













UNC Workgroup Report	At what stage is this document in the process?
<p>UNC 0678: Amendments to Gas Transmission Charging Regime UNC 0678A: Amendments to Gas Transmission Charging Regime (Postage Stamp)</p>	
<p>Purpose of Modification:</p> <p>The purpose of these Modification proposals is to amend the Gas Transmission Charging regime in order to better meet the relevant charging objectives and customer/stakeholder provided objectives for Gas Transmission Transportation charges and to deliver compliance with relevant EU codes (notably the EU Tariff Code).</p>	
	<p>The Workgroup recommends that this modification should be:</p> <ul style="list-style-type: none"> subject to Authority Direction. <p>In line with the Urgent timetable agreed with the Authority for Modification 0678, the Workgroup Report will be finalised at the last Workgroup on 06 March 2019.</p> <p>The Draft Modification Report will be issued for consultation on 08 March, representations can then be made as usual, with consultation close out on 05 April 2019.</p> <p>The Final Modification Report will be made available to UNC Modification Panel on 12 April 2019 for consideration at the scheduled UNC Modification Panel meeting on 18 April 2019.</p> <p>The Final Modification Report with the UNC Modification Panel recommendation will then be issued to Ofgem for their ultimate consideration on 23 April 2019.</p>
	<p>High Impact:</p> <p>All parties that pay NTS Transportation Charges and / or have a connection to the NTS, and National Grid NTS.</p>
	<p>Medium Impact:</p> <p>N/A</p>
	<p>Low Impact:</p> <p>N/A</p>

Contents		 Any questions?
1 Summary	3	Contact: Joint Office of Gas Transporters
2 Governance	5	 enquiries@gasgovernance.co.uk
3 Why Change?	7	 0121 288 2107
4 Code Specific Matters	12	Proposer: Colin Williams
5 Solution	15	 colin.williams@nationalgrid.com
6 Impacts & Other Considerations	25	 01926 655916 or 07785 451776
7 Relevant Objectives	34	Transporter: National Grid
8 Implementation	39	 commercial.enquiries@xoserve.com
9 Legal Text	39	
10 Recommendations	39	
11 Appendix 1: Impacts of Proposal on NTS Capacity Auctions	40	
12 Appendix 2: Differences between Modification 0621 and this Modification 0678.	41	
Timetable		
The Proposer recommends the following timetable:		
Ofgem decision on urgency	25 January 2019	
Workgroup 1 - "Approach. Compliance"	29 January 2019	
Workgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts"	31 January 2019	Systems Provider: Xoserve
Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF)	05 February 2019	 commercial.enquiries@xoserve.com
Workgroup 4 - "Compliance. FCC"	11 February 2019	
Workgroup 5 - "Non-transmission charges. Final overview"	13 February 2019	
Workgroup 6 - "Workgroup Report"	14 February 2019	

Workgroup 7 - "Workgroup Report"	18 February 2019	
Workgroup 8 - "Workgroup Report"	25 February 2019	
Workgroup 9 - "Workgroup Report"	27 February 2019	
Workgroup 10 - "Workgroup Report. Compliance"	04 March 2019	
Workgroup 11 – "Finalise Workgroup Report"	06 March 2019	
Draft Modification Report issued for consultation	08 March 2019	
Consultation Close-out for representations	05 April 2019	
Final Modification Report available for Panel	12 April 2019	
Modification Panel decision	18 April 2019	
Final Modification Report issued to Ofgem	23 April 2019	

List of Tables

Table 1: Definitions used in the Modification	13
Table 2: Key steps in the CWD calculations.....	17
Table 3: Publication dates for Transportation Charges	25
Table 4: Impact of the Modification on the Relevant Objectives	34
Table 5: Impact of the Modification on the Relevant Charging Methodology Objectives	37

List of Figures

Figure 1: Proposed CWD Model for calculation of Entry and Exit Capacity Base Reference Prices.....	17
Figure 2: Entry Point Reference Prices calculation model	18
Figure 3: Exit Point Reference Prices calculation model.....	18
Figure 4: Reserve Price derivation	21
Figure 5: Transmission Services Revenue Recovery Mechanism	22

1 Summary

What

This Modification proposes to introduce a new Gas Transmission Charging regime that produces stable and predictable transportation charging and is compliant with the forthcoming EU Tariff Code (Regulation

2017/460). This Modification also takes into account the decision to reject UNC0621¹ and its Alternatives citing areas of non-compliance. This Proposal addresses the areas of compliance identified in this decision.

Why

The Transportation Charging Methodology currently in place for the calculation of Gas Transmission charges, and the methodology to recover Transmission Owner (TO) and System Operator (SO) revenue through Entry and Exit charges, have been in place for a number of years. Whilst there have been some changes in the last ten years, the basic approach to calculating Entry and Exit Capacity charges and the approach to revenue recovery has not substantially changed.

A critique of the current Long Run Marginal Cost (LRMC) methodology (undertaken by the NTSCMF – concluding in January 2017² – with updated analysis presented during development of UNC Modification Proposal 0621 in April 2018³) identified that it is too volatile, unpredictable and does not provide stability of charges for Users.

How

This Modification proposes to introduce changes to the charging framework by way of making changes to UNC TPD Section Y. It will also be necessary to make changes to other sections of the UNC TPD (Sections B, E and G) and EID Section B).

At its core, this Modification proposes to move from a Reference Price Methodology (RPM) that calculates the capacity prices using the Long Run Marginal Cost (LRMC) method to one that is based on a Capacity Weighted Distance (CWD) approach. It also proposes an updated approach with changes to capacity pricing multipliers, capacity discounts and interruptible pricing review to better meet the required objectives.

It introduces some terminology from the EU Tariff Code, specifically 'Transmission Services Revenue' and 'Non-Transmission Services Revenue'. The revenues will map across to TO and SO revenues thereby not changing the total revenue to be collected through Transportation charges. The more material change will be the amendments to the charging methodologies in calculating the charges that will be applied to recover the allowed revenues from NTS network Users through the Transportation charges.

This proposal also introduces, for some aspects of this methodology change, mechanisms to review and refine components of the charging framework, notably the Forecasted Contracted Capacity (FCC), capacity pricing multipliers and interruptible pricing, over time so they continue to better facilitate the relevant methodology objectives⁴ and support the evolution of the GB charging regime.

¹ See <https://gasgov-mst-files.s3.eu-west-1.amazonaws.com/s3fs-public/ggf/page/2018-12/Ofgem%20Decision%20Letter%200621.pdf>

² Material at <https://www.gasgovernance.co.uk/ntscmf/subg1page>

³ Material at <https://www.gasgovernance.co.uk/0621/200418>

⁴ As described in Standard Special Condition A5: 'Obligations as Regard Charging Methodology' of the NTS Licence, paragraph 5.

2 Governance

Justification for Urgency

This Modification should be treated as urgent and should proceed under a timetable approved by the Authority. A proposed timeline is presented under the timetable of this Modification.

Urgent status is sought on the basis that need for material elements of this Proposal are driven by an imminent date related issue, this being the requirement in Article 38(3) of Regulation 2017/460 ('the Regulation') for the relevant Chapters of the Regulation (II, III and IV) to take effect from 31 May 2019. In terms of Transportation charge rates, the consequential changes are therefore required to take effect for the following Gas Year commencing 01 October 2019.

In broad terms, the relevant Chapters of the Regulation include the need to apply a different **Reference Price Methodology** (Chapter II), rules regarding the derivation of **Reserve Prices** (Chapter III) and rules regarding the **reconciliation of revenue** (Chapter IV).

If this not urgently addressed, this may cause UNC parties to be in breach of relevant legal requirements detailed within the Regulation as the prevailing NTS Charging Methodology (contained in UNC TPD Section Y Part A) will not be compliant with the Regulation.

Whilst EU regulations are likely to be no longer directly applicable in GB with effect from 29 March 2019, the principle approach specified in the European Union (Withdrawal) Act 2018 is to incorporate EU law (existing immediately prior to UK exit from the EU in March 2019) into UK law (effective from March 2019). Accordingly, the principles enshrined in the Regulation will, as far as possible, be Alternatively mandated by a UK Statutory Instrument (specifically Schedule 5 of The Gas (Security of Supply and Network Codes) (Amendment)(EU Exit) Regulations 2019).

On this basis, the legal requirement will be specified in either the Regulation or within the reflective Statutory Instrument.

This Modification will change the charging framework and methodology to recover National Grid's regulated revenues via Transportation Charges. This Modification, to meet compliance with the Regulation and to deliver the changes outlined to the charging arrangements, will impact all parties that pay Transportation Charges and / or have a connection to the NTS, and National Grid NTS. As a result, this poses a significant commercial impact on all parties mentioned and will, in turn, have impacts for the reciprocal charges levied to customers and for interested stakeholders of NTS customers and how they in turn recover costs and charge for their recovery.

This Modification also takes into account the decision on UNC0621 and its Alternatives⁵. This Proposal addresses the areas of compliance identified in this decision. The requirement for this Modification and the Ofgem decision on UNC0621 and its Alternatives was discussed at NTSCMF on 10 January 2019.

Justification for Authority Direction

This Modification proposal is recommended to be sent to the Authority for direction as it is likely to have a material effect on commercial activities relating to the shipping, transportation and supply of gas because,

⁵ See <https://gasgov-mst-files.s3.eu-west-1.amazonaws.com/s3fs-public/ggf/page/2018-12/Ofgem%20Decision%20Letter%200621.pdf>

Joint Office of Gas Transporters

if implemented, it is likely to have a material impact on the allocation of charges across NTS networks Users.

Requested Next Steps

This Modification should:

- be treated as urgent and should proceed as such under a timetable agreed with the Authority.

3 Why Change?

Drivers

3.1. The methodology which is currently in place for the calculation of Gas Transmission Transportation charges, and the methodology to recover TO and SO revenue through Entry and Exit charges, has been in place for a number of years. Whilst there have been some changes in the last ten years, the basic approach to calculating NTS Entry and Exit Capacity charges and the approach to revenue recovery arrangements have not substantially changed. What has been seen is change in the patterns of capacity booking behaviours, and the impact on the charges as a result due to the interactivity inherent within the methodology, that were not anticipated. Additional regulatory drivers for changes to the charging framework are:

3.1.1. The EU Tariff Code⁶;

3.1.2. Ofgem's Gas Transmission Charging Review⁷ and decision on UNC0621 and its Alternatives⁸. In addressing the decision letter to reject UNC0621 and its Alternatives National Grid is proposing changes outlined in this Modification and summarised in Appendix 2. This table highlights for awareness a comparison between UNC0621 and this Modification and where specific areas of compliance need to be addressed. Addressing these areas of compliance further Relevant Objective (g) and Relevant Charging Methodology Objective (e) as outlined in Section 7 of this Modification proposal.

3.2. As a result of changing behaviours, such as increased uptake in short term zero-priced capacity, there is an increase in reliance on commodity charges to recover TO revenue. Zero priced capacity has arguably resulted in overbooking of capacity, surplus to User's requirements. The high TO commodity charges, driven largely by the zero priced capacity can also result in unstable and unpredictable charges. Other charges, such as the NTS Optional Commodity charge (also referred to as "Shorthaul"), have also seen a significant increase in its use which has impacted on other charges in a way that was not originally envisaged.

Mapping Revenues

3.3. Within the collection of revenue there are some changes to the terminology used to assign the revenue for the purposes of ultimately calculating charges. These changes are required by the EU Tariff Code. This relates to mapping TO Revenue and SO Revenue to Transmission

⁶ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.072.01.0029.01.ENG&toc=OJ:L:2017:072:FULL

⁷ <https://www.ofgem.gov.uk/gas/transmission-networks/gas-transmission-charging-review>

⁸ <https://gasgov-mst-files.s3.eu-west-1.amazonaws.com/s3fs-public/ggf/page/2018-12/Ofgem%20Decision%20Letter%200621.pdf>

Services Revenue and Non-Transmission Services Revenue. This does not affect the actual allowed revenue National Grid will be required to recover through the charges.

