














UNC Modification	At what stage is this document in the process?
<h1>UNC 0636D:</h1> <h2>Updating the parameters for the NTS Optional Commodity Charge</h2>	<div>01 Modification</div> <div>02 Workgroup Report</div> <div>03 Draft Modification Report</div> <div>04 Final Modification Report</div>
<p>Purpose of Modification:</p> <p>To update the parameters used in the derivation of the Optional Commodity Charge tariff but with the provision for an exemption for interconnector points from the updated parameters used in the derivation of the OCC until an enduring solution recognising the European Tariff Network Code requirements have been implemented.</p>	
	<p>The Proposer recommends that this modification should be:</p> <ul style="list-style-type: none"> considered a material change and not subject to self-governance assessed by a Workgroup <p>This modification will be presented by the Proposer to the Panel on 15 March 2018. The Panel will consider the Proposer's recommendation and determine the appropriate route.</p>
	<p>High Impact:</p> <p>Users opting for the Optional Commodity Charge could expect an increase in the tariff but these changes would not apply to interconnector points until an enduring solution is implemented that recognises the European Tariff Network Code requirements.</p> <p>Note that it is expected that the tariff would still be available as an option to avoid inefficient bypass of the NTS.</p> <p>The Standard Commodity tariff would be consequentially reduced.</p>
	<p>Medium Impact:</p>
	<p>Low Impact:</p>

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Timetable		 0121 288 2107
The Proposer recommends the following timetable:		Contact: Joint Office of Gas Transporters
Initial consideration by Workgroup	21 March 2018	 enquiries@gasgovernance.co.uk
Workgroup Report presented to Panel	19 April 2018	 +35361604082
Draft Modification Report issued for consultation	19 April 2018	Proposer: Aughinish Alumina Limited
Consultation Close-out for representations	11 May 2018	 mike.ronan@augh.com
Final Modification Report available for Panel	14 May 2018	 +35361604082
Modification Panel decision	17 May 2018	Transporter: National Grid NTS
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1 Summary

What

The NTS Optional Commodity Charge (OCC) was introduced in 1998 and the tariff has not been updated for nearly 20 years. Therefore, it is proposed that the parameters within the NTS OCC formula need to be updated to be more reflective of the current costs and pipeline utilisation.

Why

The OCC was introduced in 1998 with the express intention of providing a mitigating option for shippers seeking short distance transportation, and was justified on the basis of avoiding inefficient bypass of the NTS. Given that the tariff has not been updated in nearly 20 years whilst standard commodity charges have risen significantly over the same period, the OCC has become a very attractive option even for exit points that are increasingly distant from an associated entry point.

National Grid NTS have advised the NTSCMF¹ that Users opting to avail of the OCC during the current Gas Year (17/18) will pay an estimated £48.5 million in optional commodity charges but, in doing so, will avoid paying nearly £195 million in standard commodity charges. This represents a potential cross-subsidy to those OCC Users of about £146 million per annum at the expense of those sites which are unable to benefit from the option of the OCC.

This proposal would update the OCC tariff formula as proposed in Modification 0636 but it would exempt all Interconnector Points (Entry and Exit) ("IPs") from these changes on the following grounds:

- Requires an enduring solution that recognises the European Tariff Network Code requirements that would allow adequate consideration by all relevant parties, avoids short-term disruption, is more rational and was foreseen previously under GCD11².
- Such a process is expected to be delivered under Modification 0621.
- IPs, would be exempted from the proposed changes to the parameters used in the derivation of the OCC tariff until this solution is implemented and this approach would mitigate any potential impacts in neighbouring markets, including security of supply.

How

It is therefore proposed to give effect to this modification by way of two changes to the UNC TPD, Section Y paragraph 3.5 "NTS Optional Commodity Rate".

1. Replace the current formula with that proposed in 2015 as Option 2 by National Grid in its discussion document NTS GCD11.

¹ NTSCMF 26 September 2017

² <https://www.nationalgrid.com/uk/gas/charging-and-methodologies>

2. Adjust the assumed capacity of the alternative by-pass pipeline against which the OCC charges are calculated. Specifically replace the MNEPOR in the current formula with the average daily flow at the exit point from the previous Gas Year divided by 75%.

