## **UNC Modification**

At what stage is this document in the process?

# UNC 0678: Amendments to Gas Transmission Charging Regime

01 Modification 02 Workgroup Report 03 Draft Modification Report 04 Final Modification

### **Purpose of Modification:**

The purpose of this Modification Proposal 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).



The Proposer recommends that this Modification should be treated as urgent and should proceed as such under a timetable agreed with the Authority.

High Impact:

All parties that pay NTS Transportation Charges and / or have a connection to the NTS, and National Grid NTS.

Π	

N/A

Low Impact:

Medium Impact:

N/A

Contents       Image: Contents         1       Summary       43         2       Governance       54         3       Why Change?       76         4       Code Specific Matters       1513         5       Solution       1746         6       Impacts & Other Considerations       3027         7       Relevant Objectives       3128         8       Implementation       3724         10       Recommendations       3724         11       Appendix 1: Differences between Modification 0621 and this Modification 0678.       3825         1       Solution       1778         4       Code Specific Matters       3825         1       Summary       44         2       Governance       3825         3       Why Change?       7         4       Code Specific Matters       14         5       Solution       17         6       Implementation       35         9       Legal Text       35         9       Legal Text       35         10       Recommendations       37         7       Relevant Objectives       30         9			
1       Summary       43         2       Governance       54         3       Why Change?       76         4       Code Specific Matters       1513         5       Solution       1716         6       Impacts & Other Considerations       3027         7       Relevant Objectives       3128         8       Implementation       3734         10       Recommendations       3734         11       Appendix 1: Differences between Modification 0621 and this Modification 0678.       3835         1       Solution       1776         1       Solution       1776         1       Appendix 1: Differences between Modification 0621 and this Modification 0678.       3734         2       Governance       56         3       Why Change?       7         4       Code Specific Matters       14         5       Solution       177         6       Impacts & Other Considerations       29         7       Relevant Objectives       300         8       Implementation       353         9       Legal Text       353         10       Recommendations       353         11 <td>Contents</td> <td></td> <td></td>	Contents		
2 Governance       54         3 Why Change?       76         4 Code Specific Matters       1543         5 Solution       1746         6 Impacts & Other Considerations       3027         7 Relevant Objectives       3128         9 Legal Text       3734         10 Recommendations       3734         11 Appendix 1: Differences between Modification 0621 and this Modification 0678.       3835         3 Why Change?       77         4 Code Specifie Matters       46         5 Solution       3635         1 Appendix 1: Differences between Modification 0621 and this Modification 0678.       3835         3 Why Change?       77         4 Code Specifie Matters       14         5 Solution       177         6 Impacts & Other Considerations       29         7 Relevant Objectives       300         8 Implementation       355         9 Legal Text       355         10 Recommendations       355         11 Appendix 1: Differences between Modification 0621 and this Modification 0678.       370         7 Relevant Objectives       300         8 Implementation       355         9 Legal Text       357         10 Recommendations       357	1 Summary	· ·	
3       Why Change?       76         4       Code Specific Matters       1543         5       Solution       1716         6       Impacts & Other Considerations       3027         7       Relevant Objectives       3128         8       Implementation       3734         9       Legal Text       3734         10       Recommendations       3734         11       Appendix 1: Differences between Modification 0621 and this       01926 655915         1       Summary       4         2       Governance       3835         1       Solution       177         4       Code Specific Matters       14         5       Solution       177         4       Code Specific Matters       14         5       Solution       177         6       Impacts & Other Considerations       29         7       Relevant Objectives       300         8       Implementation       355         9       Legal Text       373         10       Recommendations       373         11       Appendix 1: Differences between Modification 0621 and this         Modification 0678.       37	2 Governance	54	
4       Code Specific Matters       1543         5       Solution       1746         6       Impacts & Other Considerations       3027         7       Relevant Objectives       3128         8       Implementation       3734         9       Legal Text       3734         10       Recommendations       3734         11       Appendix 1: Differences between Modification 0621 and this Modification 0678.       3835         1       Summary       4         2       Governance       5         3       Why Change?       7         4       Code Specific Matters       14         5       Solution       17         6       Impacts & Other Considerations       29         7       Relevant Objectives       300         8       Implementation       35         9       Legal Text       35         10       Recommendations       35         11       Appondix 1: Differences between Modification 0621 and this         Modification 0678.       30         7       Relevant Objectives       30         8       Implementation       35         9       Legal Text	3 Why Change?	7 <del>6</del>	
5       Solution       1746       ITance.co.uk         6       Impacts & Other Considerations       3027       Proposer         7       Relevant Objectives       3128       Proposer         8       Implementation       3734       Implementation       3734         9       Legal Text       3734       Implementation       3734         10       Recommendations       3734       Implementation       3734         11       Appendix 1: Differences between Modification 0621 and this       Implementation       <	4 Code Specific Matters	<u>15<del>13</del></u>	
7       Relevant Objectives       3128         8       Implementation       3734         9       Legal Text       3734         10       Recommendations       3734         11       Appendix 1: Differences between Modification 0621 and this Modification 0678.       3635         1       Summary       4         2       Governance       5         3       Why Change?       7         4       Code Specific Matters       14         5       Solution       17         6       Impacts & Other Considerations       29         7       Relevant Objectives       30         8       Implementation       35         9       Legal Text       35         10       Recommendations       35         11       Appendix 1: Differences between Modification 0621 and this Modification 0678.       37         7       Relevant Objectives       30         8       Implementation       35         9       Legal Text       35         10       Recommendations       37         7       Timetable       37         7       Modification 0678.       37         7       Rele	5 Solution	17 <del>16</del>	
7       Relevant Objectives       3128         8       Implementation       3734         9       Legal Text       3734         10       Recommendations       3734         10       Recommendations       3734         11       Appendix 1: Differences between Modification 0621 and this Modification 0678.       3635         1       Appendix 1: Differences between Modification 0621 and this Modification 0678.       3635         2       Governance       5         3       Why Change?       7         4       Code Specific Matters       14         5       Solution       17         6       Impacts & Other Considerations       29         7       Relevant Objectives       30         8       Implementation       35         9       Legal Text       35         10       Recommendations       35         11       Appendix 1: Differences between Modification 0621 and this Modification 0678.       37         7       Timetable       37         7       The Proposer recommends the following timetable:       37         Ofgem decision on urgency       25       January 2019         Workgroup 1 - "Approach. Compliance"       29	6 Impacts & Other Considerations	<u> 30<del>27</del></u>	0121 288 2107
9       Legal Text       3734         10       Recommendations       3734         10       Recommendations       3734         11       Appendix 1: Differences between Modification 0621 and this       0 1926 655916         Modification 0678.       3835         1       Summary       4         2       Governance       5         3       Why Change?       7         4       Code Specific Matters       14         5       Solution       17         6       Impacts & Other Considerations       29         7       Relevant Objectives       30         8       Implementation       35         9       Legal Text       35         10       Recommendations       35         11       Appendix 1: Differences between Modification 0621 and this         Modification 0678.       37         7       Cigem 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         Workgroup 3 - "Multipliers and Discounts. "Shorthaul"       05 February 2019	7 Relevant Objectives	<u>3128</u>	