- 3.4. There are a number of targeted charges in the current methodology and it is necessary to consider which revenue they will contribute towards:
 - 3.4.1. The Distribution Network (DN) Pensions Deficit Charge and NTS Meter Maintenance Charge, under the EU Tariff Code (Article 4), do not fall into the specific criteria for Transmission Services. This Modification proposes that these will be classified as Non-Transmission Services charges thereby contributing towards Non-Transmission Services Revenue.
 - 3.4.2. The St. Fergus Compression charge will be a Non-Transmission Services charge.
 - 3.4.3. The methodologies to calculate these charges (DN Pensions Deficit, NTS Meter Maintenance and St. Fergus Compression) are not proposed to be reviewed at this time. Whilst these could be considered as either Transmission Services or Non-Transmission Services, providing it is approved by the National Regulatory Authority (NRA), it is proposed this is a pragmatic way to charge for these items.

Pricing Methodology

- 3.5. The current RPM (including the adjustments applied in order to calculate capacity charges) produces charges that are volatile and unpredictable. This causes challenges for investment decisions and in predicting operational costs for connected parties year on year and as such, is a key area to be addressed.
- 3.6. Through an assessment of RPMs⁹, the main Alternative considered from the current method was the CWD model. By design this approach is generally more predictable, less volatile and more stable in nature and is more suited to a system that is about use and revenue recovery associated to use rather than linked to investment (marginal pricing).
- 3.7. The proposed use of CWD in the RPM resolves this issue by narrowing the range of prices and as such making them more predictable. This makes the RPM more relevant to how the NTS is used and expected to be used. It would better suit the current and future expectations for the NTS and maximising its use (driven through market behaviour) rather than using an RPM built on the foundation of continued expansion whilst continuing to provide some locational diversity in charges through the use of locational capacity and the average distances applied under the CWD approach.
- 3.8. As a result of changing the RPM, any adjustments, discounts and other charges must be reviewed in order to avoid unintended consequences and to ensure that a clear impact

⁹ See <https://www.gasgovernance.co.uk/ntscmf/subg1model>

assessment (including any Ofgem Impact Assessment) can be carried out on the total impact of these adjustments, discounts and other charges to NTS customers and to the end consumer.

- 3.9. This Proposal considers EU compliance with the EU Tariff Code which has a deadline to implement the changes of 31 May 2019. Price changes would apply from 01 October 2019 or as soon as possible after this date in line with a decision to implement.
- 3.10. This Proposal also seeks to establish a framework for review and update of key inputs to the newly established RPM which will further the objectives of the RPM.
- 3.11. This Proposal aims to simplify the charging methodology, limiting aspects of the methodology whereby some charges can materially impact other charges and also eliminating the influence between Transmission and Non-Transmission Services.

Forecasted Contracted Capacity (FCC)

- 3.12. The proposed changes to the charging regime may result in changes to commercial behaviours in the procurement of capacity rights. The proposal for a forecast of contractual capacity (FCC) will be a key input into the reference price calculation.
- 3.13. National Grid proposes the FCC to be a forecast of capacity bookings at each Entry and Exit Point. The value will be determined in accordance with a methodology statement that will be referenced in the UNC and will not form part of Section Y of the UNC. The methodology is proposed to be linked to a forecast of GB demand on the NTS for the tariff year for which reference prices are being produced. It will also review the historical capacity bookings (where capacity has been allocated at a price greater than zero at each Entry and Exit Point, and forecast flow levels, to determine a value that will inform the proportion of capacity bookings for each specific Entry and Exit Point. The initial methodology will be discussed as part of the workgroups and NTSCMF.
- 3.14. National Grid proposes an approach that ensures FCC is reviewed annually and updates considered in line with a methodology, and updated in the appropriate transportation charging statement and charging models. This review of FCC values will, at an appropriate point, take account of any behavioural changes in capacity procurement observed under the revised charging regime with the aim of aligning the FCC to actual bookings, in line with the methodology statement. At the same time the FCC is reviewed and updated, there will be an additional adjustment to the reserve prices in order to account for the anticipated under collection driven by the application of any discounts (e.g. interruptible and specific capacity discounts).
- 3.15. The FCC will be reviewed ahead of each tariff year and updates will be communicated to industry as part of the publication of charges. The methodology contained within the statement will be kept under review as part of these updates and for any changes to the methodology would be subject to a review process to include consultation with industry.

Multipliers

- 3.16. Adjustments or separate charges can be applied in the calculation of the Entry and Exit Capacity Reserve Prices. These can serve a number of functions such as to acknowledge any potential risk associated with the type of Entry or Exit Capacity, to facilitate the recovery of revenues where relevant or beneficial to do so, and to encourage behaviours along with ensuring National Grid fulfils any relevant obligations.
- 3.17. Multipliers are applied to the Reference Price to produce the Reserve Price. Under the EU Tariff code (Article 13), the Multipliers for Interconnection Point (IP) quarterly standard capacity products and for IP monthly standard capacity products should be no less than 1 and no more than 1.5. For IP daily standard capacity products and IP within-day standard capacity products, the Multipliers should be no less than 1 and no more than 3. For the IP daily standard capacity products and IP within-day standard capacity products, the multipliers may be less than 1 but higher than 0 or higher than 3, where duly justified.
- 3.18. Beyond 30 September 2020, or in line with the implementation of this Modification, Multipliers for IPs need to be consulted on each year (as per Article 28 of the EU Tariff code). Multipliers applicable to all Entry and Exit Points from implementation of this Modification are provided in the relevant part of section 5 (Reserve Prices produced from Reference Prices).

Discounts

- 3.19. The pricing of Interruptible (Entry) / Off-peak (Exit) capacity will change from the current pricing approach. It will be consistent with the EU Tariff Code Article 16 and applied to all points. The changes proposed permit an adjustment to the relevant firm entry or exit Reserve Price in the calculation of a non-zero Reserve Price and the calculation of that Reserve Price for interruptible products.
- 3.20. The adjustment applied will be proportional to the probability of interruption and will be forward looking based upon an expectation of interruption over the coming year. An adjustment factor ('A' factor) may also be applied to reflect the estimated economic value of the product which will be factored into the assessment. Together, the probability of interruption and the 'A' factor make up the adjustment to be applied to the Reserve Price of the equivalent standard firm capacity product. The interruptible adjustment applicable to all Entry and Exit Points from implementation of this Modification are provided in the relevant part of section 5 (Interruptible (Entry) and Off-peak (Exit) Capacity).
- 3.21. Within the EU Tariff Code there are requirements to apply further discounts for storage capacity, where that discount must be at least 50%. This minimum discount is specific to storage in order to avoid double charging and in recognition of the general contribution to system flexibility and security of supply of such infrastructure. National Grid proposes an enduring storage discount value but recognises that EU Tariff Code requirements for the charging regime to be reviewed, as a whole, at least every 5 years.
- 3.22. Any specific 'site type' discounts contemplated by the EU Tariff Code (Article 9) are applied to the Reserve Price to produce a final Reserve Price for the particular Firm Entry or Exit Capacity product at that particular point. The adjustment for Entry Points and Exit Points will be based on the values specified in the Transportation Statement. The specific capacity discount

applicable to all Entry and Exit Storage Points from implementation of this Modification are provided in the relevant part of section 5 (Specific Capacity Discounts).

Revenue Recovery

- 3.23. National Grid's proposals incorporate a mechanism to manage the consequence of under or over recovery of revenues from Transmission Services Capacity Charges. The approach advocated is a capacity based charge on an enduring basis.
- 3.24. From implementation the charging framework would be expected to move towards dependency on a capacity forecast and a significantly reduced revenue recovery charge that would be capacity based achieving 100% capacity basis for recovery of Transmission Services revenue.
- 3.24.1. The calculation of the capacity prices will, at the time of calculation, take into account the revenue shortfall from any discounts referred to in paragraphs 3.17 to 3.20 of Section 3) in order to adjust the reserve prices such that the amount forecast to be under collected as a result of these discounts is reduced.
- 3.24.2. The approach in 3.22 means that less revenue will be required to be collected from the Transmission Services Revenue Recovery charges than if it were not carried out.

Managing inefficient bypass of the NTS (known as "Shorthaul")

- 3.25. National Grid does not, as part of this Proposal, propose to retain a charge that discourages inefficient bypass of the NTS. National Grid has initiated a review under UNC governance (Request Group 0670R 'Review of the charging methodology to avoid the inefficient bypass of the NTS'¹⁰) and National Grid believes that it is inappropriate at this point to include provision for such under this Proposal and thereby pre-empt the outcome of this work. A comprehensive assessment of any charging arrangements to manage discouraging inefficient bypass of the NTS within the charging framework, including compliance with EU Codes and the charges that would be in place as part of this Modification will be a feature of UNC 0670R any subsequent Modification.

Existing Contracts

- 3.26. National Grid proposes provisions to apply for Entry Capacity (for 01 October 2019 or from the effective date of this Modification, whichever is later) allocated up to 06 April 2017.

¹⁰ <http://www.gasgovernance.co.uk/0670>

- 3.26.1. This will include Existing Contracts, as outlined in Article 35 in EU Tariff Code where the “contract or capacity booking concluded before the entry into force of the EU Tariff Code – 06 April 2017, such contracts or capacity bookings foresee no change in the levels of capacity and/or commodity based transmission tariffs except for indexation, if any”.
- 3.26.2. The capacity procured under these contracts impact the application of the CWD charging model (specifically when determining Reference Prices at Entry Points) and calculation of Transmission Services Revenue Recovery Charges.

Aspects of the GB Charging Regime where there are no proposals for change:

The following is a list of items for which changes are not being proposed at this time but could be the next steps in the evolution of the GB charging regime.

- Auction Structure – All timings for auctions will be as per prevailing terms (including any changes implemented to comply with CAM).
- Entry/Exit Split – No change is proposed to the current 50:50 split.
- Gas Year/Formula Year – the Formula Year (April to March) and Gas Year (October to September) will be retained.
- DN Pensions Deficit Charge – No change to the calculation or the application of the charge.
- St. Fergus Compression Charge – No change is proposed to the calculation or the application of the charge.
- NTS Metering Charge - No change is proposed to the calculation or the application of the charge
- Shared Supply Meter Point Administration Charges - No change is proposed to the calculation or the application of the charge
- Allocation Charges at Interconnectors - No change is proposed to the calculation or the application of the charge
- Categorisation of Entry and Exit Points – Maintain the link to the Licence for categorisation.
- Seasonal Factors – Not used in current methodology and propose not to introduce.
- Fixed Pricing – As per Modification 0611, Amendments to the firm capacity payable price at IPs.
- Allowed Revenue – No change as per the Licence.
- Principles and application of Interruptible – As per prevailing terms. In respect of IPs, the terms implemented pursuant to Modification 0500, EU Capacity Regulations - Capacity Allocation Mechanisms with Congestion Management Procedures.

4 Code Specific Matters

Reference Documents

There are summary documents available on each of the topics (mentioned in the solution section of the Modification proposal) which have been discussed at NTSCMF and sub-groups related to the gas charging review, which are available at: <http://www.gasgovernance.co.uk/ntscmf/subg1page> and <http://www.gasgovernance.co.uk/ntscmf/subg1model>.