It is proposed that the changes arising from this code modification be implemented by 01 October 2018 thereby saving up to £220³ million in cross subsidies relative to the base case of waiting until October 2019⁴.

All Interconnector Points to be exempt from these changes until an enduring solution recognising the European Tariff Network Code requirements is implemented as anticipated under Modification Proposal 0621

2 Governance

Justification for Authority Direction

National Grid NTS have advised the NTSCMF⁵ that Users opting to avail of the OCC during the current Gas Year (17/18) will pay an estimated £48.5 million in optional commodity charges but, in doing so, will avoid paying nearly £195 million in standard commodity charges. This represents a potential cross- subsidy to those OCC Users of about £146 million per annum at the expense of those sites which are unable to benefit from the option of the OCC. It is proposed that the changes arising from this code modification be implemented by 1 October 2018.

This Modification should be considered likely to have a material on competition in, or commercial activities related to, the shipping, transportation or supply of gas. It therefore should be sent to the Authority for decision.

Requested Next Steps

This modification should:

- be considered a material change and not subject to self-governance
- be assessed by a Workgroup

3 Why Change?

The parameters within the NTS Optional Commodity Charge (OCC) formula need to be updated to be more reflective of the current costs and pipeline utilisation..

The OCC is available as an alternative (instead of the Standard Commodity Charges) to Users nominating a “point to point” path for transportation from an NTS entry point to an NTS offtake point. If a User elects for the OCC, all NTS Entry and Exit (SO & TO) Commodity Charges are avoided. The NTS OCC is derived from the estimated cost of laying and operating a dedicated pipeline of NTS specification. This is defined in UNC TPD Section Y. The OCC was introduced in 1998 with the express intention of providing a mitigating option for

³ This value assumes an equal load profile throughout the Gas Year assuming 1st April 2018 implementation.

⁴ It is anticipated that Modification Proposal 0621 will propose changes to the Optional Commodity tariff 4 for implementation from October 2019 for compliance with the EU Tariff Code.

⁵ NTSCMF 26 September 2017

shippers seeking short distance transportation, and was justified on the basis of avoiding inefficient bypass of the NTS. Given that the tariff has not been updated in nearly 20 years whilst standard commodity charges have risen significantly over the same period, the OCC has become a very attractive option even for exit points that are increasingly distant from an associated entry point. The parameters on which the OCC tariff is predicated are no longer considered to be appropriate as:

1. The formula used to calculate the current Optional Commodity rates uses the costs of building and operating a dedicated pipeline at the time of introduction in 1998⁶ and has not been amended since. The Transco Consultation Report on PC9A (December 1997) provided the opportunity to update the costs although this has, so far, not been effected⁷. National Grid sought to update the cost inputs in 2015. While Code Modification 0563S facilitated the inclusion of the formula into the UNC TPD, Section Y from the NTS Transportation Statement, the update to the original OCC formula is still outstanding as National Grid decided to wait until there was more clarity on the EU Tariff Code rather than any suggestion that it was inappropriate to update the charging formula.
2. Load factors at exit points are very low in relation to the design capacity assumption embedded within the OCC charge – nowhere near the 75% assumption, meaning that the OCC is too low. National Grid NTS advised at a recent NTSCMF (17 July) that the average load factor of short- hauled gas has declined to about 20% during the 16/17 Gas Year.

National Grid NTS have advised the NTSCMF⁸ that Users opting to avail of the OCC during the current Gas Year (17/18) will pay an estimated £48.5 million in optional commodity charges but, in doing so, will avoid paying nearly £195 million in standard commodity charges. This represents a potential cross- subsidy to those OCC Users of about £146 million per annum at the expense of those sites which are unable to benefit from the option of the OCC.

1. The proposal requires a change to the charging methodology contained within Section Y of the UNC and Section B3.12.10 (b).
2. If the change is not made there will be up to £220 million in charges transferred to Users unable to benefit from the OCC (largely within the Distribution Networks) in the interim period between April 2018 and October 2019 before Modification UNC 0621 could be expected to address the issue.