10. Recommendations 3734   11. Appendix 1: Differences between Modification 0621 and this   Modification 0678.   13. Summary   2. Gevernance   3. Why Change?   4. Code Specific Matters   14. Solution   5. Solution   6. Impacts & Other Considerations   7. Relevant Objectives   8. Implementation   9. Legal Text   10. Recommendations   11. Appendix 1: Differences between Modification 0621 and this   Modification 0678.   7. Relevant Objectives   30   8. Implementation   9. Legal Text   10. Recommendations   11. Appendix 1: Differences between Modification 0621 and this   Modification 0678.   7. Relevant Objectives   30   8. Implementation   9. Legal Text   35   10. Recommendations   35   11. Appendix 1: Differences between Modification 0621 and this   Modification 0678.   37   Timetable   Ofgem decision on urgency   Vorkgroup 1 - "Approach. Compliance"   29 January 2019   Workgroup 3 - "Multipliers and Discounts. 'Shorthaul'   05 February 2019	8 Implementation	<u>37<del>3</del>4</u>	
10 Recommendations 37.34   11 Appendix 1: Differences between Modification 0621 and this   Modification 0678. 3835   1 Summary 4   2 Gevernance   3 Why Change?   4 Code Specific Matters   14 5   5 Solution   6 Impacts & Other Considerations   7 Relevant Objectives   30 8   10 Recommendations   31 Appendix 1: Differences between Modification 0621 and this   Notification 0678. 29   7 Relevant Objectives   30 8   11 Appendix 1: Differences between Modification 0621 and this   Modification 0678. 37   7 Timetable   7 Commendations   11 Appendix 1: Differences between Modification 0621 and this   Modification 0678. 37   7 Timetable   7 Subserve.com   9 Legal Text   30 36   11 Appendix 1: Differences between Modification 0621 and this   Modification 0678. 37   7 Timetable   7 Subserve.com   9 January 2019   Workgroup 1 - "Approach. Compliance"   29 January 2019   Workgroup 3 - "Multipliers and Discounts. 'Shorthaul'   05 February 2019	9 Legal Text	<u>37<del>3</del>4</u>	
11 Appendix 1: Differences between Modification 0621 and this         Modification 0678.       3835         1 Summary       4         2 Governance       5         3 Why Change?       7         4 Code Specific Matters       14         5 Solution       17         6 Impacts & Other Considerations       29         7 Relevant Objectives       30         8 Implementation       35         9 Legal Text       35         10 Recommendations       37         7 Timetable       37         Timetable       31 January 2019         Workgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts"       31 January 2019         Workgroup 3 - "Multipliers and Discounts. 'Shorthaul'       05 February 2019	10 Recommendations	<u>37<del>3</del>4</u>	
1 Summary 4   2 Governance   3 Why Change?   4 Code Specific Matters   3 Why Change?   4 Code Specific Matters   1 Solution   5 Solution   6 Impacts & Other Considerations   7 Relevant Objectives   30 Systems Provider:   Xoserve 30   8 Implementation   9 Legal Text   10 Recommendations   11 Appendix 1: Differences between Modification 0621 and this   Modification 0678. 37   7 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"   Workgroup 3 - "Multipliers and Discounts. 'Shorthaul'   approach" (part of NTSCMF)			
1 Summary 4   2 Governance   3 Why Change?   4 Code Specific Matters   14 5   5 Solution   6 Impacts & Other Considerations   7 Relevant Objectives   30 8   8 Implementation   9 Legal Text   30 35   10 Recommendations   31 Appendix 1: Differences between Modification 0621 and this   Modification 0678. 37   Timetable   Ofgem decision on urgency   Vorkgroup 1 - "Approach. Compliance"   Vorkgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts"   Vorkgroup 3 - "Multipliers and Discounts. 'Shorthaul'   oproach" (part of NTSCMF)			
3 Why Change? 7 4 Code Specific Matters 14 5 Solution 17 6 Impacts & Other Considerations 29 7 Relevant Objectives 30 8 Implementation 35 9 Legal Text 35 10 Recommendations 35 11 Appendix 1: Differences between Modification 0621 and this Modification 0678. 37 Timetable 37 Timetable 19 January 2019 Workgroup 1 - "Approach. Compliance" 25 January 2019 Workgroup 1 - "Approach. Compliance" 29 January 2019 Workgroup 3 - "Multipliers and Discounts. "Shorthaul" 05 February 2019 Workgroup 3 - "Multipliers and Discounts. "Shorthaul" 05 February 2019			
4 Code Specific Matters 14   5 Solution 17   6 Impacts & Other Considerations 29   7 Relevant Objectives 30   8 Implementation 35   9 Legal Text 35   10 Recommendations 35   11 Appendix 1: Differences between Modification 0621 and this Modification 0678. 37   Timetable 37   Cigem 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   Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF) 05 February 2019			National Grid
5 Solution 17   6 Impacts & Other Considerations 29   7 Relevant Objectives 30   8 Implementation 35   9 Legal Text 35   10 Recommendations 35   11 Appendix 1: Differences between Modification 0621 and this Modification 0678. 37   Timetable 37   Cigem 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   Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF) 05 February 2019			2
6 Impacts & Other Considerations 29   7 Relevant Objectives 30   8 Implementation 35   9 Legal Text 35   10 Recommendations 35   11 Appendix 1: Differences between Modification 0621 and this Modification 0678. 37   Timetable 37   The Proposer recommends the following timetable: Ofgem decision on urgency   29 January 2019   Workgroup 1 - "Approach. Compliance" 29   Workgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts" 31   Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF) 05			
7 Relevant Objectives 30   8 Implementation 35   9 Legal Text 35   10 Recommendations 35   11 Appendix 1: Differences between Modification 0621 and this Modification 0678. 37   7 Timetable   7 Cigem 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   Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF) 05 February 2019			
8 Implementation       35         9 Legal Text       35         10 Recommendations       35         11 Appendix 1: Differences between Modification 0621 and this Modification 0678.       37         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         Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF)       05 February 2019			
8 Implementation 39   9 Legal Text 35   10 Recommendations 35   11 Appendix 1: Differences between Modification 0621 and this Modification 0678. 37   7 Timetable 37   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   Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF) 05 February 2019	•		10
9 _ Legal Text 35 10 Recommendations 35 11 _ Appendix 1: Differences between Modification 0621 and this Modification 0678. 37 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 Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF) 05 February 2019			
11 Appendix 1: Differences between Modification 0621 and this Modification 0678.37TimetableThe Proposer recommends the following timetable:Ofgem decision on urgency0fgem decision on urgency25 January 2019Workgroup 1 - "Approach. Compliance"29 January 2019Workgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts"31 January 2019Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF)05 February 2019			
Modification 0678.37TimetableThe Proposer recommends the following timetable:Ofgem decision on urgency25 January 2019Workgroup 1 - "Approach. Compliance"29 January 2019Workgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts"31 January 2019Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF)05 February 2019			
TimetableThe Proposer recommends the following timetable:Ofgem decision on urgency25 January 2019Workgroup 1 - "Approach. Compliance"29 January 2019Workgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts"31 January 2019Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF)05 February 2019			
The Proposer recommends the following timetable:Ofgem decision on urgency25 January 2019Workgroup 1 - "Approach. Compliance"29 January 2019Workgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts"31 January 2019Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF)05 February 2019			
Ofgem decision on urgency25 January 2019Workgroup 1 - "Approach. Compliance"29 January 2019Workgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts"31 January 2019Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF)05 February 2019	Timetable		
Workgroup 1 - "Approach. Compliance"29 January 2019Workgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts"31 January 2019Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF)05 February 2019	The Proposer recommends the following timetable:		
Workgroup 2 - "Integration of RPM, FCC, Revenue Recovery and existing contracts"31 January 2019Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF)05 February 2019	Ofgem decision on urgency	25 January 2019	
and existing contracts"31 January 2019Workgroup 3 - "Multipliers and Discounts. 'Shorthaul' approach" (part of NTSCMF)05 February 2019	Workgroup 1 - "Approach. Compliance"	29 January 2019	
approach" (part of NTSCMF) 05 February 2019		31 January 2019	
Workgroup 4 - "Compliance. FCC"11 February 2019			
	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	<u>1614</u> 15
Table 2: Key steps in the CWD calculations	<u>2018</u> 19
Table 3: Publication dates for Transportation Charges	<u>30<del>27</del>29</u>
Table 4: Impact of the Modification on the Relevant Objectives	<u>31<del>28</del>30</u>
Table 5: Impact of the Modification on the Relevant Charging Methodology Objectives	<u>3532</u> 33