Uniform Network Code (UNC) Section Y:

<https://www.gasgovernance.co.uk/TPD>

UNC European Interconnection Document (EID):

<http://www.gasgovernance.co.uk/EID>

EU Tariff Code:

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.072.01.0029.01.ENG&toc=OJ:L:2017:072:FULL

Implementation Document for the Network Code on Harmonised Transmission Tariff Structures for Gas (Second Edition)

https://www.entsog.eu/public/uploads/files/publications/Tariffs/2017/TAR1000_170928_2nd%20Implementation%20Document_Low-Res.pdf

Uniform Network Code (UNC) Section B:

<https://www.gasgovernance.co.uk/TPD>

NTS Transportation Statements:

<http://www.gasgovernance.co.uk/ntschargingstatements>

Customer and Stakeholder Objectives:

<http://www.gasgovernance.co.uk/ntscmf/060916>

Gas Transmission Charging Review (GTCR) and associated update letters:

<https://www.ofgem.gov.uk/gas/transmission-networks/gas-transmission-charging-review>

Knowledge/Skills

An understanding of the Section Y Part A within the UNC, NTS Transportation Statements, the EID within the UNC, Section B within the UNC, the EU Tariff code, GTCR documentation and the customer / stakeholder objectives developed within NTSCMF would be beneficial.

Definitions

Table 1 gives a definition of terms used in this Modification.

Table 1: Definitions used in the Modification

Term (Abbreviation)	Description
Capacity Weighted Distance (CWD) Model	<p>The CWD approach fundamentally requires three main inputs:</p> <ul style="list-style-type: none">• A revenue value is required, which will be the target revenue required to be recovered from Transmission Services;• A distance matrix for the average connecting distances on the NTS; and

	<ul style="list-style-type: none"> A capacity value for each Entry and Exit point that will be the Forecasted Contracted Capacity (FCC) (which is mentioned later in this section). <p>The CWD model produces the Transmission Services Reference Prices and with additional adjustments produces the Transmission Services Reserve Prices.</p>
Effective Date	<p>The later of:</p> <ul style="list-style-type: none"> the last day of the month in which Ofgem issues its letter directing implementation of this Proposal; and 31 May 2019
Existing Contracts (ECs) (for the purposes of this Modification)	<p>Arrangements relating to Long Term Entry capacity allocated before 06 April 2017 (Entry into Force of EU Tariff Code)</p>
Forecasted Contracted Capacity (FCC)	<p>The capacity input to the RPM that will be used in the Transmission Services capacity charges calculation that will be determined via a CWD methodology. An FCC value is required for every Entry and Exit point.</p>
Long Run Marginal Costs (LRMC) Model	<p>The current underlying RPM used in the calculation of the Entry and Exit Capacity Prices. Whilst there are different approaches in Entry and Exit as to how secondary adjustments are applied, the underlying LRMC principles are there in both. The LRMC approach is an investment focused methodology where the intention is to have strong locational signals to facilitate decision making. More information is available in TPD Section Y of the UNC.</p>
Multipliers	<p>The factor applied to the respective proportion (runtime) of the Base Reference Price in order to calculate the Reference Price for non-yearly standard capacity product</p>
Network Distances (for the purposes of modelling in the RPM)	<p>A matrix of distances used in the RPM that are the pipeline distances on the NTS.</p>
Non-Transmission Services	<p>The regulated services other than transmission services and other than services regulated by Regulation (EU) No 312/2014 that are provided by the transmission system operator;</p>
Non-Transmission Services Revenue	<p>The part of the allowed or target revenue which is recovered by non-transmission tariffs</p>
Reference Price	<p>Price for a capacity product for firm capacity with a duration of one year, which is applicable at entry and exit points and which is used to set capacity based transmission tariffs. This will produced in p/kWh/a (pence per kWh per annum).</p>
Reference Price Methodology (RPM)	<p>The methodology applied to the part of the transmission service revenue to be recovered from capacity based transmission tariffs</p>

	<p>with the aim of deriving Reference Prices. Applied to all entry and exit points in a system.</p> <p>The RPM therefore is the framework to spread certain costs / revenues (relevant to the methodology in place) to the Entry and Exit points and thereby on to network users.</p>
Reserve Price	<p>Reserve Price for Yearly standard capacity = the Reference Price</p> <p>Reserve Price for Non- yearly standard capacity is calculated by applying any Multipliers (if applicable).</p> <p>This will be produced in p/kWh/d (pence per kWh per day).</p>
Target Revenue	<p>This is the revenue required to be recovered from a particular set of charges.</p>
Transmission Services	<p>The regulated services that are provided by the transmission system operator within the entry-exit system for the purpose of transmission.</p>
Transmission Services Revenue	<p>The part of the allowed or target revenue which is recovered by transmission tariffs.</p>
Transportation Statement	<p>The Transportation Statement containing the Gas Transmission Transportation Charges</p>

5 Solution

This Modification proposal seeks to amend TPD Section Y, Part A (The Gas Transmission Transportation Charging Methodology) of the UNC, by changing the methodology for the calculation of gas transmission transportation charges. Changes to TPD Sections B (System Use and Capacity), E (Daily Quantities, Imbalances and Reconciliation), G (Supply Points) and European Interconnection Document (EID) Section B (Capacity) are also required.

Mapping of the revenue to Transmission Services revenue and Non-Transmission Services revenue (see paras 3.3 and 3.4 in section 3)

Transmission Services Charges

It is proposed that Transmission Services charges will be collected via:

- Transmission Services Capacity charges made up of;
 - Transmission Entry Capacity charges (including NTS Transmission Services Entry Capacity Retention Charge);
 - Transmission Exit Capacity charges;
- Transmission Services Entry Revenue Recovery charges;

- Transmission Services Exit Revenue Recovery charges; and
- NTS Transmission Services Entry Charge Rebate.

Non-Transmission Services Charges

It is proposed that Non-Transmission Services charges will be collected via:

- General Non-Transmission Services Entry and Exit Charges;
- St Fergus Compression Charges;
- NTS Metering Charges;
- DN Pensions Deficit charges;
- Shared Supply Meter Point Administration charges; and
- Allocation Charges at Interconnectors

Transmission Services Charges

Reference Price Methodology (see paras 3.5 to 3.11 in section 3)

It is proposed that a CWD approach is used in the RPM.

One RPM will be used for the calculation of Reference Prices for all Entry Points and Exit Points on the system. The RPM produces Entry and Exit Capacity Reference Prices for the applicable gas year which in turn through the relevant adjustments and calculation steps will determine the Entry and Exit Capacity Reserve Prices.

Final Reference Prices

It is proposed that the calculation of the final Reference Price for a given Entry Point or Exit point cannot be zero. If application of the CWD methodology derives a zero price, or negative price, as a result of the FCC value or the Existing Contracts (EC) influencing the CWD calculation (see below), then the Reference Price to be used for such points will be based upon the price for the closest (in terms of Weighted Average Distance as opposed to geographically) non-zero priced Entry Point (for an Entry Point) or the closest (in terms of Weighted Average Distance as opposed to geographically) non-zero priced Exit Point (for an Exit Point).

The price for the relevant Entry Point or Exit Point will equal to the Reference Price for the closest (in terms of Weighted Average Distance as opposed to geographically) relevant Entry Point or (respectively) Exit Point adjusted in line with pro-rata relationship between the two Weighted Average Distances.

Calculations within the CWD Model

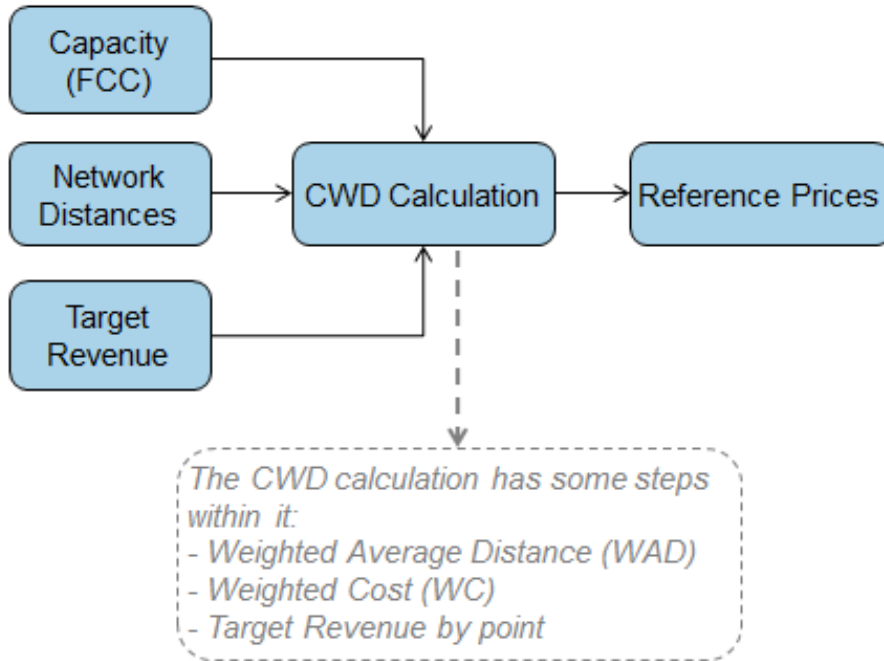
Proposed CWD Model for calculating Entry and Exit Capacity Base Reference Prices:

The proposed CWD approach fundamentally requires three main inputs (see Figure 1):

- Target Entry or Exit Transmission Services Revenue - Revenue which is Allowed Revenue net of known Existing Contracts (EC) revenue.

- Network Distances – derived from a distance matrix for the average connecting distances on the NTS
- Capacity (FCC) - FCC (by point) net of Existing Contracts (EC) capacity booked to recover the target Entry or Exit Transmission Services revenue.

Figure 1: Proposed CWD Model for calculation of Entry and Exit Capacity Base Reference Prices



Key steps in the CWD calculations, see Table 2.

Table 2: Key steps in the CWD calculations

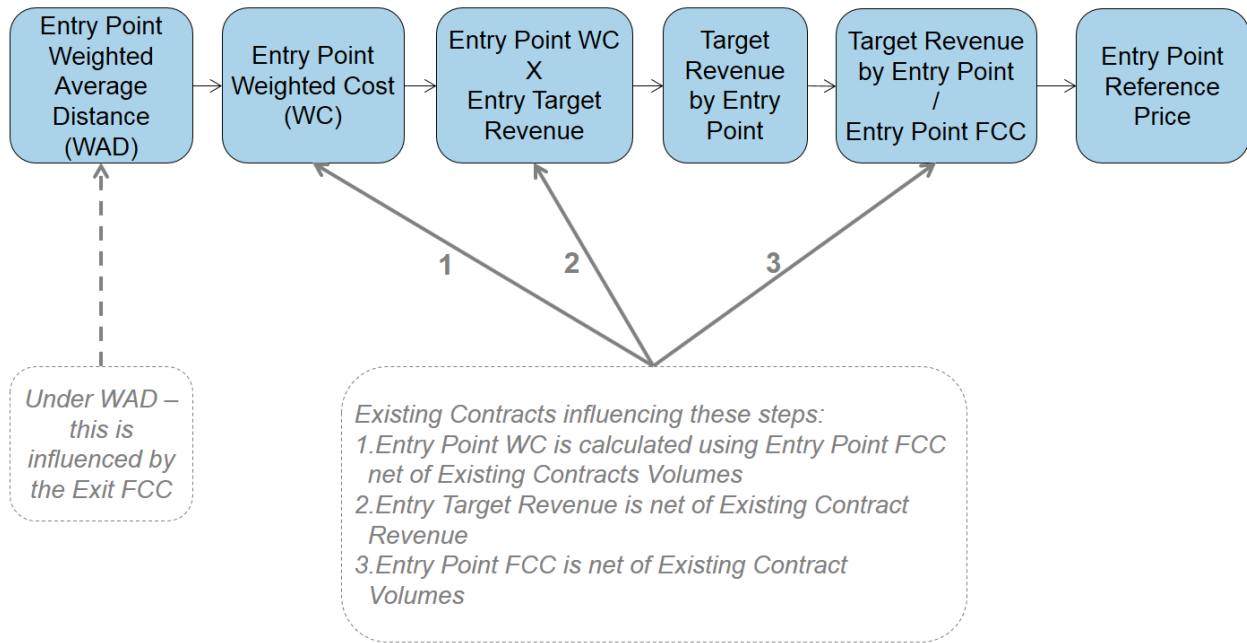
	Entry Capacity Calculation	Exit Capacity Calculation
Weighted Average Distance (WAD)	$\frac{\text{Sumproduct Exit Point FCC x Distance to Entry Point}}{\text{Sum Exit Point FCC}}$	$\frac{\text{Sumproduct Entry Point FCC}^{\#} \text{ x Distance to Exit Point}}{\text{Sum Entry Point FCC}^{\#}}$
Weighted Cost (WC)	$\frac{\text{Entry Point FCC}^* \text{ x WAD}}{\text{Sumproduct Entry Point FCC}^* \text{ x WAD}}$	$\frac{\text{Exit Point FCC x WAD}}{\text{Sumproduct Exit Point FCC x WAD}}$
Target Revenue by point (TRP)	Entry Target Revenue x WC	Exit Target Revenue x WC
Reference Price (RefP)	Entry TRP / Entry Point FCC*	Exit TRP / Exit Point FCC

[#]Entry Point FCC – this is Gross Entry Point FCC (not reduced by capacity associated with Existing Contracts)

*Entry Point FCC – this is the Entry Point FCC net of capacity associated with Existing Contracts.