The proposer is aware that National Grid is planning to address this transfer of costs from October 2019 as part of Modification UNC 0621 but is concerned that this will not address the on-going cross- subsidisation in the interim. The proposer doesn't wish to burden National Grid unduly in the administration of an amended OCC and also appreciates the need to develop a fairly simple solution that can be implemented relatively quickly and which will materially address the cross-subsidisation in the period to October 2019.

Use of "Option 2" as proposed by National Grid in its discussion document NTS GCD11.

1. This Modification is seeking to use pipes that are more reflective of those that may be built as alternatives to the NTS and to use more up-to-date costs that would be more cost reflective.

⁶ Using 1997 construction and operational costs, annuitized over a ten year project life using a 10% project discount rate.

⁷ Secondly, in the interests of keeping the level of the tariff in line with current pipeline costs, we propose that the function should be reviewed at the same time as the annual review of general transportation charges and uprated in line with a suitable escalator.

⁸ NTSCMF 26 September 2017

2. This proposal proposes the use of Option 2 as detailed by National Grid in 2015 in its discussion document NTS GCD11. In summary, this option retains the underlying assumptions of the current OCC charge and maintains the same structure in the formula. The update inflates the current portfolio of unit costs using publicly available indices and also adds in those larger pipe sizes for which National Grid received target efficient unit costs. The application of a combination of steel and RPI indices are applied so as to result in a consistent set of cost data. The topic was discussed during NTSCMF meetings leading up to the GCD11 paper and has been further discussed as part of the wider charging review in 2017. Alternative cost data for pipe building has been requested as part of both these processes. The response has been limited potentially because of commercial confidentiality. The data underlying Option 2 therefore represents a pragmatic estimate to facilitate the calculation of an OCC rate that could be applied across all distances and load sizes.

The following is an extract from NTS GCD11⁹ listing the steps NG used in the derivation of the original “short-haul” tariff and their review as detailed in NTS GCD11.

The NTS Optional Commodity charge function was produced using the following steps:

- a) Uses a pipeline portfolio that, through using flow rates and distances, allocates a specific pipe size from the portfolio to a certain distance and flow rate combination;
- b) Produce a cost for each distance/flow rate combination by using a fixed element, relating only to the pipe diameter (this can be thought of as the “connection cost” to the NTS) and a distance related (cost per km) element which applies to a range of pipe diameters;
- c) Produce an annual capital cost based on an annuity period of 10 years;
- d) Produce commoditised unit costs (in terms of p/kWh) determined assuming a standard 75% load factor.
- e) Measure the average p/kWh using a comparison between the costs at 0km and 50km.

However, all Interconnector Points (entry and exit) should be exempted from the changes to the derivation of the OCC on the following grounds:

- GCD11 foresaw that methodology change to the charging system in order to comply with the EU Regulation TAR would impact the OCC. It concluded that a review and any change to the OCC should take place at a later date with the intention to produce an enduring, compliant solution. Such a process is taking place under Modification UNC 0621 with the recommended solution being subject to a full review by ACER, neighbouring NRAs and other interested parties via consultation (subject to Brexit transitional arrangements being agreed), as prescribed under TAR.¹⁰
- While TAR compliance is not required until October 2019, the Regulation has been in place since April 2017 and most of the gas markets have already taken steps to adjust charging methodologies in line with TAR. As the TAR content and required process is published and known, it would be prudent to take it into account when making any changes to the charging system in order to avoid unnecessary disruption and inefficiency (i.e. due to an interim change, followed by a transition phase to the enduring solution).

⁹ [http://www2.nationalgrid.com/UK/Industry-information/System-charges/Gas-transmission/Charging- 11 methodology/Gas-Charging-Discussion-papers/](http://www2.nationalgrid.com/UK/Industry-information/System-charges/Gas-transmission/Charging-11-methodology/Gas-Charging-Discussion-papers/)

¹⁰ Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas, Art. 26 - 28.

This approach to minimise duplication of work was recognised by Ofgem in its consultation¹¹ on proposals to implement aspects of the Regulation (EU) 2017/460, the European Network Code on harmonised transmission tariff structures for gas (TAR NC) which closed on 6 November 2017 and is awaiting a decision.

