












UNC Modification	At what stage is this document in the process?
<h1>UNC 0636:</h1> <h2>Updating the parameters for the NTS Optional Commodity Charge</h2>	<div style="display: flex; flex-direction: column; align-items: flex-start;"> <div style="margin-bottom: 5px;">01 Modification</div> <div style="margin-bottom: 5px;">02 Workgroup Report</div> <div style="margin-bottom: 5px;">03 Draft Modification Report</div> <div style="margin-bottom: 5px;">04 Final Modification Report</div> </div>
<p>Purpose of Modification:</p> <p>To update the parameters used in the derivation of the Optional Commodity Charge tariff in order to reduce the current level of effective cross subsidy by gas customers who cannot avail of the Optional Commodity Charge.</p>	
	<p>The Workgroup recommends that this modification should be:</p> <ul style="list-style-type: none"> considered a material change and not subject to self-governance <p>The Panel will consider this Workgroup Report on 18 January 2017. The Panel will consider the recommendations and determine the appropriate next steps.</p>
	<p>High Impact:</p> <p>Users opting for the Optional Commodity Charge could expect an increase in the tariff. 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>

Contents		?	Any questions?
1	Summary	3	Contact: Joint Office of Gas Transporters
2	Governance	4	
3	Why Change?	4	
4	Code Specific Matters	5	 enquiries@gasgovernance.co.uk
5	Solution	5	
6	Impacts & Other Considerations	6	 0121 288 2107
7	Relevant Objectives	20	Proposer: Henk Kreuze, Vermilion Energy Ireland Limited
8	Implementation	22	
9	Legal Text	22	 hkreuze@vermilionenergy.com
10	Recommendations	22	
Timetable			telephone
Modification timetable:		Transporter:	National Grid NTS
		Systems Provider:	Xoserve
Initial consideration by Workgroup	06 November 2017 25 October 2017		commercial.enquiries@xoserve.com
Workgroup Report presented to Panel	18 January 2018 16 November 2017	Other:	Debra Hawkin
Draft Modification Report issued for consultation	19 January 2018 16 November 2017		debra@tpasolutions.co.uk
Consultation Close-out for representations	08 February 2018 08 December 2017		07968 340 721
Final Modification Report available for Panel	12 February 2018 19 December 2017		
Modification Panel decision	15 February 2018 21 December 2017		

- Formatted Table
- Formatted: Font color: Red
- Formatted: Font color: Red
- Formatted: Font color: Red
- Formatted: Font color: Red
- Formatted: Font color: Red
- Formatted: Font color: Red
- Formatted: Font color: Red
- Commented [RH1]: Needs updating to reflect latest (mod) position
- Formatted: Font color: Red

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.

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 GCD11².
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 April 2018 thereby saving up to £220³ million in cross subsidies relative to the base case of waiting until October 2019⁴.

¹ NTSCMF 26 September 2017

² <http://www2.nationalgrid.com/UK/Industry-information/System-charges/Gas-transmission/Charging-methodology/Gas-Charging-Discussion-papers/>

³ This value assumes an equal load profile throughout the Gas Year.

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

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 April 2018 thereby saving up to £220⁶ million in cross subsidies relative to the base case of waiting until October 2019⁷.

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; and
- be assessed by a Workgroup.

3 Why Change?

The proposal requires a change to the charging methodology contained within Section Y (3.5 NTS Optional Commodity Rate) and Section B3.12.10(b) of the UNC.

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 formula is as follows:

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

⁵ NTSCMF 26 September 2017

⁶ This value assumes an equal load profile throughout the Gas Year.

⁷ It is anticipated that Modification 0621 will propose changes to the Optional Commodity tariff for implementation from October 2019 for compliance with the EU Tariff Code.

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 $\sum E$.

4 Code Specific Matters

Reference Documents

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>

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 methodology contained within Section Y (3.5 NTS Optional Commodity Rate) and Section B3.12.10(b) of the UNC.

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 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) $M = (\frac{E}{N} \times 100) / 75$ 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 \square E.

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.

NG have providing some analysis on new rates and impacts. [can this analysis be interpreted to provide an End User Impact?]

