Joint Office of Gas Transporters

Stage 01: Proposal

0391:

Distributed Gas Charging Arrangements

What stage is this document in the process?

01 Proposal

02 Workgroup Report

03 Draft Modification Report

04 Final Modification Report

Proposes new charging arrangements in respect of Distributed Gas

The Proposer recommends that this Transportation Charging Methodology modification should be ~~referred to a~~assessed by the Workgroup ~~for assessment~~

High Impact:
Shippers, Transporters

Medium Impact:
Customers

Low Impact:
None

Contents

About this document:

This document is a ~~proposal, which will be presented by the Proposer to the Panel on 18 August 2011. The Panel will consider the Proposer's recommendation, and agree whether this modification should proceed to consultation or be referred to a Workgroup for assessment.~~modification, which will be assessed by the Workgroup on 30 April 2012.

Any questions?

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1 Summary

Is this a Self-Governance Modification

It is considered that this modification is not suitable for self-governance since it may have a material effect on:

- competition in the shipping, transportation or supply of gas conveyed through pipes or any commercial activities connected with the shipping, transportation or supply of gas conveyed through pipes
- the sustainable development of the gas distribution networks.

Why Change?

At present, the distribution transportation charges are based on the premise that gas enters the gas distribution system from NTS offtakes. With potentially significant amounts of Distributed Gas available there is a need for the transportation charges to take account of the different system usage and costs involved.

Solution

Introduction of a new ~~Three potential options impacting on the~~ distribution transportation charge, the LDZ System Entry Commodity Charge, which reflects the operating costs associated with the entry of the distributed gas and the benefits in terms of deemed NTS Exit and distribution network usage. The charge could be positive or negative (a credit). ~~and/or connection charging methodologies are proposed.~~

Impacts & Costs

It is expected that the proposed new transportation charge ~~any of the charging options outlined~~ will help facilitate the development of Distributed Gas. The introduction of the new charge will impact on the level of the existing Standard LDZ System charges; however this impact is expected to be small given the relatively small volume of Distributed Gas expected over the next few years. ~~to some extent, with some of the options likely to have a greater impact than others.~~ The main cost will be the implementation cost for invoicing the new charge; this is expected to be below £1.5m.~~s will depend upon which of the options outlined is implemented.~~

Implementation

The modification should be implemented at the earliest opportunity consistent with the timing of changes to transportation charges and development of the new charge invoicing arrangements.

The Case for Change

The proposal would result in a distribution transportation charging methodology which better reflects the costs relating to Distributed Gas, would take into account the likely greater development of Distributed Gas in the coming years and could, by better facilitating the development of Distributed Gas, better facilitate effective competition between gas shippers.

Recommendations

It is recommended that the modification ~~goes for assessment~~is assessed ~~at a~~by the Workgroup.

Distributed Gas

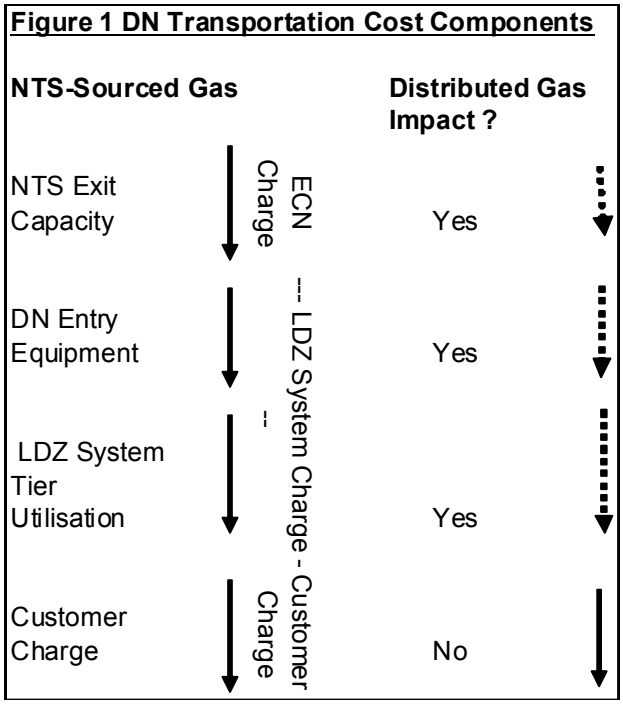
Any gas which enters into the distribution systems from sources not utilising the NTS is referred to as Distributed Gas. This could include biomethane gas, land fill gas and shale gas.