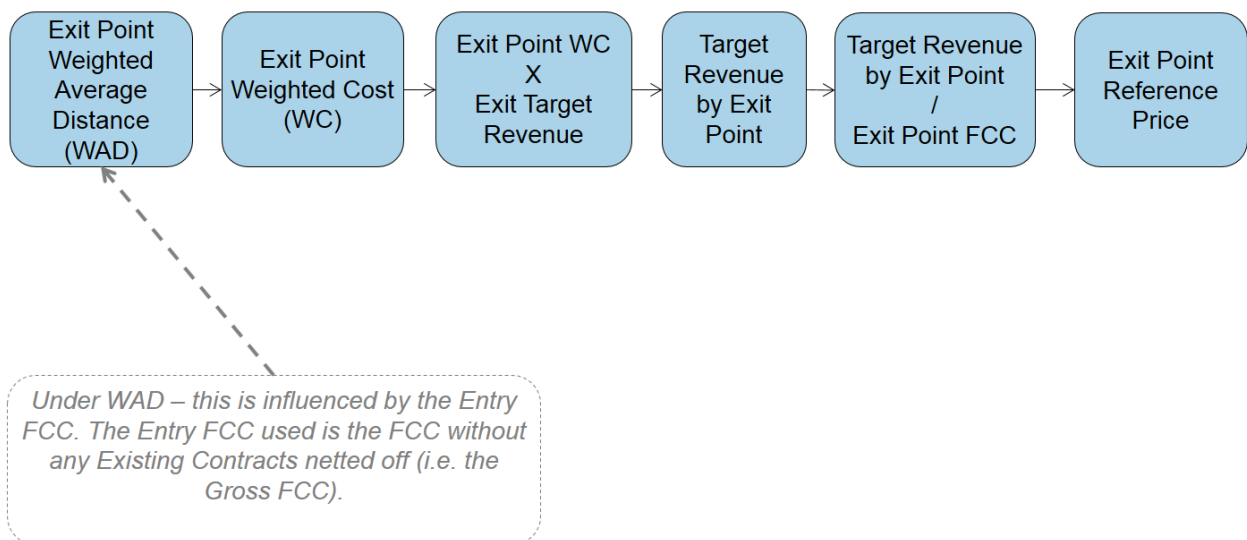
Entry Point Reference Prices are calculated in the following steps in the CWD model, see figure 2

Figure 2: Entry Point Reference Prices calculation model



Exit Point Reference Prices are calculated in the following steps in the CWD model, see Figure 3:

Figure 3: Exit Point Reference Prices calculation model



Forecasted Contracted Capacity (FCC) (see paras 3.12 and 3.13 in section 3)

It is proposed that the FCC for an Entry Point or an Exit Point will be equal to a forecasted value determined by National Grid, in line with a new methodology statement for the FCC. The methodology to determine a capacity forecast will be developed and shared with industry and the intention is that it be transparent and to keep the approach flexible to develop the best possible forecast to be applied to the relevant year to facilitate calculation of the capacity charges. The methodology will be part of a methodology statement, for which the methodology will be subject to some development as part of this Modification development. The FCC will be reviewed ahead of each tariff year and updates will be communicated to industry as part of the publication of charges. The methodology contained within the statement will be kept under review as part of these updates and for any changes to the methodology would be subject to a review process to include consultation with industry.

Reserve Prices produced from Reference Prices (see paras 3.14 to 3.16 in Section 3)

It is proposed that Reserve Prices for capacity will be produced in p/kWh/d. The Reserve Prices will be calculated each year based on the latest available set of inputs and once published, these will be the Reserve Prices applicable for the relevant gas year regardless of when the capacity product is procured.

For example, the price payable for capacity procured in 2019 for a period in October 2025 will be the Reserve Price determined for gas year 2025/26 plus, where applicable, any premium payable. This premium will be equal to either:

- The difference between the allocated price and Reserve Price in the relevant auction when the capacity was initially contracted for ('*auction premium*'); or
- The amount specified in respect of entry capacity allocated via a PARCA Application as described in TPD B1.14 and the Entry Capacity Release Methodology Statement ('*PARCA premium*').

It is proposed that the Reserve Price for Firm capacity at an Entry Point or an Exit Point is determined by application of any applicable Multipliers to the relevant Reference Price.

It is proposed that Multipliers:

- Shall not be zero for any capacity type or product;
- Are not to be used for the purposes of managing revenue recovery;
- Shall be calculated on an ex-ante basis ahead of the applicable year.

It is proposed that for the period commencing 01 October 2019, or from implementation of this proposal should it be after this date, the Multiplier applied to the Reference Prices for all Entry Point and Exit Points in order to determine the Reserve Price will be 1 (one).

Interruptible (Entry) and Off-peak (Exit) Capacity (see paras 3.17 to 3.18 in Section 3)

It is proposed that the Reserve Price for Interruptible Capacity at an Entry Point and Off-peak Capacity at an Exit Point is derived by application of an ex-ante discount to the Reserve Prices for the corresponding Firm capacity products (the day ahead firm price at the relevant Entry Point and the daily firm price at the relevant Exit Point).

It is proposed that when determining the level of discount applied in respect of Interruptible and Off-peak Capacity from 01 October 2019 or implementation date of this Modification should it be after, the likelihood of interruption and the estimated economic value of the Interruptible or Off-peak capacity products are used to determine a discount value (as per Article 16 of EU Regulation 2017/460). It is further proposed to adopt a 'banding approach' for the period commencing 01 October 2019 or implementation date should it be after and for subsequent years, such that the proposed discount value will be rounded up to the nearest 10%:

It is proposed that for the period commencing 01 October 2019, or the implementation date of this Modification should it be after, the discount applied in respect of Interruptible and Off-peak Capacity:

- At Entry Points is 10%; and
- At Exit Points is 10%.

Specific Capacity Discounts (see paras 3.19 to 3.20 in section 3)

It is proposed that Specific Capacity Discounts will be applied to the Reserve Prices in respect of Firm and Interruptible/Off-peak Capacity at the Points detailed below.

It is proposed that in respect of **storage sites**, (locations where the type of Entry point/Offtake is designated as a 'Storage Site' in National Grid's Licence (Special Condition 5F Table 4B for Entry Points, and Special Condition 5G Table 8 for Exit Points) the applicable Specific Capacity Discount for a given gas year will be equal to 50%.

It is proposed that in respect of **Liquefied Natural Gas (LNG) sites**, (locations where the type of Entry point is designated as a 'LNG Importation Terminal' in National Grid's Licence (Special Condition 5F Table 4B)) for the period commencing 01 October 2019 or implementation date of this Modification should it be later, the applicable Specific Capacity Discount for a given gas year will be equal to 0%.

It is proposed that no other Specific Capacity Discounts are applied.

Additional Calculation Step under CWD for Reference / Reserve Prices (see para 3.22 in section 3)

It is proposed that the following step is applicable for Capacity Reference Prices on an enduring basis. Once the Reserve Prices have been calculated taking into account all the required Multipliers, Specific Capacity Discounts and Interruptible / Off-peak adjustment there will be an under recovery driven by the levels of discounts or adjustments (e.g. Interruptible / Off-peak adjustment and Specific Capacity Discounts). This anticipated under recovery will result in the need for an adjustment to be applied to the CWD calculation in order to recalculate Reference Prices, and therefore Reserve Prices, such that the under recovery is estimated to be zero or close to zero. This will be applied to the Entry and Exit Capacity calculations to recalculate the Entry and Exit Capacity Reference Prices and Reserve Prices for all Entry and Exit points and in doing so will minimise the size of the Transmission Services Entry and Exit Revenue Recovery charges.

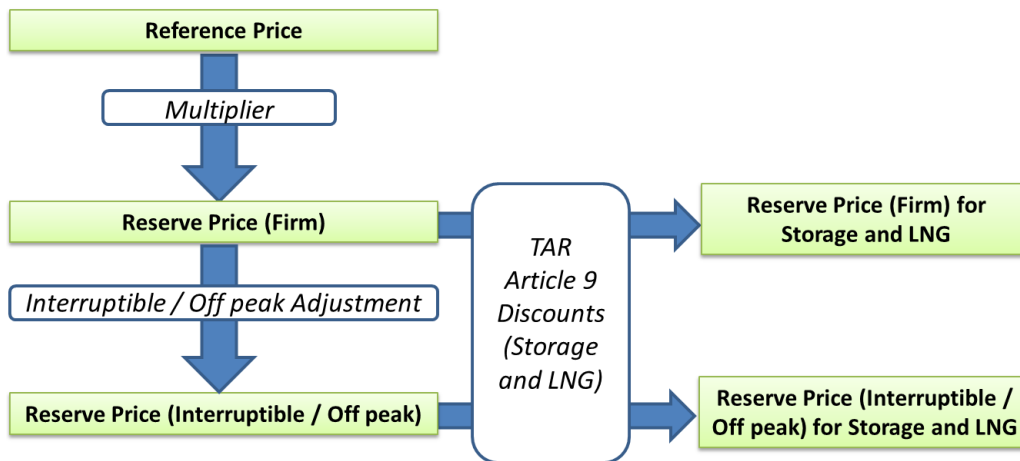
Minimum Reserve Price

It is proposed that Reserve Prices for Firm and Interruptible / Off-peak capacity (determined following the application of any relevant Multipliers, Specific Capacity Discounts, or Interruptible / Off-peak adjustments) will be subject to a minimum value (collar) of 0.0001p/kWh/d.

Summary of Reserve Price Derivation

The following diagram (see Figure 4) summarises the proposed approach to the derivation of Reserve Prices (from the applicable Reference Price) for both Firm and Interruptible / Off-peak Capacity products (including Capacity at Storage and LNG sites).

Figure 4: Reserve Price derivation



Capacity Step Prices

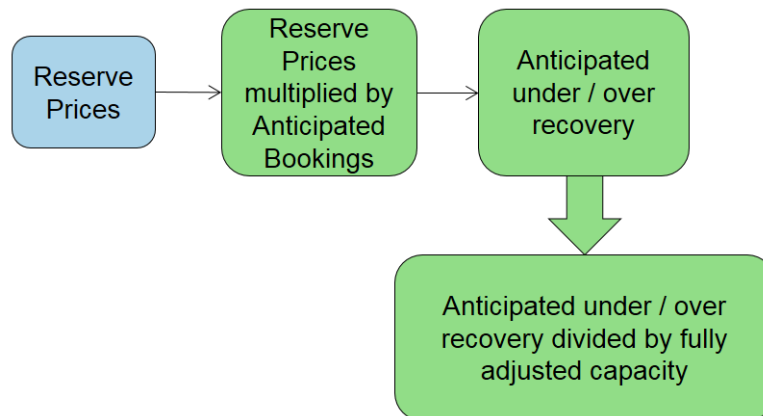
For the purposes of capacity step prices used in the QSEC Auction, these will be an additional 5% of the applicable Reserve Price or 0.0001 p/kWh/Day, whichever is the greatest, per step.