Some workgroup members felt that the increased OCC could put some of those customers out of business and/or if demand fell on the Interconnection Points because the price is too high, increased costs [?] could be picked up by consumers.

[The proposed timeframe for the adoption of this Modification means that the overall impact on key end users may not have been subjected to an adequate Cost-Benefit Analysis (or those end users having time to assess the impact of the Modification on how they operate).]

Consumer Impact Assessment	
Criteria	Extent of Impact
Which Consumer groups are affected?	<p><i>Please consider each group and delete if not applicable.</i></p> <ul style="list-style-type: none"> Domestic Consumers Small non-domestic Consumers Large non-domestic Consumers Very Large Consumers
What costs or benefits will pass through to them?	<p><i>Please explain what costs will ultimately flow through to each Consumer group. If no costs pass through to Consumers, please explain why. Use the General Market Assumptions approved by Panel to express as 'cost per consumer'.</i></p> <p>Insert text here</p>

When will these costs/benefits impact upon consumers?	<i>Unless this is 'immediately on implementation', please explain any deferred impact.</i> Insert text here
Are there any other Consumer Impacts?	<i>Prompts: Are there any impacts on switching? Is the provision of information affected? Are Product Classes affected?</i> Insert text here
General Market Assumptions as at December 2016 (to underpin the Costs analysis)	
Number of Domestic consumers	21 million
Number of non-domestic consumers <73,200 kWh/annum	500,000
Number of consumers between 73,200 and 732,000 kWh/annum	250,000
Number of very large consumers >732,000 kWh/annum	26,000

Cross Code Impacts

There is no impact expected.

EU Code Impacts

None – 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.

Workgroup Impact Assessment

Summary of Workgroup Impact Assessment

The Workgroup sought clarification of several matters referred from Panel, identified within initial representations (submitted by Gazprom, Petronas and Energy UK) and relating to this change proposal.

These can be summarised as below:

- Understanding the objective
- Consider the links, relationship and impacts with the relevant elements of modification 0621 – Amendments to Gas Transmission Charging Regime.
- Assessment of alternative means to achieve objective
- Development of Solution (including business rules if appropriate)
- Assessment of potential impacts of the modification
- Assessment of implementation costs
- Assessment of legal text.

1. Understanding the objective

Background and context around GCD11

In July 2015, National Grid NTS published an NTS Gas Charging Discussion Document “NTS GCD11 - Updating the Cost Inputs to the NTS Optional Commodity Charge Function” (GCD11) and the document

Commented [BF2]: This initial workgroup report has been developed based on material published/discussed to date and associated minutes. Further work is required and the meeting on the 18 Dec will aim to discuss each section to identify/confirm the workgroups views and ensure any initial reps have been fully considered. Any actions/contributions required by workgroup members to develop the report further will also be captured.

can be found in Appendix 1 of this report. GCD11 set out for discussion options for updating The Statement of Gas Transmission Transportation Charges, in respect of the NTS Optional Commodity charge (known as the NTS “Shorthaul” rate). The table below includes details of the 2 options.

Options	Option Details
Option One	Using pipe sizes and unit costs that were provided under the RIIO-GT1 Price Control.
Option Two	Updating the current portfolio of unit costs using publicly available indices and including the pipe sizes and unit costs that were provided for under the RIIO-GT1 Price Control.

The intention was to update the cost inputs and consequently the NTS Optional Commodity charge rate. It was highlighted that all NTS Optional Commodity rates would change as a result of updating the formula and they will apply to all those shippers currently on or who may request the NTS Optional Commodity charge in the future.

The NTS Optional Commodity charging product was introduced in 1998 to seek to avoid inefficient by-pass of the NTS by large sites located near to entry terminals. As the charge is an alternative to investment, the formula to calculate individual NTS Optional Commodity charge rates is derived from an estimated cost of laying and operating a dedicated pipeline of NTS specification (i.e. the estimated cost of by-passing the NTS). Shippers can elect to pay the NTS Optional Commodity charge as an alternative to the NTS SO and TO, Entry and Exit Commodity charges.

Since its introduction in 1998 the function used to calculate the Optional Commodity rates has not been amended and so is based on the costs used in 1998. National Grid’s view at the time was that a review of the cost inputs to the NTS Optional Commodity charge function was required.