2 Why Change?

Current Transportation Charging Arrangements

Figure 1 shows the conceptual breakdown of DN transportation charges, as from October 2012, when NTS Exit capacity costs will be recovered through a new DN ECN (Exit Capacity NTS) capacity charge. All of the transportation charges, including the new ECN charge, are related to supply point characteristics (i.e. exit-based) since virtually all gas has traditionally been sourced from the NTS and there is no substantial variation in distribution system costs between gas transported from different NTS-DN offtakes through the DN. Supply point capacity is the main driver of the level of DN unit transportation charges since there has been found to be a correlation between it and the amount of distribution system usage. Having supply point-based charges also has the benefit that there is no requirement to define or measure DN entry capacity for individual shippers to form a basis for an entry charge.

Figure 1 DN Transportation Cost Components



Current Connection Charging Arrangements for DN-Embedded Entry connections

Under the Distribution Network Owners' Connection Charging methodologies, entry connection costs are fully chargeable to the connectee and payable through an up-front one-off charge. Where the entry connection requires reinforcement of the distribution system, the costs of such reinforcement are charged to the connectee as part of the connection charge. This treatment of reinforcement costs is different from that for system exit connections where, subject to the Economic Test, part of the Specific Reinforcement cost may be funded by the DN.

The Economic Test compares the cost of distribution network reinforcement and additional operating costs of accommodating the new load with the additional distribution transportation capacity revenue from the new load. To the extent that the cost exceeds the net present value of the transportation revenue over the assessed period then a contribution to the reinforcement cost is payable, otherwise no contribution is required.

Since the current distribution transportation charges are wholly related to exit point characteristics (supply point capacity and throughput, etc.) the connection of a new Distributed Gas entry load will not give rise to any additional transportation charges. Thus if the current Economic Test were to be applied to entry connections it would lead to all the Specific Reinforcement costs being chargeable to the connectee.

Rationale for Review Now

The current arrangements have been developed during a time when the vast majority of distribution gas arrives via the NTS and there are very few Distributed Gas connections.

With Biomethane Gas now being encouraged through incentives in the UK, as part of the framework for a low carbon energy supply, it is envisaged that significant numbers of biomethane facilities may look to connect to the distribution systems. DECC has set a target of 7 TWh/a of biomethane gas by 2020. Assuming a typical biomethane facility produces around 500 m^3/h biomethane, meeting this target could require approximately 150 biomethane connections nationwide. It is also possible that other types of gas facility, such as Land Fill gas or Shale gas, may look to connect directly to the distribution systems. This modification proposal is applicable to all forms of Distributed Gas.

With these potential changes to the sources of gas within the distribution systems it is important that the connection and transportation charging regimes relating to Distributed Gas are reviewed to ensure that they remain appropriate. This proposal is concerned with the transportation charging regime; however, the impact on the connection charging arrangements need to be considered at the same time since it is appropriate to review whether the current boundary defining the costs reflected in each charging regime remains appropriate and the overall charges for the connectee are impacted by the aggregation of the two regimes. Any changes to the DNs' connection charging regimes will ultimately be managed by each DN.

Specific Reinforcement

Specific Reinforcement is reinforcement required to enable the connection of identified new customers, or to permit an increase in flow rate in respect of an existing consumer or to allow an existing consumer to change from interruptible to firm transportation

Economic Test

The Economic Test is a financial assessment tool that is designed to ensure that the Transporter meets its Gas Act obligations to develop and maintain an efficient and economical pipeline system for the conveyance of gas (Gas Act, section 9(1)(a)) and to comply with any reasonable request to connect to its system any premises or any pipeline system operated by an authorised transporter (Gas Act, section 9(1)(b)).

3 Solution

~~**Issues to be considered in determining an Appropriate Regime**~~

As Figure 1 illustrates, there are potentially differences in the costs and system utilisation in respect of Distributed Gas which relate to the LDZ System Charges and to the ECN charges due to be implemented from October 2012. It is not considered that Distributed Gas should have any impact on the Customer Charges. The issues in respect of network entry equipment opex, LDZ system utilisation ~~and network investment~~, ~~network entry equipment,~~ and ECN charges are each considered separately. It is proposed that a LDZ System Entry Commodity Charge be introduced which would be calculated as:

Unit Rate for Opex Costs + Unit Rate for LDZ System Credit + Unit Rate for ECN Credit

The Opex Costs unit rate will always be zero or a positive amount whereas the other unit rates, being credits, would always be negative or zero, and so the overall commodity charge could be either positive (a charge) or negative (a credit).

