-exit split of the transmission services revenue. Breakdown between the revenue from capacity-based transmission tariffs at all entry points and the revenue from capacity-based transmission tariffs at all exit points: Articles 26(1)(b) and 30(1)(b)(v)(2)</p>		<p>A 50/50 split is applied between Entry and Exit.</p>
<p>[E] Intra-system/cross-border split of the transmission services revenue. Breakdown between the revenue from domestic network users at both entry points and exit points and the revenue from cross-border network users at both entry points and exit points calculated as set out in Article 5: Articles 26(1)(b) and 30(1)(b)(v)(3)</p>		<p>The revenue from domestic network users can be identified within the Cost Allocation Assessment worksheet within the 'Article 26 Consultation Data Tables' spreadsheet published as a subsidiary document to this consultation.</p>
<p>[C] INFORMATION ON COMMODITY BASED AND NON-TRANSMISSION TARIFFS [ART. 26(1)(C)]</p>		

[8] Flow based charge. Information on commodity-based transmission tariffs referred to in Article 4(3):

Requirement	Description	Comments
[A] The manner in which they are set: Articles 26(1)(c)(i)(1) and 4(3)(a)	(i) Description, rationale and extent to which the flow based charge is used; (ii) Formula with cost drivers for monetary terms / in kind; (iii) Reference used for the calculation (historical flows, forecasted flows or both); (iv) Confirm that the flow based charge is set in such a way that it is the same at all Entry Points and the same at all Exit Points.	N/A
[B] The share of the allowed or target revenue forecasted to be recovered from such tariffs: Articles 26(1)(c)(i)(2) and 4(3)(a)		N/A
[C] The indicative flow-based charge: Articles 26(1)(c)(i)(3) and 4(3)(a)		N/A

[9] Complementary revenue recovery charge: Information on commodity-based transmission tariffs referred to in Article 4(3):

Requirement	Description	Comments
[A] The manner in which they are set: Articles 26(1)(c)(i)(1) and 4(3)(b)	Description, rationale and the extent to which the complementary revenue recovery charge is used.	N/A
[B] The share of the allowed or target		N/A

revenue forecasted to be recovered from such tariffs: Articles 26(1)(c)(i)(2) and 4(3)(b)		
[C] The indicative complementary revenue recovery charge: Articles 26(1)(c)(i)(3) and 4(3)(b)		N/A
[10] Information on non-transmission services provided to network users:		
Requirement	Description	Comments
[A] Non-transmission service tariff methodologies: Articles 26(1)(c)(ii)(1) and 4(1)	(i) List of services considered as non-transmission service on the basis of the criteria laid out in Art. 4(1); (ii) Users to which each of the non-transmission services applies. Indicate if it is not possible to identify the beneficiary of the non-transmission service; (iii) Explanation of the non-transmission tariff methodology provided per service.	The Non-Transmission Services tariff methodology is described in the ‘Non-Transmission Services’ section of this document.
[B] Share of the allowed or target revenue forecasted to be recovered from such tariffs: Article 26(1)(c)(ii)(2)	Provide, if possible, details per type of non-transmission service.	<ul style="list-style-type: none"> - 2023/24: £826.7m (47% of allowed revenue) - 2024/25: £493.1m (35% of allowed revenue) - 2025/26: £408.5m (28% of allowed revenue) - 2026/27: £420.4m (29% of allowed revenue) <p>The calculations are available in the ‘Article 26 Consultation Data Tables’ spreadsheet that has been published as a subsidiary document to this consultation. The specific calculations are accessible in the ‘Non-TX Services Revenue’ worksheet.</p>
[C] The manner in which the associated	Provide details about how is the	Non-Transmission Services Entry and Exit Charges are reconciled within a single account.

non-transmission services revenue is reconciled as referred to in Article 17(3): Articles 26(1)(c)(ii)(3) and 17(3)	reconciliation done including the use of a regulatory account, the split of regulatory accounts into sub-accounts and the use of separate accounts.	This includes the revenue from the DN Pensions Charges, NTS Meter Maintenance Charges, St. Fergus Compressor Charges, Shared Supply Meter Point Administration Charges and Allocation Charges at Interconnectors.
[D] Indicative non-transmission tariffs for non-transmission services to network users: Article 26(1)(c)(ii)(4)	Provide formula and description if used.	<p>Indicative illustrative Values for the General Non-Transmission Services charge (the most significant of the Non-Transmission Services charges) for the tariff years 2023/24 to 2027/28 are:</p> <ul style="list-style-type: none"> - 2023/24: 0.0533 - 2024/25: 0.0125 - 2025/26: 0.0309 - 2026/27: 0.0209 - 2027/28: 0.0295 <p>These values can also be found in the 'Article 26 Consultation Data Tables' spreadsheet published as a subsidiary document to this consultation, in the 'Non-Tx Services' worksheet.</p>
[D] COMPARED TARIFFS AND TARIFF MODEL [ART. 26(1)(D)]		
[11] The indicative information set out in Article 30(2)		
Requirement	Description	Comments
[A] Comparison between transmission tariffs applicable for: (i) prevailing tariff period; and for (ii) tariff period for which the information is published. Explain the difference between the level of transmission tariffs:	The comparison should be based on transmission tariffs.	NGT has provided values for the current tariff years 2023/24 and indicative values for future tariff years from 2024/25 to 2027/28. These are available in the ' Article 26 Consultation Data Tables ' spreadsheet published as a subsidiary document to this consultation, in the 'Entry Data' and 'Exit Data' worksheets.