In December 2015, National Grid NTS published “NTS GCD11R - Updating the Cost Inputs to the NTS Optional Commodity Charge Function” (GCD11R). A copy of GCD11R can be found in Appendix 2 to this workgroup report. National Grid NTS decided not to proceed with either of the proposed options given under NTS GCD11, to allow the UNC Modification process for UNC 0563S⁸ to conclude before making any further proposals for potential changes to the NTS Optional Commodity charge, which could include any EU TAR NC / GTCR impacts or issues.

[Governance around the current methodology for the OCC](#)

[why is this an issue, what are the problems, how have they been addressed to date, what are the steps going forward, is this relevant for this modification?]

Currently there is no methodology to describe how the NTS Optional Commodity Charge Formula is derived but the Proposer believes that this Modification contains sufficient information to support the formula.

⁸ UNC Modification 0563S – Moving the NTS Optional Commodity Charge Formula into the UNC (UNC 0563S) was subsequently implemented in January 2016 and moved the existing NTS Optional Commodity charge formula which is specified in the NTS Transportation Charging Statement (The Statement of Gas Transmission Transportation Charges) into TPD Section Y (Charging Methodologies) of the UNC.

Issues with GCD11 incl. GCD11 Formula not subject to full stakeholder review

GCD11 Formula was not subject to a full stakeholder review. The spreadsheet to help industry to understand the derivation of the formula was only published after consultation on GCD11 had closed and includes dummy values. [how are the issues of sensitivity of these numbers to be addressed to provide transparency of the derivation of the formula?]

[This process (stakeholder review) ought to take place as part of the 0636 workgroup process].

The proposer indicated that for the formula to remain credible it must be updated and believes NG have used the best available data in GCD11. Also, as part of the review for Modification 0621 stakeholders have been asked to provide cost data and views on cost inputs for the OCC. Those views that have been provided to date are consistent with GCD11 outcomes.

Pipeline Sizes: Inclusion of larger and smaller sizes

The current NTS Optional Commodity charge calculation in determining the formula was completed based on the pipe sizes available and utilised in 1998. Max flow in 1998 formula was 15 mcmd and maximum distance was 50 km. Small pipes are necessary for shorter distances and lower flows. The calculation includes load sizes that are very small and would not be NTS connected, this seems unrealistic –what impact does this have?

Large pipes are now necessary to cater for unlimited distance and 60 mcmd flows. The table below shows the current and proposed portfolio of pipe sizes. GCD11 highlighted that option 2 reflects the pipes NTS are now likely to construct and these have changed significantly from 1998.

Some workgroup members felt the costs for pipeline diameters are included when these are far beyond the pipe size that would be required for most sites (CCGT) that would consider by-pass. A 600mm pipe would be more than sufficient for a 2GWe CCGT. What is the justification for including these pipeline sizes? To what extent do these affect the analysis?

[The inclusion of additional pipe diameters in the portfolio is a change which was not investigated during the GCD11 process. We would like more justification for their inclusion and to understand whether it is realistic to assume that NGG would use larger pipeline diameters to service shorthaul connections]

[As this is the basis of the Modification Proposal calculation, we would encourage the Workgroup to further examine how the derivation of the formula has been calculated. It appears that the extra pipelines added to the portfolio have not been revealed for commercial reasons (according to the Proposer).

For the benefit of a clear, transparent process, it would be best for the Workgroup to further examine this, and also why the additional pipe diameters (610mm; 915mm; and 1200mm) have been included.

It is quite a large assumption to make that NGG would use larger pipeline diameters on current short haul routes.

The current methodology employed by NGC is that specific flow rates and diameters are allocated to a specific pipeline size. Any additions to this pipeline portfolio therefore need to be examined in more detail.]

1998 – Original Portfolio (Current)	GCD11 Option Two (proposed)
50 mm	50 mm
100 mm	100 mm
150 mm	150 mm
200 mm	200 mm
300 mm	300 mm
450 mm	450 mm
600 mm	600 mm
	610 mm
	915 mm
	1220 mm

Assumptions underlying allocation of pipeline sizes to flow/distance

[Also in relation to pipeline diameters, we note that the methodology employed by NGG allocates specific flow rates and diameters to a specific pipeline size. The assumptions behind this allocation process need to be examined, particularly in light of the expansion of the pipeline portfolio as described in Option 2.]