In the consultation, Ofgem proposed to align the stakeholder consultations required for UNC0621 and TAR NC by using a single consultation document that satisfies the requirements of both. Ofgem's proposal is

"...to facilitate alignment of the consultation processes, we propose that the UNC0621 industry consultation, which is required under UNC modification rules, and the extended final article 26 consultation, are carried out using a single consultation document. We propose that this document shall be the UNC0621 draft modification report ("DMR"), including any alternative modification proposals that may arise."

By Ofgem extending the scope of UNC 0621 to include the matters required under TAR, the impact of changes to the OCC tariff on all IPs would be addressed under UNC 0621 and therefore IPs should be exempt from this proposed UNC 0636 modification.

- Modification UNC 0621 discussions include transitional arrangements to avoid step change impacts on Shippers and consumers. No transitional arrangements for interconnector points exist under the proposed UNC 0636 Modification or any of the alternatives. This contradicts Ofgem's proposals under the implementation of TAR consultation.
- In consideration specifically of the Moffat exit point, which is critical for security of supply to the island of Ireland, an isolated gas system, considerable material impact will be caused by the changes suggested under this proposal. Approval of Modification UNC 0621 is subject to neighbouring NRA involvement under TAR as part of the enduring methodology change. The short-term disruptive impact of UNC 0636 to security of supply to Ireland will not be fully assessed or understood in the timescale and process available. TAR permits differential treatment of IPs as an homogenous group of points used for a specific purpose, and further differential treatment of IPs to and from isolated gas networks, for security of supply purposes.¹²

4 Code Specific Matters

Reference Documents

1. The Statement of Gas Transmission Transportation Charges
<https://www.gasgovernance.co.uk/sites/default/files/ggf/book/2017-09/Transportation%20statement%20October%2017%20.pdf>
2. Proposed Modification UNC 0621
3. Ofgem Consultation on proposals to implement aspects of Regulation (EU) 2017/460 , the European Network Code on harmonised transmission tariff structures for gas (TAR NC)

¹¹ <https://www.ofgem.gov.uk/publications-and-updates/consultation-proposals-implement-aspects-regulation-eu-2017460-european-network-code-harmonised-transmission-tariff-structures-gas-tar-nc>

¹² For example, Preamble (5) and Art. 9.2.

Knowledge/Skills

Understanding of the NTS charging methodology in respect of the Optional Commodity Charge.

5 Solution

The proposal requires a change to the charging formula contained within Section Y (3.5 NTS Optional Commodity Rate).

The parameters of the NTS Optional Commodity charge formula are derived from flow rates, pipeline distances and underlying costs. The **current** formula is as follows:

$$p/kWh = 1203 \times M^{-0.834} \times D + 363 \times M^{-0.654}$$

Where:

D is the direct distance of the site or non-National Grid NTS Pipeline to the elected Entry Terminal

M is the Maximum NTS Exit Point Offtake Rate (MNEPOR) at the site, converted into kWh/day

^ means 'to the power of.'

The **proposed** change to the formula is as follows:

$$p/kWh = 1247 \times M^{-0.78} \times D + 1422 \times M^{-0.708}$$

Where:

D is the direct distance of the site or non-National Grid NTS Pipeline to the elected Entry Terminal.

M is the aggregate of the allocated daily energy in kWh/day at the exit point from the previous Gas Year divided by the number of days in the previous Gas Year and further divided by 75% except:

- (i) where the site is new and hence there is no flow history, retain the existing formula for M of 24 times the Maximum NTS Exit Point Offtake Rate
- (ii) for an NTS Exit Point in respect of a pipeline interconnector having no physical exit capability, M is the aggregate of the allocated daily energy in kWh/day from the previous Gas Year divided by the number of days in the Gas Year and further divided by 75% to the NTS at the System Entry Point associated with such Connected Delivery Facility.

^ means 'to the power of'.

The update to the parameters would be effective for all sites availing of the OCC from the time of implementation of the Mod and no further updates are envisaged prior to October 2019.

Thereafter, an annual process would update M each April commencing April 2019 for effect from the following October in the event that this Mod is not superseded by code changes necessary for EU TAR compliance.

For the avoidance of doubt:

- (i) At the time of calculation of the charge rates (which will be subject to the 2 months' notice of charges), the average aggregate allocated daily energy will take the latest gas year for which data is available – For example implementation anytime between 1 April and 1 October 18 will use data from the Gas Year October 16 to September 17.