Transmission Services Revenue Recovery Charges (see para 3.21 in section 3)

It is proposed that where a proportion of revenue could be under/over recovered (i.e. compared to the target Transmission Services revenues) as a consequence of application of Reserve Prices applicable for the following gas year, a revenue recovery mechanism is applied.

The Transmission Services Revenue Recovery charges (Transmission Services Entry Revenue Recovery charge and Transmission Services Exit Revenue Recovery charge) will be calculated after the Reserve Prices have been determined and will be calculated as follows (see Figure 5) for Entry and Exit in the same way:

Figure 5: Transmission Services Revenue Recovery Mechanism



It is proposed that the ‘Anticipated Bookings’ value will be based on National Grid’s forecast of capacity bookings and therefore used to forecast the anticipated under or over recovery. It is proposed that the Transmission Services Revenue Recovery charge rate may be adjusted at any point within the gas year.

For the avoidance of doubt, such change would be subject to the existing notice requirements for variation of Transportation Charge rates.

It is proposed that the Transmission Services revenue recovery mechanism is capacity based and applied as additional capacity charges to all fully adjusted capacity except Existing Contracts for Storage. The Transmission Services Entry and Exit revenue recovery charges for this period will be produced in p/kWh/d. For the avoidance of doubt, any Entry Capacity (except Existing Contracts for Storage) or Exit Capacity booked for the applicable year (irrespective of when this capacity was procured from National Grid) would be subject to Revenue Recovery charges.

It is proposed that in respect of adjustments to available Entry Capacity at Storage, where the adjustment is executed:

- Up to and including 05 April 2017, the Capacity will be treated as Entry Capacity procured via Existing Contracts; or
- Subsequent to 05 April 2017, the Capacity will not be treated as Entry Capacity procured via Existing Contracts.

NTS Optional Charge (see para 3.23 in Section 3)

It is proposed that the existing NTS Optional Commodity Rate (OCR) is removed.

NTS Transmission Services Entry Charge Rebate

The charge mechanism reduces any Transmission Services entry over recovery. The process may be triggered at the end of the formula year. It is proposed that this will be applied as a Transmission Services entry capacity credit.

NTS Transmission Services Entry Capacity Retention Charge

NTS Entry Capacity Substitution is where National Grid moves unsold non-incremental Obligated Entry Capacity from one (donor) ASEP to meet the demand for incremental Obligated Entry Capacity at a different (recipient) ASEP. It is proposed that where a User elects to exclude capacity at potential donor ASEPs from being treated as substitutable capacity without having to buy and be allocated the capacity it is required to take out a “retainer”.

The retainer is valid for one year, covering all QSEC auctions (including ad-hoc auctions) held in this period. National Grid will exclude the relevant quantity from the substitution process, but the retainer will not create any rights to the User to be allocated or to use the capacity. The retainer will not prevent Users (including the User taking out the retainer) from buying that capacity at the ASEP in question in the period covered by the retainer.

The retainer is subject to a one-off charge which is payable via an ad hoc invoice raised within 2 months of the QSEC auction allocations being confirmed. If a User wishes to protect capacity for more than one year then a further retainer must be obtained each year and a charge will be payable each year for which a retainer is taken out.

Where any capacity covered by a retainer is allocated, a refund of the retention fee may be made; for example, for a retainer taken out for Gas Year 2013/14 in January 2010, a refund can be triggered by an allocation at the relevant ASEP made during a QSEC auction in 2010, 2011 and 2012, and an AMSEC auction in 2013 and 2014.

NTS Entry Capacity Retention Charges, in regard to non-incremental Obligated Entry Capacity, are calculated based on the minimal capacity charge rate of 0.0001 pence per kWh per day applying over a time period of 32 quarters; this equates to 0.2922 p/kWh of Entry Capacity retained.

NTS Entry Capacity Retention Charges and refunds in regard to non-incremental Obligated Entry Capacity are treated as Transmission Services.

Non-Transmission Services Charging

It is proposed that revenue due for collection via General Non-Transmission Services Entry and Exit Charges will be 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 revenue due for collection via General Non-Transmission Services Entry and Exit Charges will be recovered through a flow based charge as a flat unit price for all Entry Points and Exit Points. It is proposed that the St. Fergus Compressor Charges and General Non-Transmission Services Entry and Exit Charge rates may be adjusted at any point within the gas year.

It is proposed that this is applied to all flows excluding Storage flows unless it is flowed as “own use” gas at the Storage point.

The General Non-Transmission Services charge will be produced in p/kWh.

Treatment of under/over recovery (K) – after each formula year

It is proposed that a separate under or over revenue recovery (otherwise known as the “K” value) will be calculated for Transmission Services and Non-Transmission Services for the formula year. This will be different to the TO and SO “K” values however the principle of reconciling Transmission Entry and Exit revenues separately will remain.

It is proposed that the approach and calculation will be specified in the UNC, to be approved by Ofgem. In addition to Transmission and Non-Transmission being reconciled this Modification also proposes to have reconciliation between Entry and Exit under Transmission Services.

Transmission Services Revenue:

It is proposed to maintain 50/50 split between Entry and Exit (for the purposes of allocating revenues to the charges to recover Transmission Services Entry and Exit Revenues). It is also proposed to maintain the reconciliation of Entry and Exit for Transmission Services, as per the current approach for TO charges. This would continue to mean that Entry and Exit, under Transmission Services, when reconciled would not result in Entry impacting Exit or vice versa.

The applicable years Transmission Service Revenue will be split 50:50 between revenue to collect on Entry Capacity charges and revenue to collect on Exit Capacity charges. This value will then be added to any under/over recovery (Transmission Services K value) which was calculated in y-2 (two years ago) and split between Entry and Exit in the correct proportion, to make the applicable revenue which will be used in the CWD model to calculate the capacity charges.

Non-Transmission Services Revenue:

It is proposed that all those charges in respect of Non-Transmission Services shall contribute towards Non-Transmission Services revenue recovery. All charges are set on an ex-ante basis.

It is proposed that any under or over recovery attributed to the charges other than the Non-Transmission Services Entry and Exit Charge shall not be subject to reconciliation with any K value (Non-Transmission Services K value) adjusting the Non-Transmission Services Revenue recovery charge. Non-Transmission Services revenue charge will be added to the Non-Transmission Services K value which was calculated in y-2 (two years ago) which will be used to calculate the applicable years Non-Transmission Services Revenue which will be used for calculation of the Non-Transmission Services Charges.

Transportation Charges: Information Publication

It is proposed that information in respect of Transportation Charges will be published in accordance with table 3 below.

Table 3: Publication dates for Transportation Charges

	Data Item	Publication	Issued by*:
Transmission Services	Forecasted Contracted Capacity	Charging Model	01 August
	CWD Distances	Charging Model	01 August
	Capacity Reference Prices	Transportation Statement	01 August
	Multipliers	Transportation Statement	01 August
	Capacity Reserve Prices	Transportation Statement	01 August
	Interruptible Adjustment (Entry)	Transportation Statement	01 August
	Interruptible Adjustment (Exit)	Transportation Statement	01 August
	Specific Capacity Discounts (Storage)	Transportation Statement	01 August
	Specific Capacity Discounts (LNG)	Transportation Statement	01 August
	Revenue Recovery Charge (Entry)	Transportation Statement	01 August
	Revenue Recovery Charge (Exit)	Transportation Statement	01 August
Non-Transmission Services	Non-Transmission Services Charges	Transportation Statement	01 August
	DN Pension Deficit Charges	Transportation Statement	01 August
	NTS Metering Charges	Transportation Statement	01 August
	St Fergus Compression Charges	Transportation Statement	01 August
	SSMP Administration Charges	Transportation Statement	01 August
	Allocation Charges at Interconnectors	Transportation Statement	01 August

*Issued by means the date by which the listed information will be consolidated and published in the relevant publication. The information in this table will be published and made available in steps via the relevant notice and supporting material which may be before the date listed. The publication dates may also be changed depending on the implementation of this Modification.

6 Impacts & Other Considerations

Does this Modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

N/A

Consumer Impacts

There will be impact on different consumer groups but the allowed revenue collected by National Grid NTS will not change.

Consumer Impact Assessment

(Workgroup assessment of proposer initial view or subsequent information)

Criteria	Extent of Impact
Which Consumer groups are affected?	<p><i>Please consider each group and delete if not applicable.</i></p> <ul style="list-style-type: none"> • Domestic Consumers • Small non-domestic Consumers • Large non-domestic Consumers • Very Large Consumers
What costs or benefits will pass through to them?	<p><i>Please explain what costs will ultimately flow through to each Consumer group. If no costs pass through to Consumers, please explain why. Use the General Market Assumptions approved by Panel to express as 'cost per consumer'.</i></p> <p>Insert text here</p>
When will these costs/benefits impact upon consumers?	<p><i>Unless this is 'immediately on implementation', please explain any deferred impact.</i></p> <p>Insert text here</p>
Are there any other Consumer Impacts?	<p><i>Prompts:</i></p> <p><i>Are there any impacts on switching?</i></p> <p><i>Is the provision of information affected?</i></p> <p><i>Are Product Classes affected?</i></p> <p>Insert text here</p>
General Market Assumptions as at December 2016 (to underpin the Costs analysis)	
<i>Number of Domestic consumers</i>	<i>21 million</i>
<i>Number of non-domestic consumers <73,200 kWh/annum</i>	<i>500,000</i>
<i>Number of consumers between 73,200 and 732,000 kWh/annum</i>	<i>250,000</i>
<i>Number of very large consumers >732,000 kWh/annum</i>	<i>26,000</i>

Cross Code Impacts

None

EU Code Impacts

EU Tariff Code compliance is considered as part of this Proposal.

Central Systems Impacts

There will be impacts on Gemini and UK Link invoicing systems. These impacts are being assessed. The CDSP, Xoserve, has been consulted on all stages of development of this project and National Grid will continue to ensure this is the case.

Approach 29 January 2019

Alternatives will be treated in accordance with the Modification rules 6.4.

Bearing in mind the timetable specified in the Ofgem decision letter for 0678, Alternatives will be sent to UNC Modification Panel for consideration as to whether they are a true Alternative to 0678.

Ofgem noted that potential Alternatives should be well formed, properly considered and brought forward in a timely manner; supporting evidence should be included. Ofgem urges Proposers to act responsibly in this regard in order to ensure GB compliance.

Timing of both analysis and Legal Text will have a critical impact on the ability of Workgroup to complete the Workgroup Report. Workgroup noted that the decision on 0621 highlighted that the Workgroup Report should *contain* sufficient analysis.

Workgroup noted that analysis for shorthaul relies on confidential data held by National Grid. National Grid invited potential proposers of Alternatives to discuss this with National Grid.

Reference table of current prices will be provided by National Grid. (Action?)

Workgroup participants noted that if proposers of Alternatives produce indicative charges generated for their Modification, it removes the objectivity which National Grid would potentially provide.

Workgroup participants noted final charges for all Modifications over the next 3-4 years would be helpful to be produced to put in the Workgroup Report.

Workgroup intended to review FCC methodology draft proposal on Thursday 31 January 2019 alongside a sensitivity model which can be used to replicate the prices. This was not available for discussion at the Workgroup meeting on 31 January 2019. The sensitivity model for 0678 (CWD) will be available w/c 4 February 2019.

Workgroup participants noted that impacts on customers will be covered in the Workgroup report and will not necessarily be provided by National Grid but is also expected to be covered by any Ofgem Impact Assessment.

Workgroup participants asked for clarification on the effect of transfer of title - traded historical capacity contracts (for capacity bought before April 2017) and whether they would attract revenue recovery charges (who is the liability holder)? (Action)

National Grid clarified on 05 February 2019 that if contracts were traded before entry into force of TAR NC (06 April 2017) then revenue recovery would continue; if contracts are traded after this date then the revenue recovery charge will apply.