## List of Figures

Figure 1: Proposed CWD Model for calculation of Entry and Exit Capacity Base Reference Prices 19	<u>917</u>
Figure 2: Entry Point Reference Prices calculation model	1 <del>19</del>
Figure 3: Exit Point Reference Prices calculation model	1 <del>19</del>
Figure 4: Reserve Price derivation	4 <del>22</del>
Figure 5: Transmission Services Revenue Recovery Mechanism	<u>523</u>
Figure 1: Proposed CWD Model for calculation of Entry and Exit Capacity Base Reference Prices	<del>. 19</del>
Figure 2: Entry Point Reference Prices calculation model	<del>. 20</del>
Figure 3: Exit Point Reference Prices calculation model	. 21
Figure 4: Reserve Price derivation	<del>. 2</del> 4

## 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 EU Tariff Code (Regulation 2017/460). This Modification also takes into account the decision to reject UNC0621<sup>1</sup> 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 2017<sup>2</sup> – with updated analysis presented during development of UNC Modification Proposal 0621 in April 2018<sup>3</sup>) 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), the Transition Document 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

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

<sup>&</sup>lt;sup>2</sup> Material at <u>https://www.gasgovernance.co.uk/ntscmf/subg1page</u>

<sup>&</sup>lt;sup>3</sup> Material at <u>https://www.gasgovernance.co.uk/0621/200418</u>

pricing multipliers and interruptible pricing, over time so they continue to better facilitate the relevant methodology objectives<sup>4</sup> and support the evolution of the GB charging regime.

## 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 complaint 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.

<sup>&</sup>lt;sup>4</sup> As described in Standard Special Condition A5: 'Obligations as Regard Charging Methodology' of the NTS Licence, paragraph 5.

This Modification also takes into account the decision on UNC0621 and its Alternatives<sup>5</sup>. 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, 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.

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

## 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 Code<sup>6</sup>;
  - 3.1.2. Ofgem's Gas Transmission Charging Review<sup>7</sup> and decision on UNC0621 and its Alternatives<sup>8</sup>. 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 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.

<sup>&</sup>lt;sup>6</sup> <u>http://eur-lex.europa.eu/legal-</u> <u>content/EN/TXT/?uri=uriserv:OJ.L\_.2017.072.01.0029.01.ENG&toc=OJ:L:2017:072:FULL</u>

<sup>&</sup>lt;sup>7</sup> <u>https://www.ofgem.gov.uk/gas/transmission-networks/gas-transmission-charging-review</u>

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

- 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.

#### Reference Price Methodology (RPM)

- 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 RPMs<sup>9</sup>, 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 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.

<sup>&</sup>lt;sup>9</sup> See <u>https://www.gasgovernance.co.uk/ntscmf/subg1model</u>

- 3.9. 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. It also 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.
- 3.10. In respect of compliance with EU Tariff Code, Recital 3 states "...in order to achieve and ensure a reasonable level of cost reflectivity and predictability ... transmission tariffs need to be based on a reference price methodology using specific cost drivers. ...Where the proposed reference price methodology is other than the capacity weighted distance reference price methodology, the latter should serve as a counterfactual for comparison with the proposed reference price methodology."
- 3.11. Noting that Gas Transportation costs are sensitive to both a) the distance over which gas is transported; and b) the capacity made available over that distance, a pricing model which calculates Reference Prices that takes account of these elements is *ipso facto* more cost reflective than models that do not take both of these into account. For example, in the case of a Postage Stamp RPM, the use of an aggregated cost driver results in the same unit costs for all GB points and is therefore not cost reflective given the sensitivities stated above. Effectively, in the Postage Stamp RPM any bespoke cost drivers for transportation to individual points (or groups of points) is effectively ignored and is not sensitive to those elements which influence National Grid's costs.
- 3.12. In conclusion, <u>weNational Grid</u> does not believe a Postage Stamp RPM meets the criteria set out in Recital (3) given the lack of cost reflectivity when compared to a CWD RPM (being the 'counterfactual' comparison RPM mandated by Recital (3)). The use of a CWD RPM, and the way it is applied to GB, will deliver a regime that is more cost reflective than both the existing LRMC RPM and the alternative approach of a Postage Stamp RPM.