The existing Supply Point-based DN transportation charges would continue to apply as at present.

Network Entry Equipment – Unit Rate for Opex Costs

For the Distributed Gas entry into the DN system there will be a need for gas quality monitoring, metering, odourisation, and other equipment. The issue of which equipment is provided and operated by the Transporter and which by the connectee is the subject of separate ongoing discussions. However, the treatment of any such costs (or, indeed, the absence of such costs) incurred by the Transporter for charging purposes needs to be considered.

This proposal does change the boundary determining the capital costs which the connectee would be charged for at the time of connection i.e. the current deep connection regime would continue to apply.

However, it is proposed to reflect the particular level of entry-related equipment operating costs for each Distributed Gas entry point in the level of the element of the unit entry commodity charge rate relating to opex costs.

This unit rate will be determined from the forecast operating costs relating to the entry facilities operated by the DN and any "deep" network assets directly relating to the entry flows and from the forecast entry gas flow for the same period. No reconciliation to actual operating costs and gas flows will be done after any period.

In order to reduce the administration costs of re-estimating these values each year, it is proposed that, after initial determination, the unit rate for future years would normally be determined by applying an RPI inflation factor based rather than through redetermination from the underlying factors. However, the methodology allows for redetermination from the underlying factors for any future period so as to handle situations where the forecast costs or flows would be expected to differ substantially from those last utilised due perhaps to changes to entry facility equipment or operating processes or to network utilisation or configuration changes impacting on within-network compression usage.

LDZ System Utilisation ~~and Network Investment~~ – Unit Rate for LDZ System Credit

~~If Distributed Gas connects onto the Distribution System at tiers below the Local Transmission System then the potential volume of demand which can be supplied by the new connection without network investment will typically be less than for gas supplied from the NTS. For biomethane gas connected to the lower tiers, where it is expected that the flow could not be readily modulated, the ability to transport the gas throughout the year will typically depend on the minimum local demand levels experienced during the summer months. Dependent upon the local situation, connection to a higher pressure tier may be required in some cases so as to provide sufficient demand for the gas at all times. Alternatively, Transporters are investigating the feasibility of within-network compression in order to transport gas back up to higher pressure tiers with more available demand. It is expected that within-network compression (if feasible) would only be required in a minority of cases.~~

~~Distributed Gas connecting on at lower pressure tiers will not (without compression) use the higher distribution pressure tiers. For consistency with the methodology determining the LDZ System charges, which is based upon typical system tier usage, it would appear appropriate that the lower system tier usage for Distribution Gas, relative to NTS-sourced gas, is taken into account in determining the level of charges. Given the relatively low numbers of such connections (relative to the number of Supply Points) it would seem reasonable to take the actual system tier of connection into account in such determination.~~

The rationale for this credit is that the Standard LDZ System capacity and commodity charges are based on analysis of the utilisation of the different LDZ System tiers entry flows by Supply Points of different sizes which reflects gas entering the DN system from the NTS. Gas from LDZ System entry points may enter directly into a lower pressure tier than the Local Transmission System and so may utilise fewer tiers of the system than gas entering from the NTS typically would. Since the exit-based LDZ System charges assume transportation of NTS-sourced gas it is appropriate to provide a utilisation credit for LDZ System entry flows so that the net (lower) transportation charge in respect of gas transported from a LDZ System entry point to a DN Supply Point reflects the different typical system utilisation.

The latest LDZ System charges (post-April 2012) are based on the methodology consulted on within DNPC08 and reflect analysis of LDZ System tier costs and usage for each DN individually. The derived charges are based on tier costs for each of the main tiers (and sub-tiers for the Low Pressure tier) and so it is proposed that these main tier costs are used as the credits for LDZ System entry points, appropriately scaled.

Since it is proposed that the unit credits are commodity based it is appropriate to base them on the commodity unit costs of each tier in the DNPC08 analysis scaled to the LDZ System charges for the appropriate period. In addition, the unit commodity costs from the DNPC08 analysis were based on the LDZ System commodity charges recovering 5% of the LDZ System revenue and so since the credits are based 100% on commodity it is necessary to scale the DNPC08 unit commodity costs by 20 times to give 100% revenue equivalent levels.