Proposer believes NG have used standard company planning and design specifications.

Transparency of Maximum NTS Exit Point Offtake Rate (MNEPOR) values needs to be considered?

Cost Data

Actual values for costings in GCD11 are commercially sensitive and therefore dummy values are in GCD11. The consequences of this are...

a) Use of Steel Index

Major cost component of pipelines is steel which has its own index. [Proposer to submit further details?]

Is the use of RPI / steel index appropriate? why a mixture of both? NG was subject to RPI –X regulation for a substantial period of time since when the shorthaul tariff was established. Would RPI – X be more appropriate indexation and more consistent with Ofgas original decision ?

Anecdotally steel prices have fallen in recent years due to China flooding the market with cheap steel, does the steel index reflect this ? if not why not ?

[We think that there would be merit in conducting further analysis on the use of a steel index. The decision to invest in a private pipeline would have occurred, in most cases, many years ago. This

brings into question the validity of updating the steel index to today's prices. At the same time, where a decision was taken by an off-taker not to invest in a private pipeline, using either an existing pipeline route, or a new/enhanced route, any investment undertaken by NGG would have been taken at that time. The application of a steel index to historical investments appears to be inappropriate and at least warrants further discussion during the workgroup process.]

[It would bring more clarity to the industry if the rationale for updating the steel index is addressed. The pipeline infrastructure (and any decisions to invest) would have been made quite some time ago.

Therefore applying a steel index to investments made in the past needs to be examined in more detail.]

b) Application of RPI

Allowed revenues increase with indices derived from price control. Standard commodity rates increase (assuming stable flows). Shortfalls in capacity revenues are also recovered by standard commodity charges.

[We would like to understand the relevance of linking the formula to RPI. We would like to understand whether its application is consistent with the way charges are imposed elsewhere (e.g. in the case of the standard commodity charges).]

Why is increasing charges above RPI appropriate? Is this cost reflective?

Should costs be broken down between material and labour and different rates applied?

[Further clarification is needed on linking the formula to RPI. This method appears to be unique to the Optional Commodity Charge. Why is this? Have charges been applied in the same manner elsewhere (i.e. standard commodity charges)? What makes the Optional Commodity Charge different in this regard?]

c) Cost of Building Pipeline

Some workgroup members felt that it would be cheaper for connectees to build their own. In recent years nearly all spur pipelines to CCGTs have been built by the connecting party.

Bypass pipelines are likely to be more complex than spur pipelines. [Explain why this is relevant?]

If 1998 charge was too high it would have expected to see more by-pass pipelines being built to date.

Is the proposed charge still an appropriate alternative to investment?

d) Breakdown of costs

See above?

2. Consider the links, relationship and impacts with the relevant elements of modification 0621 – Amendments to Gas Transmission Charging Regime.

Modification 0636 is intended to be an interim step forward in the period prior to October 2019, as it will update the underlying costs to 2015. There will be no restriction in terms of distance and eligibility for the OCC. It will continue to be an optional replacement for both the TO and SO standard commodity charges.

It is expected that Modification 0636 will be superseded by Modification 0621 that will reflect updated underlying costs for the OCC. It is also anticipated that there will be a distance restriction of [50] Km for eligibility for the OCC. Modification 0621 is also expected to be operational (in some form) from October 2019 with regard to the OCC.

National Grid NTS have confirmed that Modification 0621 will update whatever code is in place at the time. Therefore Modification 0621 is not constrained by Modification 0636 but if Mod 0621 does not propose changes to the OCC, the updated formula will continue to operate at the same levels.

3. Assessment of alternative means to achieve objective

Some Workgroup members felt the current formula for deriving the OCC should remain in place for existing off-takes utilising short-haul; shippers and consumers should not be penalised for having made historical decisions to use the OCC rather than invest in alternative transportation arrangements at historical cost levels.

4. Development of Solution (including business rules if appropriate)

?

5. Assessment of potential impacts of the modification

Interim changes

Some members of the Workgroup highlighted that parties thought OCC would be static until 2019 and any changes before then could have impact on investment.