### Forecasted Contracted Capacity (FCC)

- 3.13. 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.
- 3.14. 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 (the "FCC Methodology') that will be referenced in the UNC and will not form part of Section Y of the UNC. The FCC Methodology is not proposed to be incorporated into the UNC in order to maintain a high degree of predictability in the process to determine the values using a developed methodology. Each year the methodology will be followed to produce tariffs for the applicable year. The use of a methodology contributes towards predictability for the tariffs to be calculated and a known set of values and logical steps to derive an FCC for the applicable year. Having the methodology in a statement outside of the UNC provides the flexibility around the process to update the FCC content and also flexibility and to ensures a timetable of change can be followed such that changes to the methodology can be completed and it can be implemented in an efficient and timely manner in order to set tariffs. Incorporating into the UNC does not provide

this assurance as the timetable for change may not be as certain. The use of an FCC should be flexible enough such that it can be updated to take account in a timely fashion of any relevant or useful information to incorporate into future FCC changes.

- 3.15. The FCC Methodology is proposed to take account of a range of inputs into inform a forecast for the gas year for which tariffs are to be generated. These inputs will look to take account of both historical and forecast data such as, and not limited to, be linked to a forecast of GB demand, historical sold capacity, historical -onflows on the NTS applicable to each Entry and Exit point. The resulting forecasted contracted capacity will be applicable for the tariff (gas) year for which Rreference Pprices are being produced. As part of the review of historical sold capacity +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 FCC initial methodology will be determined by National Grid and take effect in the event of implementation. Using sold levels (only where a price greater than zero is the allocated price) is to takes account of the change in interruptible pricing. As there is a move away from 100% discounts to a 10% discount, the approach will reflect<del>review</del> the booking levels where those procuring capacity have been paying a price greater than zero. The assumption on this particular item is that, as they will have incurred a liability, this capacity is more sought after than that for which a 100% discounted (zero) price was the outcome.
- 3.16. In consultation with Users (including DNO Users), National Grid proposes to review the FCC Methodology when it believes this required. This review of the FCC Methodology will include consideration of any behavioural changes in capacity procurement observed under the revised charging regime with the aim of aligning the FCC values derived to actual bookings and National Grid will propose any updates that it considers are consistent with overall NTS charging methodology. In this event, National Grid will notify industry of the revised FCC methodology alongside the relevant transportation charging statement and charging models.
- 3.17. The FCC for each Entry Point and Exit Point will be determined ahead of each tariff year and communicated to industry as part of the publication of charges. 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).

#### Multipliers

- 3.18. 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.
- 3.19. 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.

- 3.20. National Grid has proposed a Multiplier of 1 for all capacity products as <u>weNational Grid</u> does not wish to create an artificial incentive for procurement of one capacity product in preference to another product. As the System Operator, <u>weNational Grid</u> would prefer that Users of the system make their own commercial decisions when procuring capacity taking account of the duration required, the timing of the commitment & payment and the risk of scarcity (demand exceeding supply).
- 3.21. Given the proposal for the Multiplier to be explicit in the UNC, any subsequent change to the Multiplier would be subject to the UNC change process. This aspect is neutral on cost reflectivity grounds as the other aspects of the RPM apportion the charges, this makes no distinction between long or short term capacity.
- 3.22. 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

- 3.23. 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.
- 3.24. 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 Offpeak (Exit) Capacity).
- 3.25. Having reviewed instances of interruption of the previous ten years, and applied the trends observed to a range of probability calculations, a discount above 10% is not supported. This remains the case even where an adjustment factor is applied and interruption levels at the most 'problematic' sites are taken in isolation. Overall, the probability of interruption for the vast majority of sites is very low (but not zero). Given this, and in order to maintain a degree of consistency in respect of the value of the discount, <u>weNational Grid</u> haves proposed a banding approach such that the discount will only change where there is a *material* change to the frequency of interruption on the System.
- 3.26. 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.

3.27. 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**

- 3.28. 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 (which for the avoidance of doubt may be positive or negative) on an enduring basis and is levied applied to the Fully Adjusted all-Ccapacity (at any points) apart from that classified as 'Existing Contracts' in order to give full effect to the provisions detailed in Article 35 of the EU Tariff Code. The Fully Adjusted capacity will be net of trades and buy-backs.
- 3.29. 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.
  - 3.29.1. 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 3.23 to 3.26 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.
  - 3.29.2. The approach in 3.27 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")

3.30. 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'<sup>10</sup>) 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.

<sup>&</sup>lt;sup>10</sup> <u>http://www.gasgovernance.co.uk/0670</u>

- 3.31. Noting that the EU Tariff Code does not *require* the implementation a bespoke charge to disincentivise inefficient bypass of a network, the lack of inclusion of such is not in conflict with EU Tariff Code. Our preferred approach to this aspect of the NTS Charging Methodology is to work with interested stakeholders to develop a robust and sustainable charging mechanism which is agreeable with the majority of, or all, stakeholders which meets the objectives of such a charge.
- 3.32. This requires comprehensive assessment of any potential charging arrangements which seek to discourage inefficient bypass of the NTS and how these would operate within the charging framework, including assessment of compliance with Retained EU Law. This assessment, in the context of the charging methodology that would be introduced by this Modification, will be considered as part of UNC 0670R-any-subsequent Modification.
- 3.33. In respect of the proposed transitional arrangements, a 'reasonable endeavours' obligation is specified on the basis that the timescales for effective implementation of the Proposal may not be sufficient to allow assessment of the impacted User and/or issue of the notices in accordance with the prescribed timescales.

#### **Existing Contracts**

- 3.34. 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. These are '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".
- 3.35. The capacity procured and revenue expected to be recovered under Existing 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.
- 3.36. EU Tariff Code Article 17 requires that "...the level of transmission tariffs shall ensure that the transmission services revenue is recovered by the transmission system operator in a timely manner..." and that "...the under- or over-recovery of the transmission services revenue shall be minimised...".
- 3.37. Accordingly, to ensure that the References Prices determined by the proposed CWD RPM provide a level of revenue recovery as close to target as possible (thereby minimising amounts needing to be collected via revenue recovery mechanisms), the capacity already booked and revenue levels already 'set' in respect of Existing Contracts *are netted off* the aggregate capacity and aggregate revenue figures entered into the CWD RPM. Consistent with this aspiration, an additional scaling factor (as described in para 3.17) is applied to Reference Prices to account for the anticipated under collection driven by the application of any discounts (e.g. interruptible and specific capacity discounts).
- 3.38. The alternative approach of *inclusion* of capacity already booked and revenue levels already 'set' via Existing Contracts in the CWD RPM effectively 'double counts' any capacity and revenue for the relevant Entry Points and would have the consequence of setting Reference Prices at Entry Points *too low* to recover the target revenue. Inclusion of these elements in the CWD RPM effectively and the prices at Entry Points too low to recover the target revenue.