Approach update 05 February 2019

Some Workgroup Participants noted that Modifications should be properly formulated and should not include blank spaces. This means that some Modification Proposals will need to wait until National Grid releases data. National Grid have indicated it will deliver both the model and FCC methodology by 08 February 2019. Some Workgroup participants indicated they would be waiting until after that date in order to formulate and submit an Alternative.

The Proposer of 0678A indicated that his Modification will be the same as 0678 in all respects except the use of the Postage Stamp.

Input from Ofgem 29 January 2019

Ofgem will be preparing for an impact assessment (IA) and will then consider at the point at which the FMR is received whether in fact an IA is required.

Ofgem will endeavour to give feedback to the Workgroup as it goes along, regarding the DMR and FMR.

Ofgem noted on the subject of implementation that in the 0678 decision letter, industry is required to ensure GB compliance with TAR NC and any other relevant legislation as soon as possible. (Implementation by 31 May 2019 or as soon as possible is the target). Some Workgroup Participants recognise this is likely to be after 31 May 2019, since Ofgem will likely need to come to a minded-to decision possibly involving an IA, given TAR NC requirements for 2 months consultation followed by 2 months for ACER feedback, followed by Ofgem's final decision.

Workgroup noted that a notice period for advising of prices is required. Ofgem advised it will decide on this at a later point.

Some Workgroup participants asked if the date from which charges take effect could be 01 October 2020, noting that contracts tend to start at the start of a Gas Year.

Workgroup participants discussed Implementation date vs Effective date and some Workgroup participants noted the busiest time is March for the following Gas Year beginning 01 October. Some Workgroup participants stated, for the market to have confidence it seems sensible to have an effective date of 01 October 2020. Ofgem noted this observation.

Thus, on 29 January 2019, Workgroup 0678 requested a formal View (reference Modification Rules 12.8) from the Authority. The topics where a View was requested are:

- The feasibility of achieving 01 October 2019 implementation date
- The impact of not achieving this date, and
- The requirement to be compliant as soon as possible.

Some Workgroup Participants felt there is no clarity as to when charges from the new methodology will take effect. Will charges from the new methodology take effect **within** the Gas Year 2019/2020?

Some Workgroup Participants felt that while mid-year changes are allowed, it was important to have charges based on one given charging methodology for the duration of the Gas Year e.g. 01 October 2019 to 30 September 2020. This would avoid significant within-year changes in charges producing stability within the contract year and allows for the normal publication timings, giving 150 days' notice. Note that this is indicative notice, 2 months is the usual notice for final charges and less is required for some auctions. (DH 31 Jan 2019) National Grid stated that mid-year changes to capacity charges would most likely require a derogation from the licence.

Other Workgroup Participants did not agree, noting that GB will not be compliant if GB does not have TAR NC compliant charges effective 01 October 2019.

A Workgroup participant noted that in the Netherlands, TAR NC has been implemented with charges taking effect from 01 January 2020. For the Netherlands this is the beginning of the Tariff year. According to Article 38 a compliant methodology shall apply from 31 May 2019.

National Grid referred to the words stated in the implementation section of its Modification 0678; this is also in 0678A.

Workgroup participants discussed financial implications of any potential infringement proceedings, which Ofgem indicated would be against GB. Ofgem noted the case of Frankovich v Italy for damage claims¹¹.

From a systems perspective, Xoserve stated that implementation and effective dates are very important; any Alternatives must take this into account.

Compliance

Key points are drawn out in Appendix 2 – comparison table. Proposers of potential Alternatives are asked to ensure that this is updated with each potential new Alternative.

Interim Contracts 29 January 2019

Interim Contracts as a concept proposed under Modification 0621 are not now being used in 0678 and not in 0678A and are therefore not going to be recognised. This means that any long-term entry capacity allocated after entry into force of TAR NC (06 April 2017) will float, in terms of pricing.

Workgroup participants noted Article 35 and explored compliance of top up charges (revenue recovery) on legacy contracts.

Issue:

How is the principle of levying a top-up charge on legacy contracts compatible with Article 35?

National Grid clarified that the mechanism of Revenue Recovery will be subject to change, as with the current framework. Currently it is commodity based; under 0678 and 0678A it will be capacity based.

Action 01-2901 update expected on 11th Feb

National Grid stated that historical storage capacity under 0678 and 0678A would not attract transmission services entry revenue recovery charges.

Q. What is the effect/materiality of this change from commodity to capacity?

Q. Is there an option to sell back unused capacity?

Q. Treatment for Combined ASEPs: the issue remains unclear in terms of discrimination against certain storage facilities.

Some Workgroup participants agreed that principles being developed under Modification 0662 should be incorporated into 0678 and 0678a. Workgroup sought clarification from National Grid on how this works for storage capacity at combined ASEPs. **NG to supply some relevant wording here:**

If the ASEP is not defined as a storage in the licence...

Analysis

Consistent presentation of analysis (formatting) is important for comparison purposes (Action 04-2901 Richard Fairholme). National Grid to facilitate the numbers into some consistent output for comparison purposes – **update expected with sensitivity tool on Monday 11 February, (tool to come Friday 8th February)**

National Grid clarified that areas of the proposal which are not covered by 0678 this must be discussed with National Grid. National Grid will provide this ONLY where the numbers required are not publicly available.

¹¹ <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:61990CJ0006>

DN analysis

This will be provided with the model forthcoming by close of play on 08 February 2019.

Urgency 29 January 2019

Many Workgroup participants sought to highlight that it is not feasible to implement this suite of Modifications by October 2019 and therefore questioned why Urgency was sought by National Grid. Issues include opportunity to develop alternatives, impact assessments by Ofgem, requirement for Article 26 consultation and notice given to industry for potentially significant/unknown changes to prices.

National Grid noted the Modification aims to deliver compliant implementation “by October 2019 or as soon as possible after implementation”. The aim is to get the FMR to Ofgem as soon as possible and by 23 April 2019 (in line with the Urgency timetable) in order to enable Ofgem to begin work on this as soon as possible, aiming at new prices being effective for October 2019. Modifications coming out of 0670R and Modification 0662 are required.

Transition 29 January 2019

There is no phased delivery proposed under Modification 0678 nor 0678A. The FCC approach is thus brought forward to day 1; a methodology outlined in a Methodology Statement will be developed.

Shorthaul 29 January 2019

Request 0670R is progressing through NTSCMF and is envisaged to provide a product to avoid the inefficient bypass of the NTS.

Integration of RPM 31 January 2019

The Workgroup considered the current arrangements, the principle drivers, tariff year modelling, allowed revenue and netting-off of allowed revenue for existing contracts,

Some Workgroup participants believed there would be some distortion in charges between contract prices and “new” capacity prices as a result of netting-off allowed revenue for existing contracts. It was noted that the TAR NC does not cover how to treat existing contracts within the RPM. Consideration needs to be given to the interaction between under recovery of costs and the revenue recovery approach.

Some additional considerations will be required, to understand the value for existing contracts (netting-off allowed revenue). Some Workgroup participants believed there was a need for a mechanism to allow more equitable revenue recovery via the revenue recovery charges.

Some Workgroup participants requested clarification from National Grid on their 0678 Modification Proposal as to the treatment of netting-off existing contracts volume and revenue, against Ofgem’s views in their Modification 0621 Decision Letter (appendix page 15 – price differentials).

A Workgroup participant noted that other EU TSOs do not net off within the FCC value. It was also noted that these TSOs do not offer fixed prices as is the case within GB. For estimated under recovery approaches can include or exclude existing contract revenue recovery. It was believed a commodity recovery charge would be consistent with TAR NC and was not explicitly ruled out in the Modification 0621 Decision.

One Workgroup participant believed that the Workgroup needs to consider the impact of including existing contracts in the weighting of cost step in the RPM calculation;

The Workgroup acknowledged there would be a price difference as a result of Article 35. Some Workgroup participants wanted to understand the materiality of this and where the residual charges would reside.

Some Workgroup participants believed that existing capacity customer contracts... (AS to provide suitable text for the Workgroup Report).

Some Workgroup participants believed there was a need to review capacity hand-backs.

0678A

It was noted by the Workgroup that the intent of Alternative 0678A is for it be aligned with Modification 0678 apart from the weightings and distance.

FCC (Part 1/2) 31 January 2019

The Workgroup noted that the initial Forecasted Contracted Capacity (FCC) will be provided with the sensitivity tool, with a single set of FCC values for each year along with the methodology to derive it.

Some Workgroup participants wished to have more clarity on the options available for how to incorporate PARCA Reservations and new sites, further noting that PARCA should be considered as enduring contracts within the proposed FCC methodology.

Some concern was expressed about the possible variations for the Principles. The Principles should be also be a fair and equitable distribution of costs for users. The Workgroup believes there were a number of options that could be considered, for example, what is booked, what is paid for and what is flowed against. The Workgroup wished for further clarity on the Principles and how these will be applied, within the methodology.

The Workgroup wanted to understand the timing for the provision of the methodology with some expressing the view that it should be set out in the UNC. Some participants expressed concern about the timing of the visibility of the FCC values to allow an appropriate impact assessment. National Grid expects the methodology to accompany the UNC consultation (which according to the timetable should begin on 08 March 2019), along with clarity on the approach.

Some Workgroup participants believed that further clarity was required on forecasting flows along with actual data to date to demonstrate accuracy of previous forecasts. The Workgroup recognised that there is opportunity for error. The Workgroup wanted to understand the size of the potential error/tolerance in historical forecasts of flows.

A Workgroup participant suggested Shipper inputs into flows should be required. Inputs and contributions were invited from any workgroup participant.

National Grid was concerned about the flexibility and change governance with tying wholly into the UNC, as it was anticipated yearly changes may be required to enable periodic reviews. Some Workgroup participants expressed concern with the level of control and visibility for change. It was noted by some that any forecast will have a degree of error and having a methodology statement may be preferable initially over an approach in the UNC.

Noting the existing governance for the methodology statements, Ofgem have had the view they wished to limit their involvement in changing these, with suitable justification for any required Ofgem involvement.

A participant expressed concern about not having the FCC methodology and that this could hinder the development and assessment of potential Alternatives.

FCC (Part 2/2) 11 February 2018

Text

Revenue Recovery 31 January 2019

A Workgroup participant noted that the Distribution Networks (DNs) are currently not exposed to a commodity charge but under Modification 0678 they would pick up a capacity recovery charge in the future, along with other Users.

The Workgroup considered the K Factor and the process of adjustments.

A Workgroup participant expressed concern about within year recovery and the volatility in tariffs. It was noted that National Grid have an incentive to forecast accurately and limit the use of K. It was challenged why the industry should be subject to the volatility of inaccurate information created by National Grid. It was recognised that National Grid should minimise the exposure as any forecasting error is pushed onto Shippers, and Users will see a change in prices for any error. The Workgroup considered the elements that factor into the forecast and the flexible sources, for example the long-term forecast will be dependent on production and the difficulty to derive charges.

National Grid drew the attention of the workgroup to its Licence obligation to set charges to not under or over recovery in any given formula year and it has the ability to set revenue recovery charges to help facilitate this.

Existing Contracts 31 January 2019

One Workgroup participant believed that the Modification 0678's Solution does not cover a revenue recovery charge for the storage solution.

The Workgroup considered abandoned storage capacity, and that Modification 0662 held the liability of capacity, and dependent on the qualification, charges were not attracted.

National Grid was not proposing to change the capacity process. The Workgroup considered if a Capacity Handback concept would be a valid Alternative or not.

Ofgem stressed that any Modification needs to be compliant with TAR NC.

National Grid recognised that abandoned capacity needs to be dealt with, however this was out of scope for this Modification and could be addressed after the implementation of changes. There was recognition that it was unfair treatment of capacity for this purpose, however this could be remedied at a later point.

The Workgroup considered the Storage Long Term entry capacity if traded before April 2017 and deduced it will not attract the top-up charge.