The DNPC08 analysis showed that the typical use of the different pressure tiers varied with the size of the Supply Point. However, most of the variation is in the use of the

Low Pressure tier and the use of the MP, IP and LTS tiers is fairly stable across most of the Supply Point sizes. It is appropriate therefore to use the typical costs for these tiers as the basis for the credits.

Using West Midlands DN as an example, the tier costs in the DNPC08 analysis which underlie the domestic commodity rate are as shown below, scaled to the level of the April 2012 charges, and multiplied by a factor of 20.

Unit Cost of each System Tier		
	At 5% level	**At 100% level**
	p/kWh	p/kWh
LTS	0.0026	0.0520
IP	0.0006	0.0114
MP	0.0042	0.0840
LP	0.0200	0.4005
Total	**0.0274**	**0.5480**

The Unit Rate for LDZ System Credit would be calculated as:

Highest Utilisation Tier	**Unit Rate Credit**
LTS	Zero
IP	LTS Utilisation Rate
MP	IP plus LTS Utilisation Rates
LP	MP plus IP plus LTS Utilisation Rates

For the West Midlands DN example, the credits would therefore be as shown below.

LDZ System Credit	
LDZ System Entry Point Highest Utilisation Tier	p/kWh
LTS	Zero
IP	0.0520
MP	0.0634
LP	0.1475

where the Highest Utilisation Tier is defined as the higher (in terms of pressure) of:

- the tier at which gas enter into the LDZ system from the LDZ System Entry Point;
- the tier which gas from the LDZ System Entry Point is, via within-network compression, moved to (this is not applicable for gas which is not subject to within-network compression).

This example illustrates that, since the costs attributed to the Low Pressure tier typically make up at least 70% of the LDZ System tier costs, the maximum LDZ System utilisation credit would be no more than 30% of the equivalent LDZ System commodity charge rate if scaled to recover 100% of the LDZ System revenue.

~~**Network Entry Equipment**~~

~~For the Distributed Gas entry into the DN system there will be a need for gas quality monitoring, metering, odourisation, and other equipment. The issue of which~~

~~equipment is provided and operated by the Transporter and which by the connectee is the subject of separate ongoing discussions. However, the treatment of any such costs (or, indeed, the absence of such costs) incurred by the Transporter for charging purposes needs to be considered.~~

~~For gas which enters into the DN system via NTS offtakes, the distribution Transporter provides and operates the entry equipment. These costs are incorporated within the LDZ system costs which are reflected in the level of the exit based LDZ System charges which apply to all gas transported within a DN.~~

~~For Distributed Gas, one option would be to incorporate any associated entry equipment costs within the LDZ system costs and to charge for this aspect in the same manner for all gas transported through the DN, i.e. through exit based LDZ System charges which do not distinguish between type of entry point. An alternative option would be to reflect the particular level of entry equipment costs for each Distributed Gas entry point in the particular level of transportation charges for gas from such an entry point. Since the current LDZ System charges reflects the typical entry costs for NTS sourced gas it would be appropriate to reflect **the difference in unit entry cost** for the Distributed Gas entry point relative to NTS sourced gas in any **differential transportation charge** for the Distributed Gas (with the existing LDZ System charges still being paid in all cases). In order to apply a **differential transportation charge** for gas transported from each Distributed Gas entry point, it would seem appropriate to apply the differential charge to the volume or capacity of gas entering the system i.e. through a DN entry transportation charge.~~

~~The unit cost (per peak day kWh) of the entry equipment at a Distributed Gas entry point is expected to be considerably higher than for an NTS DN entry point since the capacity at the former will probably be much lower, but without a proportionate reduction in the costs of the equipment required, so leading to a higher cost per unit of entry capacity. Alternatively, if all such equipment were to be owned and operated by the connectee then the Transporter's cost for entry equipment at the Distributed Gas entry point would be lower than for a NTS DN entry point. It is possible therefore that any differential transportation charge to reflect these particular costs at each Distributed Gas entry point could be either positive or negative.~~