3.39. Recognising that Article 6(3) of the EU Tariff Code requires that "... the same reference price methodology shall be applied to all entry and exit points..." it is nevertheless the case in GB that Existing Contracts only occur at Entry Points. Should Existing Contracts have additionally existed at Exit Points it would have been necessary for the equivalent netting off to take place in respect of Exit Point to ensure compliance. Given the GB position, application of this at Entry Points only is not in conflict with Article 6(3).

#### Effective Date for the charges driven by this proposal

- 3.40. The effective date of this proposal can be any date as determined by Ofgem. The effective date is to provide at least two clear months' notice to take effect from the 1<sup>st</sup> of the month after Ofgem have decided, or any specific date stipulated by Ofgem in its decision. For example, unless a different date was provided by Ofgem, if a decision is made during July, the charges would take effect from 1<sup>st</sup> October. If a decision is made in October then, unless otherwise specified by Ofgem, the effective date would be from 1<sup>st</sup> December.
- **3.39.**3.41. In order to facilitate the changes as outlined in 3.40 it will be necessary to take into consideration actual and anticipated revenues to be collected up this point to determine the target revenue to be applied for the remainder of the regulatory year.

## 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: <u>http://www.gasgovernance.co.uk/ntscmf/subg1page</u> and <u>http://www.gasgovernance.co.uk/ntscmf/subg1model</u>.

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/legalcontent/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%20Implemen tation%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.

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	<ul> <li>The CWD approach fundamentally requires three main inputs:</li> <li>A revenue value is required, which will be the target revenue required to be recovered from Transmission Services;</li> </ul>	
	<ul> <li>A distance matrix for the average connecting distances on the NTS; and</li> </ul>	
	<ul> <li>A capacity value for each Entry and Exit point that will be the Forecasted Contracted Capacity (FCC) (which is mentioned later in this section).</li> </ul>	
	The CWD model produces the Transmission Services Reference Prices and with additional adjustments produces the Transmission Services Reserve Prices.	
Effective Date	The later of:	
	<ul> <li>the last day of the month in which Ofgem issues its letter directing implementation of this Proposal; and</li> <li>31 May 2019</li> </ul>	
Existing Contracts (ECs) (for the purposes of this Modification)	Arrangements relating to Long Term Entry capacity allocated before 06 April 2017 (Entry into Force of EU Tariff Code)	
Forecasted Contracted Capacity (FCC)	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.	
Long Run Marginal Costs (LRMC) Model	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.	
Multipliers	The factor applied to the respective proportion (runtime) of the Reference Price in order to calculate the Reserve Price for non- yearly standard capacity product	
Network Distances (for the purposes of modelling in the RPM)	A matrix of distances used in the RPM that are the pipeline distances on the NTS.	

Non-Transmission Services	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;	
Non-Transmission Services Revenue	The part of the allowed or target revenue which is recovered by non-transmission tariffs	
Reference Price	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).	
Reference Price Methodology (RPM)	The methodology applied to the part of the transmission service revenue to be recovered from capacity based transmission tariffs with the aim of deriving Reference Prices. Applied to all entry and exit points in a system.	
	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.	
	<b>Reserve Price for Yearly standard capacity</b> = the Reference Price	
Reserve Price		
Reserve Price		
Reserve Price	Price Reserve Price for Non- yearly standard capacity is calculated by	
Reserve Price Target Revenue	Price Reserve Price for Non- yearly standard capacity is calculated by applying any Multipliers (if applicable).	
	Price <b>Reserve Price for Non- yearly standard capacity</b> is calculated by applying any Multipliers (if applicable). This will be produced in p/kWh/d (pence per kWh per day). This is the revenue required to be recovered from a particular set of	
Target Revenue	<ul> <li>Price</li> <li>Reserve Price for Non- yearly standard capacity is calculated by applying any Multipliers (if applicable).</li> <li>This will be produced in p/kWh/d (pence per kWh per day).</li> <li>This is the revenue required to be recovered from a particular set of charges.</li> <li>The regulated services that are provided by the transmission system operator within the entry-exit system for the purpose of</li> </ul>	

## 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), the Transition Document 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 3.12 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.

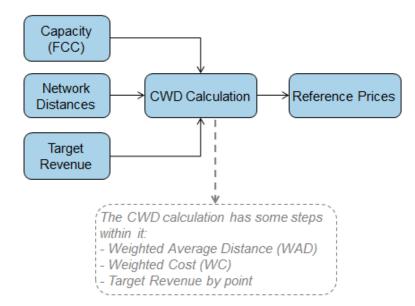
### **Calculations within the CWD Model**

#### 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. Where Allowed Revenue is required to be determined in respect of a period of less than 12 months and that period is not 1 April to 31 March (National Grid's Regulatory Year), a profiling factor will be applied to Entry and Exit from the annual Allowed Revenue in order to determine appropriate values (respectively for Entry and Exit) for the relevant period. The target Entry and Exit revenue profiling factors will be set operate in such a way that the tariffs will be set such that within any Regulatory Year (1 April to 31 March) the tariffs will be set to minimise any under or over recovery.
- 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. It should be noted that whilst TAR NC permits Existing Contracts at both Entry and Exit, there are no eligible Exit Existing Contracts.

#### 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

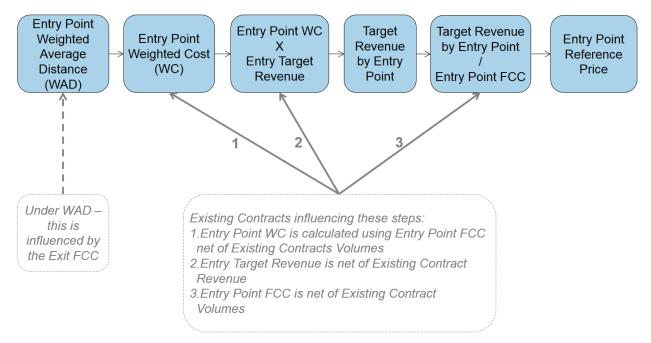
	Entry Capacity Calculation	Exit Capacity Calculation
Weighted Average Distance (WAD)	(Sumproduct Exit Point FCC x Distance to Entry Point) / Sum Exit Point FCC	(Sumproduct Entry Point FCC <sup>#</sup> x Distance to Exit Point) / Sum Entry Point FCC <sup>#</sup>
Weighted Cost (WC)	Entry Point FCC* x WAD / (Sumproduct Entry Point FCC* x WAD)	Exit Point FCC x WAD / (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.