[With the transition towards October 2019, this addition to the change portfolio may well hinder rather than help planning i.e. the uncertainty that this brings and the negative impact it may have on investment.]

On the subject of Interconnectors, it was identified that the current formula has no benefits for IPs come 2019 because of provisions of the EU tariff code meant funding needed to be recovered by capacity charges and not commodity charges commodity charge at IPs. Discrimination issues were raised and CH is to provide detail for the Workgroup Report on the impacts to the EU Tariff code?

Determination of [cross-subsidy]

Current OCC rates are significantly below the costs of building the required pipeline.

If true costs of pipe-building are known then a more accurate value for the cross subsidy can be determined. [can this be determined?]

Analysis of OCC utilisation and OCC rates

The proposer has undertaken analysis based on data on provided by National Grid NTS with regards to OCC utilisation and OCC rates (as calculated under the Mod 0636 proposal) for comparison with the standard commodity rates. Points to note about the following analysis are as follows:

- Current OCC rates are used in the analysis but are anonymised
- Historic exit flows have been used for Gas Year 2015/6 for "M"

Commented [RH3]: Alternative wording please

Commented [BF4]: Further introductory/explanatory wording required to explain analysis sections

- Average 17/18 commodity rates, flows and revenues and the short-haul data (volumes and revenues) are as included in the October Final charge setting process.

a) Impact on number of sites and distances

The analysis confirms that there are currently 49 sites (including interconnectors) where the OCC is being utilised. The analysis conducted implies that this would reduce to 27 (or less) if Users choose the cheapest option under Modification 0636.

The average distance for OCC routes is at present 89km with a maximum distance of 274 km. This reduces to an average distance of 30km but retains a maximum distance of 262km if Users choose the cheapest option under Mod 0636.

b) Breakdown of revenues from current OCC flows

The table below provides a breakdown of the annual revenue from current OCC flows. The following information supports the table:

- "Remainers" are flows which are currently using OCC via a particular route which remain on the OCC following Mod 0636
- "Leavers" are flows which are currently using OCC via a particular route which switch to standard rate following Mod 0636
- "Never on OCC" are flows which are currently using Standard Commodity rates.

Scenario and Impact	Breakdown of Annual Revenue from Current OCC Flows			Amount re-distributed to "Never on OCC"
	OCC "Remainers"	OCC "Leavers"	Total from OCC flows	
No OCC - Standard Commodity only	£132.93 m	£65.50 m	£198.43 m	-
Current	£14.30 m	£34.00 m	£48.31 m	£150.12 m
Mod 0636	£54.60 m	£75.45 m	£130.05 m	£68.38 m
Impact of Mod 0636	£40.30 m	£41.45 m	£81.74 m	-£81.74 m
Retained benefit after Mod 0636	£78.33 m	-£9.95 m	£68.38 m	

In conclusion Modification 0636 reduces the amount "re-distributed" by £82m and the remaining OCC flows still save £78m compared to Standard rates.

c) Impact of ? by Annual Load Size

DH to explain this new analysis in the meeting on 18/12/17

	Annual Load MWh	Impact £ per annum
Domestic⁹		
Low	8	-£1.19
Medium	12	-£1.78
High	17	-£2.52
Non-Dom Retail¹⁰	73.2	-£10.85
Industrial¹¹		
I1	< 277.8	-£41.19
I2	277.8 - 2,778	-£412
I3	2,778 - 27,780	-£4,119
I4	27,780 - 277,800	-£41,192
I5	277,800 - 1,111,200	-£164,769

Note: Where the annual load is a range the impact of the top of the range is shown.

d) Impact of Mod 0636 on Standard Commodity Charges (Assuming Shippers Choose Cheapest Option)