~~Another option would be to charge the capital element for any Transporter provided entry equipment to the connectee as a connection charge, with the ongoing operating cost reflected in the level of transportation charges, on the basis that such entry equipment costs are effectively for a single connectee and best charged for through an up front charge. This, however, would result in a different treatment for this type of asset at a Distributed Gas entry point compared to the treatment at a NTS DN entry point. The justification for such discriminatory treatment is not readily apparent.~~

NTS Exit Capacity / ECN Charges – Unit Rate for ECN Credit

~~The provision of Distributed Gas which can be relied upon to be available at peak times is likely to enable the Distribution Network Owner to book commensurately lower levels of NTS exit flat capacity in order to meet the need to provide the network capability to meet "1 in 20" peak day demands. Since Distributed Gas may provide an alternative means of meeting the peak capacity requirement it may be appropriate to provide a payment or credit to the Distributed Gas equivalent to the reduction in the level of NTS exit capacity booking.~~

~~In practice, it would be difficult to relate a particular Distributed Gas provision to a particular change in the booking of NTS exit capacity and so it may be appropriate to link the credit value to the typical or average cost of NTS exit capacity for the DN. In addition, it may be appropriate to apply a "dependability factor" to the determination of the level of credit to reflect the fact that Distributed Gas may possibly be less dependable for the provision of peak capability than NTS Exit capacity.~~

~~It would seem most appropriate to apply any such credit as an ongoing transportation credit against the level of entry capacity. However, under a scheme where only standard transportation charges are applied it could be appropriate to determine an equivalent one-off NPV equivalent of the credits over a period which could offset any liability for deeper reinforcement costs.~~

From October 2012, the cost incurred by the Distribution Network Owner in respect of NTS Exit capacity will be recovered through a new LDZ ECN (Exit Capacity NTS) transportation capacity charge, payable for transportation to all DN supply points and linked to the supply point characteristics (i.e. not linked just to gas entering the DN from the NTS).

The rationale for the ECN credit is that LDZ System entry flows, if dependable, provide an alternative means to NTS Exit capacity for the DN to ensure the capability to flow gas into the DN network at peak times. In practice it will be impractical to link particular LDZ System entry points to NTS Exit capacity booking levels at particular offtakes and so it is proposed that the credit is valued by reference to the average DN ECN charge for a period, since the ECN charge will be the DNs' means of passing through the NTS Exit capacity costs. The degree to which LDZ System entry flows can be depended upon for system planning purposes, so as to provide an alternative to booking NTS Exit capacity, is factored into the calculation through a Dependability Factor.

It is proposed that the unit rate is based on the average ECN charge for the whole DN multiplied by a Dependability Factor and then converted into a commodity equivalent charge

i.e. $\text{Unit Rate}_{\text{capacity}} = \text{ECN}_{\text{(p/pdkWh/d)}} * D$, where D is Dependability Factor

To convert to a commodity equivalent charge, multiply by daily capacity for entry point (SOQ) and 365 (days), divide by Annual Quantity (throughput) for supply point

i.e. $\text{Unit Rate}_{\text{commodity}} = \text{Unit Rate}_{\text{capacity}} * SOQ * 365 / AQ$

But Load Factor, $LF = AQ / (365*SOQ)$

So $\text{Unit Rate}_{\text{commodity}} = \text{Unit Rate}_{\text{capacity}} / LF = \text{ECN}_{\text{(p/pdkWh/d)}} * D / LF$

Thus if Dependability Factor, D, is set equal to Load factor, LF, then

$\text{Unit Rate}_{\text{commodity}} = \text{ECN}_{\text{(p/pdkWh/d)}}$

For example, if the average ECN rate for a DN is 0.0150 p/pdkWh/d then the Unit Rate for ECN Credit for any LDZ System Entry Point in the DN would be 0.0150 p/kWh for the same period.

Although basing the Dependability Factor on the load factor may seem simplistic, an entry flow with a higher load factor, producing closer to its peak supply on each day, may, in the absence of other information, be considered to be more dependable for planning purposes than a supply point with a more variable flow i.e. with a lower load factor.

Another advantage of this credit determination basis is that it avoids the need to obtain an estimate of the load factor characteristic of each LDZ System Entry Point.

It is worth noting that the use of the load factor for an entry point as an estimate of its dependability, and the preference for commodity-based rather than capacity-based rebates, is already established within the methodology for determining DNO credits for embedded electricity generation.