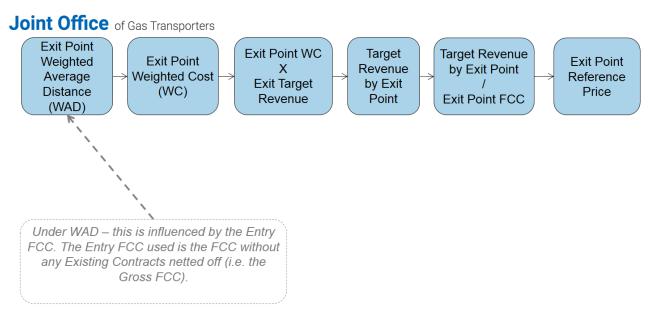
Entry Point Reference Prices are calculated in the following steps in the CWD model, see figure 2

#### 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



There are no eligible Exit Existing Contracts and therefore the impact of including them is zero. The same approach or methodology is applied to Entry and Exit. Were there to be any Exit Existing Contracts they would be incorporated in the same manner as Entry. As there are none, the approach outlined is the same effect as if they are zero in any algebra.

## Forecasted Contracted Capacity (FCC) (see paras 3.13 to 3.17 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 (the 'FCC Methodology'). It is proposed that the FCC Methodology attached to this Proposal applies from the date of implementation for application within the relevant Gas Year(s). For the avoidance of doubt, it is not proposed that the FCC Methodology will form part of the UNC.

It is proposed that ahead of each Gas Year National Grid will determine the FCC value for each Entry Point and Exit Point and will be communicated to industry as part of the publication of charges.

It is proposed that where National Grid believes it necessary to review or update the methodology, it will run a consultation with UserStakeholderss (in consultation with Users and DNO Users) to review the FCC Methodology. Following the consultation, – –Iif the FCC Methodology is revised, National Grid will notify industry of any revisions as part of the publication of charges. Any such consultation would be concluded in advance of setting the tariffs for the forthcoming tariff (gas) year.

It is proposed that any such revision will take effect from the date specified unless Ofgem (upon application by any Shipper or Distribution Network Operator within one month of the notice) directs that the change is not made as per its powers under Standard Special Condition A11(18) of National Grid's Licence.

# Reserve Prices produced from Reference Prices (see paras 3.18 to 3.22 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 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 3.23 to 3.25 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 of this Modification 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 3.26 to 3.27 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 3.17 and 3.36 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.

This step within the calculation is incorporated within the RPM. This is required in order to manage the tariffs such that they are being set to recover the target revenue. Without this step tariffs, would be set such that they would under-recover or not be set in a manner to aim to recover the target revenue. This impact of this step is the same for all points within the RPM as the revenue additive is input as a feature of the RPM calculation in the CWD approach. This limits any potential distortions as proportionally all points pick up an uplift within the RPM proportionate the CWD reference price they receive.

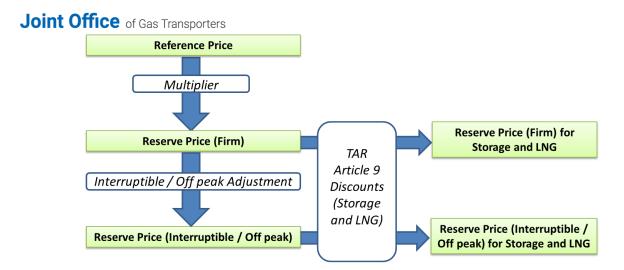
### Minimum Reserve Price

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

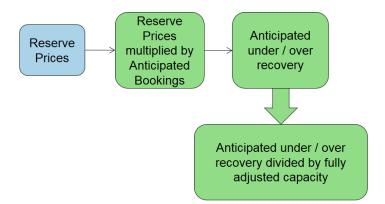
For the purposes of capacity step prices used in the QSEC Auction, these will be an additional 5% of the applicable Reserve Price or 0.0001 p/kWh/Day, whichever is the greatest, per step.

# Transmission Services Revenue Recovery Charges (see para 3.34 to 3.39 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. 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) or Exit Capacity booked for the applicable year would be subject to Revenue Recovery charges.

It is proposed that in respect of adjustments (including as a consequence of trades) to available Entry Capacity, 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 Commodity <u>R</u>rate<sup>11</sup> (see para 3.30 to 3.32 in Section 3)

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

#### Transition Communication of Charge Cessation

The existing OCR will no longer be available from [the Modification Effective Ddate of implementation].

It is proposed that National Grid will use reasonable endeavours to provide <u>\_\_\_(\_after a decision has been made and affording</u> as much notice as is practicable prior to the <u>Modification Effective dD</u>ate of implementation)<u>after a decision has been made</u>, notification to each User at a Point with an existing OCR (determined as at four months prior to [the date of implementation]) of the cessation of the OCR with effect from [the <u>Modification Effective dD</u>ate of implementation]. Any User nominating the OCR after the decision date and before the effective date will be informed as part of the confirmation of the OCR applicable that it will no longer be available after the effective date and any current nomination will end from that effective date.

For the avoidance of doubt, all charges (where detailed as applicable in the proposed charging methodology) will be payable from [the date of implementation].

## 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.

## Effective Date for the charges driven by this proposal

The effective date of this proposal can be any date as determined by Ofgem. The effective date will provide at least two clear months' notice to take effect from the 1<sup>st</sup> of the month after Ofgem have decided, unless a specific date stipulated by Ofgem in its decision as outlined in 3.40 of the Why Change section of this proposal.

In any event, it will be necessary to take into consideration actual and anticipated revenues to be collected up the effective date to determine the target revenue to be applied for the remainder of the regulatory year.

The charges would change the payable prices for the effective date, except for any charges that would be explicitly exempt in any such decision, or any charges for which payable prices are not permissible to be updated under the EU Tariff Code.

Reconciliations are undertaken under the current regime, such as reconciling commodity charges, updating flow values and incorporating the OCC and reconciliation of commodity charges to account for

eligible flows. These will continue to ensure that charges for the applicable period up to the effective date are accurately charged.