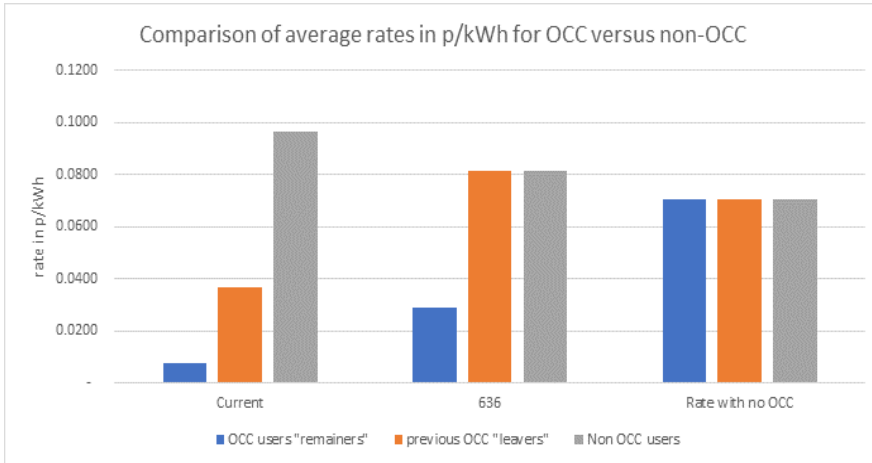
Commodity Charges	Current p/kWh	Mod 0636 p/kWh	Variance	No OCC
TO Combined Commodity Rate	0.0751	0.0643	-14%	-
SO Combined Commodity Rate	0.0212	0.0172	-19%	-
SO+TO Combined Commodity Rate	0.0963	0.0815	-15%	0.0707

⁹ Source: <https://www.ofgem.gov.uk/gas/retail-market/monitoring-data-and-statistics/typical-domestic-consumption-values>

¹⁰ Source: <https://www.ofgem.gov.uk/publications-and-updates/retail-energy-markets-2016>

¹¹ Source: <https://ec.europa.eu/energy/en/data-analysis/market-analysis>

e) [Comparison of average rates in p/kWh for OCC versus non-OCC](#)



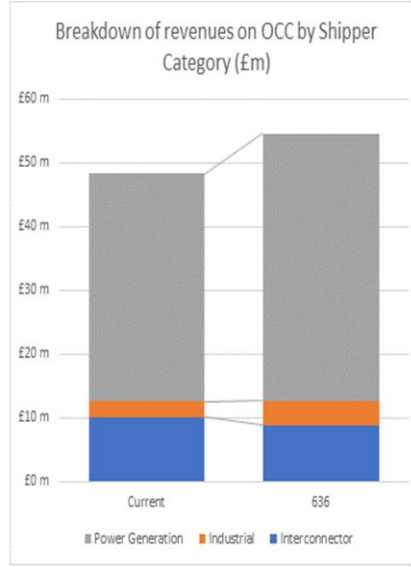
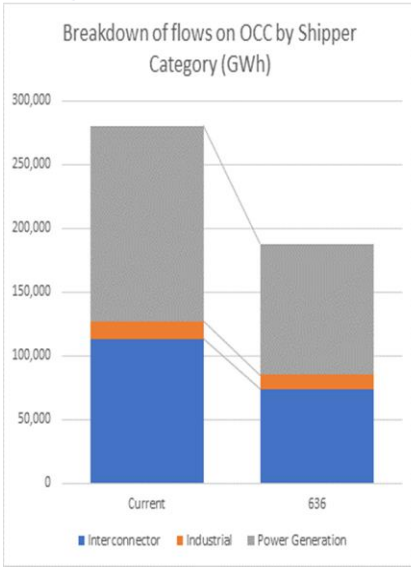
	Current	636	Rate with no OCC
OCC users "remainders"	0.0076	0.0291	0.0707
previous OCC "leavers"	0.0367	0.0815	0.0707
Non OCC users	0.0963	0.0815	0.0707

f) [Raised contribution towards SO charges](#)

The revenue recovered via the OCC will continue to contribute to the SO allowed revenues.

g) [Distributional effects on charges](#)

[Comparison of Flows and Revenues by Shipper Category](#)



The following tables provides the data to support the above graph.