Multipliers/discounts 05 February 2019

Multipliers (RF 04 Feb 2019)

Article 13 of EU Tariff Code (Level of multipliers and seasonal factors)

The Workgroup recognised that the proposal to include provision for capacity product specific multipliers (applied to the Reference Price to determine Reserve Prices) was proposed in order to comply with Article 13 of Regulation 2017/460. The EU Tariff Code permits multipliers within ranges for different capacity products. These ranges have the potential to increase or decrease prices relative to the annual reference price.

National Grid stated that it has proposed to apply multipliers of one (1.0) for all capacity products on the basis that it had not identified a need to incentivise procurement of one capacity product over another (i.e. to incentivise long term over short term or vice versa) and therefore this aspect of the pricing methodology would not influence Users' capacity procurement strategy if the payable price is ultimately the same. The Workgroup supported the proposed multipliers and noted that they were within the range permitted by Regulation 2017/460 Article 13(1). Modifications 0678 and 0678A have the same multipliers of one (1.0).

(Note that 0678B may have different bespoke multipliers – shorthaul)

Whilst multipliers (as a definition with associated ranges) are only mandated at Interconnection Points under the EU Tariff Code, the proposals apply this approach to all Entry and Exit points. National Grid clarified that this was done with the aim of having one methodology for all points.

Interruptible Discount

The Workgroup explored the impacts on pricing stability of historical zero priced interruptible capacity products. It also considered the requirements contained in Regulation 2017/460 (Article 16) in relation to the extent of the future discount which can be applied to determine Reserve Prices for Interruptible Capacity. The discount is a product of the predicted probability of interruption allows the economic value, of the interruptible capacity product, to be taken into consideration. National Grid presented analysis (covering the previous ten years) to the Workgroup, to support the basis for the proposed discounts and although the probability was found to be very low, it was agreed that it was not zero. Workgroup participants^[RH1], therefore gained a greater level of understanding in relation to the proposed level of discount.

National Grid recognised the views of some Workgroup participants, that attractiveness of the Interruptible capacity product is dependent upon it having a material discount to the equivalent Firm product. On this basis, National Grid put forward a banding approach such that the interruptible discount derived from the calculation prescribed by Regulation 2017/460 Article 16 was rounded up to the nearest 10%. This recognises the “economic value” aspect of Article 16. The outcome for Modification 0678 is that the discount will be 10%.

Workgroup participants noted that any income from sales of Interruptible capacity would contribute to Non-Transmission Services Charges. Workgroup expressed the view that, logically, that Interruptible capacity should be a Transmission Service charge and revenue should feed into the Transmission Owner price control but that this is constrained by the current price control arrangements. Some viewed this as a compliance issue. Action National Grid to illustrate revenue alignment for interruptible capacity and the resulting effect on revenue recovery and top up charges, especially for existing capacity holders.

Action National Grid to clarify how FCC will take interruptible capacity into account

Action Ofgem to clarify whether it would consider a change in licence to make interruptible revenue Transmission Services revenue (rather than Non-Transmission Services Revenue)

Some Workgroup participants suggested that National Grid should look carefully at its proposal in regard to Transmission and Non-Transmission Services revenues a Workgroup Participant believes that these are not the same as the TO and SO revenue streams mandated in the licence (in reference to the treatment of interruptible revenue streams).

Action National Grid to clarify licence vs UNC links.

Specific Capacity Discounts

Storage

The Workgroup recognised that the requirement for application of at least a 50% discount to the Reserve Price at Storage Connection Points was proposed in order to comply with Article 9 of EU Tariff Code.

LNG

The Workgroup recognised the proposal to include the potential provision for application of discount to the Reserve Price at LNG Connection Points. Article 9 of Regulation 2017/460 says this may be applied. Modifications 0678 and 0678A propose a 0% discount

[Workgroup participants noted that this level can be changed in the future through a UNC Modification.](#)

[National Grid clarified that it does not recognise any of the GB assets as falling under the definition of “Infrastructure ending Isolation” \(Article 9\).](#)

‘Shorthaul’ approach [05 February 2019](#)

[Some Workgroup Participants noted that Modifications should be properly formulated and should not include blank spaces. This means that some Modification Proposals will need to wait until National Grid releases data. National Grid have indicated it will deliver both the model and FCC methodology by 08 February 2019. Some Workgroup participants indicated they would be waiting until after that date to submit an Alternative proposal.](#)

[Modification 0678 contains no provision for avoidance of inefficient bypass of the NTS, aimed at being a compliant Modification, with any proposal for this aspect in Modification 0670R.](#)

[Some Workgroup Participants noted that this could be construed as tacit acceptance that a shorthaul concept is required, which in turn highlights this Modification 0678 could be seen as being incomplete. This leads to a fragmented approach. Compliance with EU Regulation is essential, and the Workgroup must also consider Proposals as measured against all Relevant Objectives.](#)

[National Grid clarified it believed the Modification 0678 was complete. RWE clarified that 0678A was also complete.](#)

[Other Workgroup participants did not agree that a shorthaul concept is an essential part of compliance with TAR NC.](#)

[Action National Grid to clarify the effect of cessation of shorthaul on existing users and customers currently using shorthaul services \(update expected 14th February\).](#)

Non-Transmission Charges

Text

Final overview

Text

Rough Order of Magnitude (ROM) Assessment *(Cost estimate from CDSP)*

Insert text here

OR

Rough Order of Magnitude (ROM) Assessment <i>(Workgroup assessment of costs)</i>	
Cost estimate from CDSP	Insert text here
Insert Subheading here	Insert text here

7 Relevant Objectives

Table 4: Impact of the Modification on the Relevant Objectives

Impact of the Modification on the Relevant Objectives:	
Relevant Objective	Identified impact

a) Efficient and economic operation of the pipe-line system.	None
b) Coordinated, efficient and economic operation of (i) the combined pipe-line system, and/ or (ii) the pipe-line system of one or more other relevant gas transporters.	None
c) Efficient discharge of the licensee's obligations.	Positive
d) Securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.	Positive
e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards... are satisfied as respects the availability of gas to their domestic customers.	None
f) Promotion of efficiency in the implementation and administration of the Code.	None
g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	Positive

Demonstration of how the Relevant Objectives are furthered:

c) Efficient discharge of the licensee's obligations.

The proposed changes to TPD B and EID B (where applicable) support the implementation of the new charging methodology and arrangements. Standard Special Condition A5(5) of the NTS Licence sets out the relevant methodology objectives and National Grid believes that these objectives are better facilitated for the reasons detailed below in Table 5 ('Impact of the Modification on the Relevant Charging Methodology Objectives').

d) Securing of effective competition between relevant shippers;

The proposed changes to TPD B and EID B (where applicable) support the implementation of the new charging methodology and arrangements. To the extent that the application of a new Reference Price Methodology is expected to provide a more stable and predictable price setting regime, Shippers will have a greater level of confidence in their forecasts of prospective use of network costs and therefore set their own service costs more accurately (potentially with a lower risk margin) thereby enhancing effective competition.

g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.

The proposed changes to TPD B and EID B (where applicable) support the implementation of the new charging methodology and arrangements including those elements required to comply with the EU Tariff Code. The decision to reject UNC0621 and its Alternatives highlighted three areas of compliance that needed to be addressed (Interim Contracts, Transition Period and Shorthaul). This Modification

proposes changes that will address these. Appendix 2 gives a comparison between Modification 0621 and this new Modification 0678, highlighting steps taken to address compliance in line with Ofgem's 0621 Rejection Letter. In order to provide a compliant proposal to address these areas, National Grid is proposing:

- Not to propose the creation of Interim Contracts;
- Not to use a transition period for the introduction of the methodology changes; and
- The removal of the charge to manage avoidance of inefficient bypass (as highlighted in this proposal, National Grid has raised a separate review group (UNC0670R) to address this aspect of charging in the longer term).

Table 5: Impact of the Modification on the Relevant Charging Methodology Objectives

Impact of the Modification on the Relevant Charging Methodology Objectives:	
Relevant Objective	Identified impact
a) Save in so far as paragraphs (aa) or (d) apply, that compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business;	Positive
aa) That, in so far as prices in respect of transportation arrangements are established by auction, either: <ul style="list-style-type: none"> (i) no reserve price is applied, or (ii) that reserve price is set at a level - <ul style="list-style-type: none"> (I) best calculated to promote efficiency and avoid undue preference in the supply of transportation services; and (II) best calculated to promote competition between gas suppliers and between gas shippers; 	Positive
b) That, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;	Positive
c) That, so far as is consistent with sub-paragraphs (a) and (b), compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers; and	Positive
d) That the charging methodology reflects any Alternative arrangements put in place in accordance with a determination made by the Secretary of State under paragraph 2A(a) of Standard Special Condition A27 (Disposal of Assets).	None
e) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	Positive

This Modification proposal does not conflict with:

- (i) Paragraphs 8, 9, 10 and 11 of Standard Condition 4B of the Transporter's Licence; or
- (ii) Paragraphs 2, 2A and 3 of Standard Special Condition A4 of the Transporter's Licence;

as the charges will be changed at the required times and to the required notice periods.

Demonstration of how the Relevant Objectives are furthered:

- a) **Save in so far as paragraphs (aa) or (d) apply, that compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business;**
- aa) **That, in so far as prices in respect of transportation arrangements are established by auction, either:**
 - (i) no reserve price is applied, or**
 - (ii) that reserve price is set at a level -**
 - (I) best calculated to promote efficiency and avoid undue preference in the supply of transportation services; and**
 - (II) best calculated to promote competition between gas suppliers and between gas shippers;****and**

c) That, so far as is consistent with sub-paragraphs (a) and (b), compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers

National Grid believes that the proposed utilisation of a new Reference Price Methodology which re-distributes National Grid's costs on a geographical basis, weighted by capacity will enhance cost reflectivity and competition between gas suppliers and between gas shippers when compared to the current application of a Long Run Marginal Cost Methodology (LRMC). The proposed model is better suited to the current and expected future usage of the NTS and the current model is more suitable for an expanding network requiring an investment-based RPM.

A sub-group of the NTS Charging Methodology Forum identified that as the inputs into the LRMC model are varied the resulting price changes are not intuitive and the changes can cause unpredictable results, and the changes to prices can be volatile. As a result, similar offtake points (in terms of offtake volumes and distances from points of entry) may incur materially different charges. Use of a methodology which delivers more comparable costs would better facilitate these objectives

b) That, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;

The update to the Transmission Services methodology proposal takes into account developments which have taken place in the transportation business, in particular that the network is no longer expanding.

e) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.

The EU Tariff Code compliance is taken into account in this Modification proposal. Accordingly, implementation of this Proposal would ensure that the GB arrangements are compliant with the EU Tariff Code. The decision to reject UNC0621 and its Alternatives highlighted three areas of compliance that needed to be addressed (Interim Contracts, Transition Period and 'Shorthaul'). This Modification proposes changes that will address these. In order to provide a compliant proposal to address these areas, National Grid is proposing:

- Not to propose the creation of Interim Contracts;
- Not to use a transition period for the introduction of the methodology changes; and
- The removal of the charge to manage avoidance of inefficient bypass (as highlighted in this proposal, National Grid has raised a separate review group (UNC0670R) to address this aspect of charging in the longer term.

Please see also Appendix 2 for a comparison table between Modification Proposal 0621 (which was rejected by Ofgem) and this Modification Proposal (0678).

8 Implementation

Implementation of this Modification is proposed to be in line with an Ofgem decision. It should be by 31 May 2019 or as soon as possible after this date.

This Modification and the resulting methodology change will take effect for prices from 01 October 2019 or any other date in line with the Ofgem decision, in order to achieve compliance with the EU Tariff Code (or the relevant Statutory Instrument) as soon as possible.