~~Shippers to DN supply points also currently pay NTS exit commodity charges in respect of all gas offtaken at such supply points despite the fact that a small portion of the gas may have not been physically delivered through the NTS. With the expected substantial increase in the level of Distributed Gas, it would be timely to review whether such a charging arrangement continues to be appropriate. Any such change would impact on the NTS charging methodology whereas the other changes being proposed here relate to the distribution charging methodologies and so it is suggested that any such change be formally proposed and debated separately.~~

~~Deep or Shallower Connection Boundary~~

~~Three core options for the treatment of costs, and thus the structure of charges, relating to Distributed Gas have been identified.~~

~~1. Retain Deep Connection Boundary but with Allowances~~

~~Under current connection arrangements, the connectee is liable for all connection costs and any associated deeper reinforcement costs.~~

~~As identified above, there are potential benefits from the locational nature of Distributed Gas in respect of:~~

- ~~Lower utilisation of the LDZ system relative to NTS sourced gas~~
- ~~Potential reduction in NTS Exit Capacity bookings~~

~~Under this option it would be appropriate to retain the current non-locational transportation charges since any specific reinforcement costs relating to the Distributed Gas would be recovered through up-front connection charges. For consistency it would seem appropriate to apply the locational benefits identified above as up-front allowances (based on the NPV of the benefit). This could be done through the application of an entry-specific Economic Test under which any liability to pay for specific reinforcement was offset by the allowances.~~

~~Benefits of this approach are that it is roughly consistent with the approach for exit connections, where an Economic Test is applied (but with allowances relating to the incremental exit-based transportation charges), and that a signal regarding the economics of connecting at different locations is provided through the up-front connection cost. In addition, it would avoid the development and implementation of a more complex transportation charging methodology.~~

~~A key drawback of the approach is that specific reinforcement relating to Distributed~~

Gas would effectively be treated in a different manner (requiring up-front payment) to reinforcement in support of the delivery of gas from NTS offtakes, which is included within the regular capital expenditure of the Transporter and effectively recovered through ongoing transportation charges. This different treatment would create a higher up-front financing requirement for Distributed Gas relative to incremental NTS-sourced gas which could be considered to discriminate against Distributed Gas.

A further drawback of this approach is that the application of allowances within an Economic Test, reflecting the location-related benefits of Distributed Gas, would only offset any liability for payment for connection equipment or deeper network investment. In situations where there were minimal or no such costs, this approach would result in zero up-front payment but would not properly reflect the location-related benefits in any credit.

2. Move to a Shallower Connection Boundary with Exit-based Transportation Charges
Under this approach any network investment and connection equipment costs, (depending upon the definition of the boundary) relating to Distributed Gas would be payable by the Transporter and recovered through the current exit-based transportation charges. Transportation of Distributed Gas would be charged for in the same manner as for transportation of NTS-sourced gas.

The benefit of this approach is that it is consistent with the treatment of connection equipment and network investment relating to NTS-sourced gas. It would also not impose any up-front charges or entry-specific transportation charges on the Distributed Gas and so, for some circumstances, could be considered to be an attractive charging option for Distributed Gas connectees. If the diversification of gas sources for gas distribution supply points is seen as a longer-term benefit for energy supply and utilisation of the gas distribution network then the fact that this charging option may encourage greater levels of Distributed Gas (compared to the first charging option) may be seen as a significant benefit.

A further benefit of this approach is that it does not require any new transportation charges to be developed nor does it require the ongoing use of a connection Economic Test for entry. It also has the lowest development and ongoing implementation costs.

The main drawback of this approach is that the connection equipment and network investment costs relating to a particular Distributed Gas entry point are not reflected in any location-specific connection or transportation charges. By not providing any location-specific charge signal, the approach could lead to Distributed Gas connections which do not contribute to the efficient and economic development of the Distribution Network, requiring significant Transporter investment relative to the level of gas supplied and so leading to significantly higher transportation charges for all users.

A further drawback, conversely, is that whilst the approach does not directly reflect any additional costs it also does not directly reflect any location-related benefits of Distributed Gas in the level of any charges or credits.