	Current	636
Interconnector	£10 m	£9 m
Industrial	£2 m	£4 m
Power Generation	£36 m	£42 m
Total	£48 m	£55 m

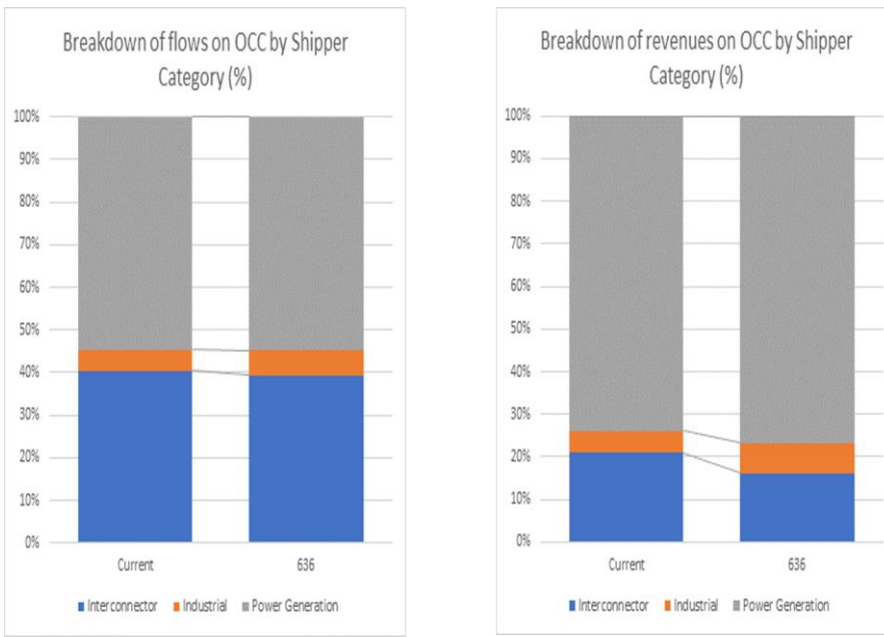
	Current	636
Interconnector	113,277	74,142
Industrial	13,857	10,909
Power Generation	153,429	102,901
Total	280,562	187,952

In conclusion:

- Average rates for flows remaining on OCC increase by a factor of 4 and for flows "leaving" OCC increase by a factor of 2

- OCC flows reduce in absolute terms for all shipper categories although the % split by shipper category hardly changes
- Revenues from OCC flows increase despite lower flows.

Comparison of Flows and Revenues by Shipper Category – percentages



The following tables provides the data to support the above graph.

Breakdown of flows on OCC by Shipper Category (%)		
	Current	636
Interconnector	40.37%	39.45%
Industrial	4.94%	5.80%
Power Generation	54.69%	54.75%

Breakdown of revenues on OCC by Shipper Category (%)		
	Current	636
Interconnector	20.89%	16.23%
Industrial	5.16%	7.01%
Power Generation	73.96%	76.76%

In conclusion:

- Standard Commodity charges will reduce by 15%

[It was agreed that a worked example (by customer type) should be included in the workgroup report of the impact to costings.]

Some workgroup members felt that changes are likely to have significant distributional impacts; a small number of parties seeing a large increase in transportation charges whilst others see a small decrease – the wider consequences of this need to be examined in a cost benefit study. This should consider impact on the generation sector, flows to Ireland and IUK exports.

Commented [BF5]: Does the analysis support or dismiss the concerns raised in an initial reps?

[The Option 2 formula results in a greater contribution towards SO costs by shorthaulers. The validity of this outcome needs to be investigated if the charges are to be deemed to be cost reflective.]

[Based on the impact analysis provided in GCD11, the benefits in terms of recovered revenues and the overall reduction in standard commodity charges are small, however, the impacts on individual offtakes are significant. We strongly believe that a thorough cost benefit analysis ought to be carried out to consider the impact of adopting Option 2. In particular, the additional costs which will be imposed on a particular category of customers (industrials and power generation) need to be weighed up against the benefits (in terms of reduced combined commodity charges) to the wider customer base.]

h) Contractual arrangements

The Workgroup considered contracts in relation to the timing of the proposed change. Standard commodity charges are changed in April & October each year. There is an expectation amongst some UNC parties that the current formula would remain until 2019.

Assume contracts and specific investment projects will be confidential. Suggest details are shared with Ofgem to collate.

It was confirmed that there are no contracts that will be impacted by this modification.

[We feel that the impact on current contractual arrangements needs to be considered when examining this Modification, as these contracts would have been agreed based on the current gas market arrangements at least up to October 2018, in accordance with the timings of a gas year.]