9 Legal Text

Text Commentary

To be provided later

Text

To be provided later

10 Recommendations

Workgroup's Recommendation to Panel

The Workgroup asks Panel to agree that:

- This proposal requires further assessment and should be returned to Workgroup.

The Code Administrator may set alternative subheadings appropriate to the specific Code.

Insert subheading here

Insert text here

11 Appendix 1: Impacts of Proposal on NTS Capacity Auctions

Acronym	Full name	Dir.		Class		Product			Transition		Calculation and Publication*				Published Price (at time of auction)	Payable Price	
		Entry	Exit	Firm	Interruptible	Annual	Quarterly	Monthly	Daily	Last 'Old Rules' Auction	First 'New Rules' Auction	Last Old Calculation	Last Old Publication	First New Calculation			First New Publication
INTERCONNECTION POINTS																	
IPAY	Inteconnection Point Annual Yearly	Y	Y	Y		Y				Jul 2018	Jul 2019	Oct 2017	May 2018	Oct 2018	May 2019	Y1: actual Y2-15: indicative	Prevailing price plus premium
IPAQ	Interconnection Point Annual Quarterly	Y		Y			Y			May 2019	Aug 2019	Oct 2017	May 2018	Oct 2018	Jan 2019	actual	Prevailing price plus premium
			Y	Y			Y					Mar 2019	May 2019	Feb 2019	May 2019		
IPRM	Interconnection Point Rolling Monthly	Y		Y				Y		Aug 2019	Sep 2019	Jun 2018	1 Jul 2018	Feb 2019	May 2019	actual	Prevailing price plus premium
			Y	Y			Y					Mar 2018	May 2018				
IPDA	Interconenction Point Day Ahead	Y		Y	Y				Y	29 Sep 2019 (F: 15:30, I: 16:30)	30 Sep 2019 (F:15:30, I: 16:30)	Jun 2018	Jul 2018	Feb 2019	May 2019	actual	Prevailing price plus premium
			Y	Y	Y		Y					Mar 2018	May 2018				
IPWD	Interconnection Point Within Day	Y		Y	Y				Y	30 Sep 2019 (00:00 - 00:30)	30 Sep 2019 (18:00 - 01:30)	Jun 2018	Jul 2018	Feb 2019	May 2019	actual	Prevailing price plus premium
			Y	Y	Y		Y					Mar 2018	May 2018				
NON-INTERCONNECTION POINTS																	
QSEC	Quarterly System Entry Capacity	Y		Y			Y			Mar to May 2019	Mar to May 2020	Oct 2018	Jan 2019	Oct 2019	Jan 2020	indicative	Prevailing price plus premium
MSEC	Monthly System Entry Capacity	Y		Y				Y		Feb 2019	Feb 2020	Jul 2018	31 Jul 2018	Feb 2019	May 2019	M1-6: actual M7-18: indicative	Prevailing price plus premium
RMTTSEC	Rolling Monthly Trades and Transfer System Entry Capacity	Y		Y				Y		Aug 2019	Sep 2019	Jun 2018	1 Jul 2018	Feb 2019	May 2019	actual	Prevailing price plus premium
DADSEC	Day Ahead Daily System Entry Capacity	Y		Y	Y				Y	29 Sep 2019	30 Sep 2019	Jun 2018	Jul 2018	Feb 2019	May 2019	actual	Prevailing price plus premium
WDDSEC	Within Day Daily System Entry Capacity	Y		Y					Y	30 Sep 2019	1 Oct 2019	Jun 2018	Jul 2018	Feb 2019	May 2019	actual	Prevailing price plus premium
EAFLEC	Enduring Annual Flat Exit Capacity		Y	Y					Enduring, sold Annually	Jul 2018	Jul 2019	Mar 2018	May 2018	Feb 2019	May 2019	Y4+: indicative	Prevailing
AFLEC	Annual Flat Exit Capacity		Y	Y		Y				Jul 2018	Jul 2019	Mar 2018	May 2018	Feb 2019	May 2019	Y1: actual Y2-3: indicative	Prevailing
DADNEX	Day Ahead Daily NTS Exit Capacity		Y	Y		Y			Y	29 Sep 2019	30 Sep 2019	Mar 2018	May 2018	Feb 2019	May 2019	actual	Prevailing price plus premium
WDDNEX	Within Day Daily NTS Exit Capacity		Y	Y					Y	30 Sep 2019	1 Oct 2019	Mar 2018	May 2018	Feb 2019	May 2019	actual	Prevailing price plus premium

F - Firm I - Interruptible * these dates are starting points for the respective calculation and publication processes

12 Appendix 2: Differences between Modification 0621 and this Modification 0678.

The following table highlights the differences between Modification Proposal 0621 (which was rejected for implementation by Ofgem) and this Modification Proposal (0678). A rationale is provided for those elements where a different approach has been taken in this Modification Proposal 0678 and extracts have been included from Ofgem's decision letter for 0621 which evidence the compliance concern.

Note: The table is presented in two halves for legibility.

Component	Element	0621	Rationale in the context of 0621 Ofgem Decision	0678	Extracts from Ofgem Decision Letter For Mod Proposal 0621
		v5.0 (1/5/2018)		v1.0 (17/1/2019)	20/12/2019
		National Grid		National Grid	Ofgem
Capacity Reference Price	Reference Price Methodology (interim)	Capacity Weighted Distance	Ofgem concluded that individual features of the transition period were non-compliant with TAR hence the interim arrangements have been removed	N/A	"TAR NC makes no provision ...for a transition period as proposed ... however, we note that any methodology in effect from 31 May 2019 must in itself be compliant with ... TAR NC".
	Reference Price Methodology (enduring)	Capacity Weighted Distance with adjustment to minimise Revenue Recovery		Capacity Weighted Distance with adjustment to minimise Revenue Recovery	
	Target Revenue	Net of existing and interim contracts	Ofgem concluded that Interim Contracts were non-compliant with TAR hence the target revenue will only be net of Existing Contracts	Net of Existing Contracts	"treatment by the UNC621 modifications of so-called "interim contracts" is not consistent with either a literal or a purposive reading of Article 35 TAR NC"
	Treatment of zero Reference Prices	Uses Weighted Average Distance to determine price using nearest non-zero Reference Priced Entry or Exit Point's WAD.		Uses Weighted Average Distance to determine price using nearest non-zero Reference Priced Entry or Exit Point's WAD.	
Forecasted Contracted Capacity (FCC)	Interim arrangements	Obligated capacity for first 2 years	Ofgem concluded that use of obligated values was not consistent with TARs requirement for use of a forecast.	N/A	"obligated capacity does not amount to a "forecast" for the purposes of TAR NC ... the revenue reconciliation principle set out in TAR NC, [is] that under- or over recovery ... should be minimised to the extent possible"
	Enduring arrangements	National Grid Forecast (excluding Historical Capacity)	Ofgem concluded that Interim Contracts were non-compliant with TAR hence the FCC will only exclude Existing Contracts	National Grid Forecast (excluding Existing Contract capacity)	
Reserve Price - Firm and Interruptible	Multiplier (Annual Capacity Product)	1.0		1.0	
	Multiplier (Quarterly Capacity Product)	1.0		1.0	
	Multiplier (Monthly Capacity Product)	1.0		1.0	
	Multiplier (Daily Capacity Product)	1.0		1.0	
	Multipliers from year 2 onwards	1.0		1.0	
	Interruptible / Off-peak adjustment (entry)	10%		10%	
	Interruptible / Off-peak adjustment (exit)	10%		10%	
	Interruptible /off-peak adjustments from Year 2 onwards	10%		10%	
Fixed or floating price	Floating		Floating		
Reserve Price - Specific Capacity Discounts	Storage	50%		50%	
	Interconnection Points	None		None	
	LNG	0%		0%	
	Minimum Reserve Price	0.0001p/kWh/d		0.0001p/kWh/d	
Revenue Recovery Charges (Interim)	Target revenue apportionment	Pro-rated according to forecast flows at IPs / non-IPs versus forecast total flows	Ofgem concluded that use of a commodity (flow) based revenue recovery mechanism in the interim period was not compliant with TAR both in terms of the consequential proportion of revenue recovered via this mechanism and the question as to whether this was consistent with the requirement for such recovery means to be 'an exception'	N/A	"use of obligated capacity ... would lead to... more than 50% of ... revenue being recovered by this charge. ... use of a commodity-based charge to recover most of the ... revenue is inconsistent with the intention of Article 4(3) TAR NC, which provides "as an exception" that a "part" of the revenue may be recovered via a commodity-based charge"
	Duration	2 years		N/A	
	IP application	Capacity charge (applied to fully adjusted capacity)		N/A	
	IP Exclusions	None		N/A	
	Non-IP application	Flow based charge applied to allocations (flow)		N/A	
Non-IP Exclusions	Non-own use gas allocations (flow) at Storage Connection Points		N/A		

			0621	Rationale in the context of 0621 Ofgem Decision	0678	Extracts from Ofgem Decision Letter For Mod Proposal 0621
			v5.0 (1/5/2018)		v1.0 (17/1/2019)	20/12/2019
	Component	Element	National Grid		National Grid	Ofgem
Transmission Services Charges	Revenue Recovery Charges (Enduring)	Target revenue apportionment between IPs and non-IPs	n/a		n/a	
		IP application	Capacity charge (applied to fully adjusted capacity)		Capacity charge (applied to fully adjusted capacity)	
		IP Exclusions	None		None	
		Non-IP application	Capacity charge (applied to fully adjusted capacity)		Capacity charge (applied to fully adjusted capacity)	
		Non IP Exclusions	Historical Contracts for Capacity at Storage Connection Points	Ofgem concluded that Interim Contracts were non-compliant with TAR hence the exclusion will only extend to Existing Contracts	Existing Contracts for Capacity at Storage Connection Points	
	NTS Optional Charge	Application	2 years		N/A	"Article 4(2) states that "Transmission tariffs may be set in a manner as to take into account the conditions for firm capacity products".... the NOC, ... is levied on flows, without reference to the underlying capacity booking. TAR NC requires any exempt flow-based charge to be calculated on the basis of forecasted or historical flows, or both, ... the NOC unit rate is derived taking into account the "maximum offtake rate" ("M") and distance. We do not consider "M" is a suitable proxy for "forecasted" or "historical" capacity allocations and flows
		Method (rate derivation)	Existing formula, cost base subject to annual RPI adjustment		N/A	
		Quantity (IPs)	Capacity deemed to have been used		N/A	
		Quantity (Non-IPs)	Allocation (flow)		N/A	
		Alternative charges	Transmission Services Revenue Recovery charges and Non-Transmission Services (entry and exit) charges	Ofgem concluded that the Optional Charge was not compliant with the criteria for classification as a Transmission Services Charge.	N/A	
Limitations		60km distance cap		N/A		
Application at Bacton ASEPs	NTS optional flow at UKCS and IP pro rata in proportion to total flows at both		N/A			
'k'	Application	Existing principles		Existing principles		
Non-Transmission Services Charges	St. Fergus Compression	Application	Existing principles		Existing principles	
	NTS Metering	Application	Existing principles		Existing principles	
	DN Pensions Deficit	Application	Existing principles		Existing principles	
	SSMP Administration	Application	Existing principles		Existing principles	
	IP Allocation	Application	Existing principles		Existing principles	
	Entry and Exit Charges	Application	Allocation (flow) based charge to recover residual Non-transmission services revenue, except non-own-use at storage		Allocation (flow) based charge to recover residual Non-transmission services revenue, except non-own-use at storage	
'k'	Application	Existing principles		Existing principles		
General	Publication of variables	Multipliers	Transportation Statement		Transportation Statement	
		Interruptible Adjustment	Transportation Statement		Transportation Statement	
		LNG Discount	Transportation Statement		Transportation Statement	
		CWD Distances	Charging Model		Charging Model	
		CWD FCCs	Charging Model		Charging Model	
		Maximum allowed revenue forecast	No proposed obligations		No proposed obligations	

Variation in treatment of element from UNC Modification Proposal 0621