3. Move to a Shallower Connection Boundary with Distributed Gas Entry Transportation Charges
Under this approach any network investment and connection equipment costs (depending upon the definition of the boundary) would be payable by the Transporter and recovered through transportation charges. However, under this option the

transportation charges for gas from Distributed Gas entry points would vary from those for NTS-sourced gas so as to reflect the incremental costs and benefits of gas transportation of Distributed Gas relative to NTS-sourced gas. It is unnecessary to split the existing distribution transportation charges into entry and exit-based elements for all transportation; instead it is proposed that, under this option, the existing exit-based transportation charges would continue to apply in all cases but that a Distributed Gas entry transportation charge would be introduced that would reflect the variation in transportation costs for Distributed Gas relative to NTS-sourced gas – this could be either a credit or a debit.

Since the potential costs and benefits will depend upon the particular circumstances and location for each Distributed Gas entry point it would seem appropriate to determine the entry charge or credit separately for each entry point. It may be appropriate to fix the element of the charge relating to connection equipment and network investment costs since these will be determined at the time of connection. The benefits relating to LDZ system utilisation and to reduced NTS exit capacity costs will vary dependent upon the LDZ System and NTS Exit Capacity charge levels and so it would seem appropriate to recalculate these elements at the same time that other charges vary.

The benefits of this approach are that connection equipment and network investment costs incurred by the Transporter for Distributed Gas are treated in the same manner as for NTS-sourced gas, i.e. reflected in the level of transportation charges, and that the level of transportation charges for Distributed Gas better reflects the level of costs incurred than under the more generalised transportation charging option. The level of entry transportation charges for different Distributed Gas locations would provide a signal to the connectee which should facilitate the development of an economic and efficient network. For circumstances where the specific Distributed Gas-related costs incurred by the Transporter are low, this approach would result in an ongoing transportation charge credit for the Distributed Gas so potentially providing the most attractive regime for Distributed Gas to connect, which could lead to the greatest wider benefits relating to the diversification of gas sources.

It is also worth noting that for biomethane Distributed Gas in particular, this option, whereby any Transporter-incurred connection equipment costs are focussed back to the connectee through a transportation entry charge, would seem to better align with the Renewable Heat Incentive for such gas, which may in part be based upon the connectee paying for the network connection equipment costs, than the generalised transportation charging option (Option 2) does.

A drawback of the approach is that it is more complex than the other charging approaches identified, in that individual entry transportation charges would need to be determined and applied on an ongoing basis for each particular Distributed Gas entry point. The implementation cost is likely to be highest for this option.

Structure of Transportation Charges

Under the first two options identified the current structure of transportation charges would be unchanged.

Under the third option a new transportation charge, an entry charge for Distributed Gas entry points, would be introduced. Since any specific costs relating to the Distributed Gas are likely to relate to the level of entry capacity required at the time of connection it may be appropriate to structure any charge or credit as a capacity charge

~~relating to the level of entry capacity requested at the time of connection.~~

4 Relevant Objectives

The Proposer believes that implementation will better facilitate the achievement of **Relevant Methodology Objectives a, b, c and d.**

Proposer's view of the benefits against the Code Relevant Methodology Objectives	
Description of 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;	Yes
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;	Not applicable
b) that, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;	Yes
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	Yes
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).	Not applicable
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/Negative/None

The ~~third option outlined, to~~ introduction~~e~~ of a new entry transportation charge (or credit) for Distributed Gas, would enable the transportation charges to better reflect the costs relating to Distributed Gas. ~~The other options outlined would only directly impact the charges applied through the connection charging methodologies.~~

The proposed methodology changes take account of the likely greater development of Distributed Gas in the coming years.

A charging methodology that better reflects the cost impacts of Distributed Gas may facilitate the development of such gas sources which could in turn better facilitate effective competition between gas shippers.

The modification does not conflict with paragraphs 2, 2A and 3 of Standard Special

Condition A4 of the Transporter's Licence since any change in charges would be applied based on the methodology prevailing at the time.

5 Impacts and Costs

Consideration of Wider Industry Impacts

The modification is likely to have a beneficial impact on the development of Distributed Gas schemes and in particular on the development and usage of biomethane.