Articles 26(1)(d) and 30(2)(a)(i)		
[B] Comparison between transmission tariffs applicable for: (i) tariff period for which the information is published, and for (ii) each tariff period within the remainder of the regulatory period. Estimated difference in the level of transmission tariffs: Articles 26(1)(d) and 30(2)(a)(ii)	The comparison should be based on transmission tariffs.	NGT has provided values for the current tariff years 2023/24 and indicative values for future tariff years from 2024/25 to 2027/28. These are available in the ' Article 26 Consultation Data Tables ' spreadsheet published as a subsidiary document to this consultation, in the 'Entry Data' and 'Exit Data' worksheets. The Regulatory Period ends 31 March 2026.
[C] At least a simplified tariff model, updated regularly, enabling network users to calculate the transmission tariffs applicable for the prevailing tariff period and to estimate their possible evolution beyond such tariff period: Articles 26(1)(d) and 30(2)(b)	The simplified tariff model should serve for the calculation of tariffs. If the information on multipliers and seasonality is not available at the time of the publication of the consultation on the RPM, it should be indicated. By the time this information is published, the simplified tariff model should be updated to include information on tariffs.	This ' October 2023 Transmission Services Model ' is published on the NGT website.
[D] Explanation of how to use the simplified tariff model: Articles 26(1)(d) and 30(2)(b)		Instructions are contained on the 'User Inputs' worksheet next to each User Input.

[E] FIXED PAYABLE PRICE UNDER PRICE CAP REGIME [ART. 26(1)(E)]

[12] Where the fixed payable price referred to in Art.24(b) is offered under a price cap regime for existing capacity

Requirement	Description	Comments
[A] Provide proposed index: Article 26(1)(e)(i)	Provide index, components of the index if used.	N/A
[B] Provide proposed calculation for the risk premium: Article 26(1)(e)(ii)	Calculation of the index if used.	N/A
[C] How is the revenue derived from the risk premium used? : Article 26(1)(e)(ii)		N/A
[D] At which IPs is such approach is proposed? : Article 26(1)(e)(iii)	Provide IP name and ID if used.	N/A
[E] For which tariff period(s) is such approach proposed? : Article 26(1)(e)(iii)		N/A
[F] The process of offering capacity at an IPs where both fixed and floating payable price approaches referred to in Article 24 are proposed: Article 26(1)(e)(iv)	Provide details on the offering process if used.	N/A

Appendix 3: Assessment of RPM against Article 7(a)-(e) of TAR NC

The complies with the requirements of Article 7(a)-(e) of TAR NC. An explanation of how these requirements are met are provided below:

Enabling network users to reproduce the calculation of reference prices and their accurate forecast:

The RPM, which follows a Postage Stamp approach, applies the same Reference Price for the same unit of capacity at all Entry Points and at all Exit Points. It does not include any reference to the distance between Entry and Exit Points. This should mean that Reference Prices are easier for network users to replicate than would be the case if a CWD methodology was to be used. To assist network users in reproducing the calculation of Reference Prices and their accurate forecast, a tariff model is produced and updated each year by NGT. By following the steps within the model, network users can replicate the calculation of current year tariffs and future year indicative tariffs. They are also able to adjust certain sensitivities to see how this would impact tariffs. The most recent version of this model 'October 2023 Transmission Services Model'¹⁹ is published on the charging pages of the NGT website²⁰.

Taking into account the actual costs incurred for the provision of transmission services considering the level of complexity of the transmission network:

In the UNC 0678/A/B/C/D/E/F/G/H/I/J minded to decision letter, Ofgem expressed that the Postage Stamp RPM was likely to be a more appropriate option in the presence of a meshed network characterised by surplus capacity and declining usage than CWD. Subsequently, UNC 0678A based on a Postage Stamp approach was implemented.

Ensuring non-discrimination and prevent undue cross-subsidisation including by taking into account the cost allocation assessments set out in Article 5:

The RPM does not include features which are considered to be discriminatory. Discounts or special treatment of revenue recovery exclusions are permitted only where approved by Ofgem in its role as regulator. As there is no distance -based cost driver in the current RPM (unlike in a CWD methodology for example), it avoids discrimination between Entry and Exit flows at different parts of the network which are not strongly correlated with network costs, therefore better facilitating effective competition.

The CAA completed by NGT as part of the 'Article 26 Consultation Data Tables' spreadsheet and published as a subsidiary document to this consultation produces CAA values for Exit that are less than 2%. The CAA values for Entry are distorted due to the differing levels of Existing Contract capacity held at IP and Non-IP sites across the years. The Commodity CAA is 0% as commodity charges are not used.

¹⁹ [October 2023 Transmission Services Model](#)

²⁰ [NGT Website, Transmission System Charges](#)

Ensuring that significant volume risk related particularly to transports across an entry-exit system is not assigned to final customers within that entry-exit system:

NGT considers that the proposed Postage Stamp RPM achieves the objective of ensuring that significant volume risk related particularly to transports across an entry-exit system is not assigned to final customers within that entry-exit system. This is consistent with the view expressed by Ofgem in its UNC 0678/A/B/C/D/E/F/G/H/I/J decision letter. In addition, we consider that the proposed RPM, by avoiding discrimination between users, is likely to facilitate competition without unduly affecting the merit order of gas supply.

Ensuring that the resulting reference prices do not distort cross-border trade:

The RPM does not include features which are considered to be discriminatory. Discounts or special treatment of revenue recovery exclusions are permitted only where approved by Ofgem in its role as regulator. The same RPM is applied at both Interconnection Points and Non-Interconnection Points. By applying this approach, the RPM is unlikely to distort cross-border trade.

Contact:

Ash Adams

Code Change Lead

Gas System Operator

E: Ashley.Adams@nationalgas.com

Colin Williams

Charging and Revenue Manager

Gas System Operator

E: Colin.Williams@nationalgas.com

nationalgas.com