6. Assessment of implementation costs

[ROM]

7. Assessment of legal text.

Legal Text was provided by the Proposer and updated by National Grid NTS? and is included in section 9. The Workgroup has considered the Legal Text and is satisfied that it meets the intent of the Solution.

Commented [BF6]: What is the status with the legal text not formally requested by panel yet?

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

Cost estimate from CDSP where the Modification relates to a change to a CDSP Service Document

[Should be available from Xoserve (CDSP) around 11/12/17, (contact: Paul Orsler/Steve Pownall).]

OR

Rough Order of Magnitude (ROM) Assessment *(Workgroup assessment of costs)*

Cost estimate from CDSP	Insert text here
Insert Subheading here	Insert text here

7 Relevant Objectives

Impact of the modification on the Relevant Objectives:

Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	None
b) Coordinated, efficient and economic operation of (i) the combined pipe-line system, and/ or (ii) the pipe-line system of one or more other relevant gas transporters.	None
c) Efficient discharge of the licensee's obligations.	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

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

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

Commented [RH7]: Change this wording please

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

None

Text [proposer suggested text]

Uniform Network Code – Transportation Principal Document Section B

3.12.10 For the purposes of paragraphs 3.12.9 to 3.12.14 (inclusive), the capacity of the Specified Exit Point shall be the Supply Point Capacity, provided:

- (a) in the case of an LDZ Supply Point the capacity shall be determined in accordance with Section G5.4.1, except for a LDZ Shared Supply Point in which case the capacity shall be determined in accordance with Section G1.7.17;
 - (i) for an LDZ CSEP the capacity shall be determined in accordance with paragraph 4.5.2;
- (b) in the case of an NTS Exit Point the capacity shall be equal to ~~24 times the Maximum NTS Exit Point Offtake Rate~~ the aggregate of the allocated daily energy (where this value is positive) 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 an NTS Exit Point has no flow history then equal to 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 which is both a Connected Offtake System and a Connected Delivery Facility, the capacity shall be equal to ~~24 times the amount (where positive) determined as the instantaneous rate (in kWh/Hour) which the Transporter determines to be the maximum instantaneous rate at which it is feasible to deliver gas~~ the aggregate of the allocated daily energy in kWh/day from the previous Gas Year divided by the number of days in the previous Gas Year and further divided by 75% to the NTS at the System Entry Point associated with such Connected Delivery Facility.

Uniform Network Code – Transportation Principal Document Section Y (3.5 NTS Optional Commodity Rate)

The NTS Optional Commodity Rate (in pence per kWh) is site specific and is calculated by the following equation:

$$1203.1247 \times [(M)^{-0.834 - 0.78}] \times D + 363.1422(M)^{-0.654 - 0.708}$$

Where:

D = the direct distance from the site or non-National Grid NTS pipeline to the Specified Entry Point in km;

M = ~~Maximum NTS Exit Point Offtake Rate (MNEPOR) converted into kWh/day at the site~~ the aggregate of the allocated daily energy in kWh/day at the NTS 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 NTS Exit Point has no flow history, M = 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 which is both a Connected Offtake System and a Connected Delivery Facility, then M shall be equal to the aggregate of the allocated daily energy in kWh/day from the previous Gas Year divided by the number of days in the previous Gas Year and further divided by 75% to the NTS at the System Entry Point associated with such Connected Delivery Facility; and

^ = to the power of

10 Recommendations

Workgroup's Recommendation to Panel

The Workgroup asks Panel to agree that:

- This ~~self-governance~~ modification should proceed to consultation.
- This proposal requires further assessment and should be returned to Workgroup.

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

Insert subheading here

Insert text here

Appendix 1

GCD11 document:

"42342-NTS GCD11 - Optional Commodity Charge Change V1.3"

<https://www.gasgovernance.co.uk/sites/default/files/ggf/book/2017-11/42342-NTS%20GCD11%20-%20Optional%20Commodity%20Charge%20Change%20V1.3.pdf>

Appendix 2

GCD11 Discussion report:

"NTS GCD11R - Updating the Cost Inputs to the NTS Optional Commodity Charge Function"

<https://www.gasgovernance.co.uk/sites/default/files/ggf/book/2017-11/44428-NTS%20GCD11R%20Discussion%20Report.pdf>