Costs

Indicative industry costs – User Pays
Classification of the proposal as User Pays or not and justification for classification
Transporters would need to ensure invoice calculations reflect their obligations. This is a Transporter responsibility and therefore this is not a User Pays modification.
Identification of Users, proposed split of the recovery between Gas Transporters and Users for User Pays costs and justification
Not applicable
Proposed charge(s) for application of Users Pays charges to Shippers
Not applicable
Proposed charge for inclusion in ACS – to be completed upon receipt of cost estimate from Xoserve
Not applicable

Impacts

Impact on Transporters' Systems and Process	
Transporters' System/Process	Potential impact
UK Link	~~Potential r~~Requirement for new charge type
Operational Processes	Potential impact on the process for handling new Distributed Gas connection enquiries
User Pays implications	None

Impact on Users	
Area of Users' business	Potential impact
Administrative and operational	Low
Development, capital and operating costs	Impacts through revised transportation charges
Contractual risks	Low

Impact on Users	
Legislative, regulatory and contractual obligations and relationships	Impacts through revised transportation charges

Impact on Transporters	
Area of Transporters' business	Potential impact
System operation	~~No immediate impact~~ No immediate impact
Development, capital and operating costs	No immediate impact ~~The level of net capital and operating costs relating to Distributed Gas connections could increase.~~
Recovery of costs	No immediate impact~~The recovery of costs relating to Distributed Gas connections would depend upon the option implemented.~~
Price regulation	The transportation ~~and/or connection~~ charging methodologies would be modified
Contractual risks	The proposals could impact on the contractual risks relating to Distributed Gas developments
Legislative, regulatory and contractual obligations and relationships	The proposals could impact on the regulatory and contractual obligations and relationships relating to Distributed Gas developments
Standards of service	None

Impact on Code Administration	
Area of Code Administration	Potential impact
Modification Rules	None
UNC Committees	None
General administration	None

Impact on Code	
Code section	Potential impact
Section Y	Change to charging methodology in respect of Distributed Gas

Where can I find details of the UNC Standards of Service?

In the Revised FMR for Transco's Network Code Modification **0565 Transco Proposal for Revision of Network Code Standards of Service** at the following location: http://www.gasgoverrance.co.uk/sites/default/files/0565.zip

Impact on UNC Related Documents and Other Referenced Documents	
Related Document	Potential impact
Network Entry Agreement (TPD I1.3)	None
Network Exit Agreement (Including Connected System Exit Points) (TPD J1.5.4)	None
Storage Connection Agreement (TPD R1.3.1)	None
UK Link Manual (TPD U1.4)	None
Network Code Operations Reporting Manual (TPD V12)	None
Network Code Validation Rules (TPD V12)	None
ECQ Methodology (TPD V12)	None
Measurement Error Notification Guidelines (TPD V12)	None
Energy Balancing Credit Rules (TPD X2.1)	None
Uniform Network Code Standards of Service (Various)	None

Impact on Core Industry Documents and other documents	
Document	Potential impact
Safety Case or other document under Gas Safety (Management) Regulations	None
Gas Transporter Licence	None

Other Impacts	
Item impacted	Potential impact
Security of Supply	The proposal, by facilitating the development of Distributed Gas, may indirectly enhance the security of supply.
Operation of the Total System	The proposal, by facilitating the development of Distributed Gas, may indirectly impact the operation of the Total System.
Industry fragmentation	None

Terminal operators, consumers, connected system operators, suppliers, producers and other non code parties	The proposal, by facilitating the development of Distributed Gas, may impact on potential producers of Distributed Gas. The proposal, by facilitating the development of Distributed Gas, may help to deliver the UK target reductions in CO2 equivalent emissions to the longer-term benefit of consumers.

6 Implementation

The Proposers opinion is that this Modification Proposal should be implemented at the earliest opportunity consistent with the timing of changes to transportation charges and development of the new charge invoicing arrangements.

~~as soon as reasonably possible following development such that the revised charging basis would apply when transportation charges are subsequently amended. Consequently it is proposed that matters associated with implementation timescales be discussed as part of development of this Modification Proposal.~~

7 The Case for Change

None in addition to that identified above.

8 Legal Text

Legal text:

UNIFORM NETWORK CODE – TRANSPORTATION PRINCIPAL DOCUMENT
SECTION Y – CHARGING METHODOLOGIES
Part B – DN TRANSPORTATION CHARGING METHODOLOGY

Amend as follows:

Changed marked version shown at:
www.gasgovernance.co.uk/0391/260312

9 Recommendation

The Proposer invites the ~~Panel~~ Workgroup to:

- ~~DETERMINE that~~to assess Modification 0391 ~~progress to Workgroup.~~