## **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*:
	Forecasted Contracted Capacity	Charging Model	
	CWD Distances	Charging Model	
(0	Capacity Reference Prices	Transportation Statement	
/ices	Multipliers	Transportation Statement	
Transmission Services	Capacity Reserve Prices	Transportation Statement	
sion	Interruptible Adjustment (Entry)	Transportation Statement	
miss	Interruptible Adjustment (Exit)	Transportation Statement	
ans	Specific Capacity Discounts (Storage)	Transportation Statement	2 months prior to
Ē	Specific Capacity Discounts (LNG)	Transportation Statement	effective date**
	Revenue Recovery Charge (Entry)	Transportation Statement	
	Revenue Recovery Charge (Exit)	Transportation Statement	
	Non-Transmission Services Charges	Transportation Statement	
sion	DN Pension Deficit Charges	Transportation Statement	
smis ces	NTS Metering Charges	Transportation Statement	
Non-Transmission Services	St Fergus Compression Charges	Transportation Statement	
D-no	SSMP Administration Charges	Transportation Statement	
z	Allocation Charges at Interconnectors	Transportation Statement	

\* 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.

\*\* Unless the Authority provides the necessary approval for a shorter notice period to be provided.

## 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.

### **Cross Code Impacts**

None

### **EU Code Impacts**

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

## Joint Office of Gas Transporters 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.

## 7 Relevant Objectives

#### Table 4: Impact of the Modification on the Relevant Objectives

Im	Impact of the Modification on the Relevant Objectives:		
Re	levant Objective	Identified impact	
a)	Efficient and economic operation of the pipe-line system.	None	
b)	Coordinated, efficient and economic operation of	None	
	(i) the combined pipe-line system, and/ or		
	(ii) the pipe-line system of one or more other relevant gas transporters.		
c)	Efficient discharge of the licensee's obligations.	Positive	
d)	Securing of effective competition:	Positive	
	(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.		
e)	Provision of reasonable economic incentives for relevant suppliers to	None	
	secure that the domestic customer supply security standards are		
	satisfied as respects the availability of gas to their domestic customers.		
f)	Promotion of efficiency in the implementation and administration of the Code.	None	
g)	Compliance with the Regulation and any relevant legally binding decisions	Positive	
	of the European Commission and/or the Agency for the Co-operation of Energy Regulators.		

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 outs 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).

The following table highlights the key components of this Proposal, the Articles of the EU Tariff Code that constrain the form and operation of those components and a brief description of how this Proposal complies with those requirements.

Aspect	EU Tariff Code Requirements	Addressed in this Proposal by:
	Recital 3: requirement to use CWD as the counterfactual for proposed RPM	A variant of a CWD RPM is proposed. The CWD outlined in Article 8 should serve as the counterfactual where relevant.
	Article 6: RPM application -	The proposed RPM:
Reference Price Methodology	<ul> <li>approved by NRA;</li> <li>provides a Reference Price;</li> <li>same RPM applied at all Entry Points and Exit Points; and</li> <li>adjustments only on basis of Article 9 or benchmarking by NRA, equalisation by the TSO or the NRA, or rescaling by the TSO.</li> </ul>	<ul> <li>is subject to Authority approval (required to implement this Proposal);</li> <li>provides a Reference Price;</li> <li>applies to all Entry Points and Exit Points; and</li> <li>incorporates adjustments in line with Article 9 and rescaling (to minimise Revenue Recovery values)</li> </ul>
	<ul> <li>Article 7: Choice of RPM to comply with following requirements -</li> <li>enable Users to re-produce the calculation;</li> <li>take account of actual costs in providing Transmission Services;</li> <li>non-discriminatory and no undue cross subsidisation taking account of Article 5;</li> <li>no material volume risk assigned to end consumers; and</li> <li>no distortion of cross border trade.</li> </ul>	<ul> <li>In respect of the proposed RPM:</li> <li>the calculation is capable of re-production as it is set out in the charging methodology;</li> <li>target revenues are set taking account of actual costs (at price control);</li> <li>it is designed to be non-discriminatory with no un-due cross subsidisation;</li> <li>it recovers <i>capacity</i> charges from Network Users (i.e. not flow-based); and</li> </ul>

Table 5: High Level Summary of Proposal Compliance with EU Tariff Code

Aspect	EU Tariff Code Requirements	Addressed in this Proposal by:
		<ul> <li>it is not expected to distort cross border trade.</li> </ul>
	Article 8: CWD as set out in (2) with the following parameters –	The proposed RPM is principally as detailed in this Article and features:
	<ul> <li>recovered via capacity charges;</li> <li>uses a Forecasted Contracted Capacity;</li> <li>[relevant flow scenarios - assume N/A combinations of entry points and exit points, where some entry points and some exit points can be combined in a relevant flow scenarioas we can't combine entry and exit in a RFS]</li> <li>the Entry Exit target revenue is split 50:50.</li> </ul>	<ul> <li>a capacity based Transmission Services charging regime;</li> <li>Forecasted Contracted Capacity derived in accordance with a documented FCC Methodology;</li> <li>there is no specific provision in the calculation of the Reference Prices as the assumption for the NTS is that all gas from an Entry point can flow to any Exit point.</li> <li>target revenues are based on a 50:50 split between Entry Points and Exit Points.</li> </ul>
Multiplier	<ul> <li>Article 13: parameters for Multipliers –</li> <li>for quarterly and monthly capacity, between 1 and 1.5; and</li> <li>for daily and within day capacity, between 1 and 3 except in 'duly justified cases'</li> </ul>	A Multiplier of 1 is proposed for all capacity products which is within the parameters set by this Article
	Article 16: calculation of Reserve Prices for interruptible capacity - • multiply firm Reserve price by difference	A discount of 10% is proposed which has been determined taking account of the criteria identified in this this Article.
Interruptible / Off peak	between 100% and interruptible discount Interruptible discount determined on the basis of –	A discount of greater than 10% is not justified when taking these into account.
	<ul> <li>probability of interruption; and</li> <li>adjustment factor representing the estimated economic value of the interruptible capacity product.</li> </ul>	
Discounts	<ul> <li>Article 9: provision for discounts for –</li> <li>Storage, at least 50%; and</li> <li>LNG facilities, may be applied in order to increase security of supply</li> </ul>	A discount of 50% is proposed in respect of Storage which is the minimum prescribed by this Article. A discount of 0% has been proposed in respect of LNG which is not in conflict with this Article (this Article prescribes that application of a discount for LNG is optional).
	<ul> <li>Article 4(3): Method of recovery –</li> <li>capacity based;</li> <li>with NRA approval and by exception, flow based.</li> </ul>	Capacity-based Transmission Services charges and revenue recovery mechanism are proposed.
Revenue Recovery	<ul> <li>Article 17: General rules including -</li> <li>requirement to minimise revenue recovery values</li> </ul>	The proposed netting off of Existing Contracts and scaling (to take account of discounts) aims to minimise Revenue Recovery. Development of a robust FCC Methodology will also facilitate this aim.
	<ul> <li>Article 18: Under and Over Recovery -</li> <li>calculated as difference between target revenue and actual revenue in the same tariff period</li> </ul>	The proposed determination of revenue recovery is consistent with the calculation described in this Article.
Existing Contracts	<ul> <li>Article 35: existing contracts</li> <li>EU Tariff Code rules dis-applied for capacity procured at any entry or exit point before 6 April 2017; and</li> <li>Existing contracts not able to be renewed prolonged or rolled over after expiry</li> </ul>	Maintenance of existing terms and conditions for procured capacity is afforded to those falling within the definition of Existing Contracts. All other capacity products are subject to the proposed enduring regime which is compliant with the other requirements of the EU Tariff Code.