- (ii) $M = (\sum E) / N \times 100 / 75$ where E is the allocated daily energy for each day of the relevant Gas Year at the exit point and N is the number of days in the relevant Gas Year
- (iii) The 75% divisor converts an annual daily load to a notional peak day load which determines an appropriate pipe building cost estimate which is then used to derive the unit rate. The value of 75% is consistent with the assumption embedded in the current OCC formula.
- (iv) A new site ceases to be new if at the annual update it has at least a full Gas Year's allocation history (even though some allocations could be zero)
- (v) M for a seasonal site will have its value calculated in the same way as a non-seasonal site and zero allocation values will be included in the calculation of $\sum E$.

NOTE: ALL Interconnector Points (entry and exit) will continue to use the current formula ($p/kWh = 1203 \times M^{-0.834} \times D + 363 \times M^{-0.654}$) and will be exempt from the proposed change to the formula.

6 Impacts & Other Considerations

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

There is no impact on an SCR. There is no impact on the current charging review that is due for implementation in 2019 for compliance with the EU Tariff Code.

Consumer Impacts

If implemented, the modification will reduce an effective current cross-subsidy within the current charging methodology.

Cross Code Impacts

There is no impact expected.

EU Code Impacts

None¹³ – this change is for the interim period until the charging review is implemented in 2019 for compliance with the EU Tariff Network Code. The proposer anticipates that the wider charging review will include a more comprehensive update of the OCC.

Central Systems Impacts

Changes to systems will be assessed as part of the Modification development.

7 Relevant Objectives

Impact of the modification on the Relevant Objectives:

Relevant Objective	Identified impact
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¹³ Only if all IPs (entry and exit) are exempt otherwise TAR due process would apply

a) Efficient and economic operation of the pipe-line system.	None
b) Coordinated, efficient and economic operation of (i) the combined pipe-line system, and/ or (ii) the pipe-line system of one or more other relevant gas transporters.	None
c) Efficient discharge of the licensee's obligations.	None
d) Securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.	None
e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards... are satisfied as respects the availability of gas to their domestic customers.	None
f) Promotion of efficiency in the implementation and administration of the Code.	None
g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	None (only if all IPs are exempt)
Impact of the modification on the Relevant Charging Methodology Objectives:	
Relevant Objective	Identified impact
a) Save in so far as paragraphs (aa) or (d) apply, that compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business;	Positive
aa) That, in so far as prices in respect of transportation arrangements are established by auction, either: (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;	None
b) That, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;	Positive
c) That, so far as is consistent with sub-paragraphs (a) and (b), compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers; and	Positive
d) That the charging methodology reflects any alternative arrangements put in place in accordance with a determination made by the Secretary of State under paragraph 2A(a) of Standard Special Condition A27 (Disposal of Assets).	None

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

None (only if all IPs are exempt)

Adjustments to the OCC rate will reduce the Standard Commodity rates (all other things being equal) and thereby reduce the transfer of costs between users and improve its cost reflectivity – relevant objective (a).

An OCC rate that better reflects the underlying costs of appropriately sized alternative by-pass pipelines will better facilitate effective competition between shippers and suppliers – relevant objective (c) and specifically, help reduce transportation costs to domestic gas customers.

Increasing take-up of the OCC over longer distances has led to a need to review the parameters within the OCC rate calculation – relevant objective (b).

8 Implementation

- The usual date for charging changes is October or April in any year (but changes can be implemented at other dates subject to Ofgem approval). Ideally the proposer would like to implement the modification proposal as soon as possible.
- If decision to implement is received after 31 July 2018, implementation 2 calendar months following the decision to implement.

Should the proposal proceed, National Grid will be asked to give (on a “reasonable endeavours” basis) 150 days’ indicative notice that the OCC rate may change at exit points availing of the OCC and if possible an indicative rate. Similarly, National Grid will be asked to give 2 months’ notice of the actual charges should the Modification be approved.

9 Legal Text

Text Commentary

Text

10 Recommendations

Proposer’s Recommendation to Panel

Panel is asked to:

- Agree that Authority Direction should apply
- Refer this proposal to a Workgroup for assessment.