#### Table 665: 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						
<ul> <li>aa) That, in so far as prices in respect of transportation arrangements are established by auction, either:</li> <li>(i) no reserve price is applied, or</li> <li>(ii) that reserve price is set at a level -</li> <li>(I) best calculated to promote efficiency and avoid undue preference in the supply of transportation services; and</li> <li>(II) best calculated to promote competition between gas suppliers and between gas shippers;</li> </ul>	Positive						
<ul> <li>b) That, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;</li> </ul>	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						
<ul> <li>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).</li> </ul>	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 redistributes 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.

Table 5 (above) highlights the key components of this Proposal, the Articles of the EU Tariff Code that constrain the form and operation of those components and a brief description of how this Proposal complies with those requirements.

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 <u>(the 'Modification Effective Date')</u> 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 (with a minimum of two months' notice), in order to achieve compliance with the EU Tariff Code (and the relevant Statutory Instrument) as soon as possible.

## 9 Legal Text

### **Text Commentary**

To be provided later

### Text

To be provided later

## **10 Recommendations**

### **Proposer's Recommendation**

This Modification should be treated as urgent and should proceed as such under a timetable approved by the Authority.

## 11 Appendix 1: 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.

			0621		0678	Extracts from Ofgem Decison Letter For Mod Proposal 0621
			v5.0 (1/5/2018)	Rationale in the context of 0621 Ofgem Decision	v2.0 (19/02/2019)	20/12/2019
	Component	Element	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	N/A	"TAR NC makes no provisionfor a transition period as proposed however, we note that any methodology in effect from 31 May 2019
		Reference Price Methodology (enduring)	Capacity Weighted Distance with adjustment to minimise Revenue Recovery	been removed	Capacity Weighted Distance with adjustment to minimise Revenue Recovery	must in itself be compliant with TAR NC".
		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
		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)	TAR NC, [is] that under- or over recovery should be minimised to the extent possible"
		Multiplier (Annual Capacity Product)	1.0		1.0	
Services Charges		Multiplier (Quarterly Capacity Product)	1.0		1.0	
		Multiplier (Monthly Capacity Product)	1.0		1.0	
		Multiplier (Daily Capacity Product)	1.0		1.0	
ion Sei		Multipliers from year 2 onwards	1.0		1.0	
Transmission		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 Minimum Reserve Price	0% 0.0001p/kWh/d		0% 0.0001p/kWh/d	
	-	Target revenue	U.UUUIP/KWN/d Pro-rated according to forecast flows at IPs / non-IPs versus forecast		0.0001p/kwn/d	4
	Revenue Recovery Charges (Interim)	apportionment	total flows	Ofgem concluded that use of a commodity (flow) based revenue	N/A	"use of obligated capacity would lead to more than 50% of
		Duration	2 years	recovery mechanism in the interim period was not compliant with	N/A	revenue being recovered by this charge use of a commodity-
		IP application	Capacity charge (applied to fully adjusted capacity)	TAR both in terms of the consequential proportion of revenue	N/A	based charge to recover most of the revenue is inconsistent with
		IP Exclusions	None	recovered via this mechanism and the question as to whether this	N/A	the intention of Article 4(3) TAR NC, which provides "as an
		Non-IP application	Flow based charge applied to allocations (flow)	was consistent with the requirement for such recovery means to be	N/A	exception" that a "part" of the revenue may be recovered via a
		Non-IP Exclusions	Non-own use gas allocations (flow) at Storage Connection Points	'an exception'	N/A	commodity-based charge"

	-	0621		0678	Extracts from Ofgem Decison Letter For Mod Proposal 0621
		v5.0 (1/5/2018)	Rationale in the context of 0621 Ofgem Decision	v2.0 (19/02/2019)	20/12/2019
Component	Element	National Grid		National Grid	Ofgem
	Target revenue apportionment between IPs and non-IPs	n/a		n/a	
Revenue Recovery	IP application	Capacity charge (applied to fully adjusted capacity)		Capacity charge (applied to fully adjusted capacity)	
Charges (Enduring)	IP Exclusions	None		None	
charges (chouning)	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	
	Application	2 years		N/A	"Article 4(2) states that "Transmission tariffs may be set in a man
	Method (rate derivation)	Existing formula, cost base subject to annual RPI adjustment	Ofgem concluded that the Optional Charge was not complaint with the criteria for classification as a Transmission Services Charge.	N/A	Article 4(2) states that "Transmission tariffs may be set in a mann as to take into account the conditions for firm capacity products" the NOC, is levied on flows, without reference to the underlyin capacity booking. TAR NC requires any exempt flow-based charge be calculated on the basis of forecasted or historical flows, or bott 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
	Quantity (IPs)	Capacity deemed to have been used		N/A	
	Quantity (Non-IPs)	Allocation (flow)		N/A	
NTS Optional Charge	Alternative charges	Transmission Services Revenue Recovery charges and Non- Transmission Services (entry and exit) charges		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	
St. Fergus Compression	Application	Existing principles		Existing principles	
NTS Metering	Application	Existing principles		Existing principles	
<b>DN Pensions Deficit</b>	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	
<b>'</b> κ'	Application	Existing principles		Existing principles	]
	Multipliers	Transportation Statement		Transportation Statement	1
	Interruptible Adjustment	Transportation Statement		Transportation Statement	
Publication of	LNG Discount	Transportation Statement		Transportation Statement	1
variables	CWD Distances	Charging Model		Charging Model	
variables	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