

Modification proposal:	Uniform Network Code (UNC) Modification 391 (UNC391): Distributed Gas Charging arrangements		
Decision:	The Authority's ¹ decision is that this proposal be made. ²		
Target audience:	The Joint Office, Gas Distribution Network operators (GDNs), Gas Shippers and interested parties		
Date of publication:	21 September 2012	Date of publication:	To be confirmed by the Joint Office

Background to the modification proposal

It is envisaged that significant numbers of biomethane facilities may look to connect to the distribution systems in the near future. It is also likely that developers of other types of gas, such as landfill or shale, may want to connect directly to the distribution system. At present distribution transportation charges are based on the premise that Gas enters the distribution system from the National Transmission System (NTS). For distributed gas which enters the distribution system directly there is a need for the transportation charges to take account of the different system usage and costs involved.

UNC modification proposal 391 (UNC391) was raised by National Grid Gas Distribution (NGG) at to address some of the key issues identified within the industry. Ofgem's Energy Market Issues for Biomethane (EMIB) industry working group also considered some of these issues and has been interacting closely with the UNC391 workgroup.

UNC391 seeks to make changes to the Local Distribution Zone (LDZ) System Charging Methodology (the "methodology") to more accurately reflect the costs associated with the entry of distributed gas directly into the distribution networks. Any potential changes to distribution networks connection charging arrangements are outside the scope of this modification, although the issue was considered in formulating this proposal and no justifiable rationale to change the deep connection boundary was found by the industry at this time.

Under the methodology, NGG, and the other Gas Distribution Network (GDN) operators, levy: LDZ system capacity and commodity charges; a LDZ customer charge; and, from the 1 October 2012, an Exit Capacity NTS (ECN) charge on gas shippers flowing gas on their networks. The proposer considers that there are differences in the costs and system utilisation in respect of distributed gas which merit separate consideration within the methodology. These differences relate to the LDZ system charge and to the Exit Capacity NTS (ECN) charge. It is not considered that distributed gas entry will affect the LDZ customer charge.

To reflect the differences, 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.

The opex costs 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 GDN transportation charges would continue to apply as at present (i.e. unchanged).

¹ The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.

² This document is notice of the reasons for this decision as required by section 38A of the Gas Act 1986.

Network Entry Equipment – Unit Rate for Opex Costs

The proposal does not change the boundary determining the capital costs which the connectee would be charged for at the time of the connection i.e. the current deep connection regime would continue to apply. It would however reflect the particular level of entry-related equipment operating costs for each distributed gas entry point in the level of the unit entry commodity charge rate relating to opex costs.

The unit rate will be determined from the forecast operating costs relating to the entry facilities operated by the GDN, as well as 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.

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 rather than through redetermination from the underlying factors. The methodology however allows for redetermination (by the GDN) from the underlying factors for any future period, to cater for situations where the forecast costs or flows would be expected to differ substantially from those last used. This could be due to possible changes to entry facility equipment; operating processes; network use or configuration changes affecting within-network compression usage.

LDZ System Use - Unit rate for LDZ System Credit

The standard LDZ system capacity and commodity charges are based on the use of the different LDZ system tiers entry flows by supply points of different sizes which reflect gas entering the GDN system from the NTS. The rationale for this credit is that gas from the LDZ system entry points may enter directly into a lower pressure tier than the local transmission system and so may use 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 proposed to provide a credit for LDZ system entry flows. This is so that the net (lower) transportation charge in respect of gas transported from a LDZ system entry point to a GDN supply point reflects the different typical system use.

The latest LDZ system charges (post April 2012) are based on the methodology consulted on within DNPC08³ and reflect analysis of LDZ system tier costs and usage for each GDN individually. The derived charges are based on the 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 scaled to the LDZ system charges for the appropriate period. Most of the variation is in the use of the low pressure tier and the use of the MP, IP and LTS⁴ tiers is fairly stable across most of the supply point sizes. The modification therefore proposes to use the typical costs for these tiers as the basis for the credits.

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

From October 2012, the cost incurred by the GDN in respect of NTS exit capacity will be recovered through a new LDZ ECN (Exit Capacity NTS) transportation capacity charge,

³ <http://www.gasgovernance.co.uk/sites/default/files/DNPC08D.pdf>

⁴ Different pressure tiers in gas transportation – Medium Pressure, Intermediate Pressure and Local Transmission System

payable for transportation to all GDN supply points and linked to the characteristics of supply points (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 GDN to ensure capability to flow gas into the distribution network at peak times. It is deemed impractical to link particular LDZ system entry points to NTS exit capacity booking levels at particular offtakes. It is thus proposed that the credit is valued by reference to the average GDN ECN charge for a period, since the ECN charge will be the GDN's 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.

The unit rate is to be based on the average ECN charge for the whole GDN multiplied by a dependability factor and then converted into a commodity equivalent charge.

UNC Modification Panel's recommendation

The UNC Modification Panel considered this modification on 16 August 2012 and unanimously decided to recommend that UNC391 be implemented.

The Authority's decision

We have considered the issues raised by the modification proposal and the Final Modification Report (FMR) dated 16 August 2012. We have considered and taken into account the responses to the Joint Office's consultation which are attached to the FMR⁵. We have concluded that:

1. implementation of UNC391 will better facilitate the achievement of the relevant methodology objectives⁶; and
2. directing that the modification be made is consistent with our principal objective and statutory duties⁷.

Reasons for the Authority's decision

With the expected increase in biomethane gas and other distributed gas sources over the next 10 years, it is important to ensure that the commercial regime remains cost reflective for these gas entry points and that the regime promotes competition between gas shippers. We consider this approach to transportation charging will facilitate commercial decision making.

We have assessed the modification against the relevant methodology objectives. We consider that this modification has a positive impact on objectives (a), (b) and (c) as set out under Standard Special Condition A5 (5) of the Licence, while its impact on the other objectives is neutral.

(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.

⁵ UNC modification proposals, modification reports and representations can be viewed on the Joint Office of Gas Transporters website at www.gasgovernance.com

⁶ As set out in Standard Special Condition as A5 (5) of the Gas Transporters Licence

⁷ The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Gas Act 1986.

The Modification will allow for the different level of usage of gas entering from distributed gas entry points, and the associated costs, to be reflected in the transportation charges. In addition, the modification will ensure that specific operating costs associated with supporting a particular distributed gas entry point are reflected in the charges levied upon shippers entering gas at that point, and so will be more cost reflective than if no such provision was introduced.

This modification introduces a LDZ System Entry Commodity Charge which reflects the cost impact of distributed gas entry in three different ways:

- unit rate for Opex costs – the level of entry-related equipment operating costs for each distributed gas entry point will be reflected in the unit entry commodity charge relating to opex costs;
- unit rate for LDZ system credit – a utilisation credit will reflect lower LDZ utilisation for gas entering from distributed gas entry points; and
- unit rate for ECN credit – distributed generators will potentially receive a credit to reflect the fact that they provide an alternative to NTS Exit capacity to ensure the flow of gas into the DN network at peak times. The ECN charges will come into force from October 2012.

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

New sources of gas have recently been directly connected to the gas distribution system and, with appropriate commercial arrangements in place, growth in the number of such gas connections is expected over the coming years. The modification enables the charging methodology to take account of the particular characteristics associated with such gas entry. Absent the proposal, these characteristics would not be accommodated within the methodology, meaning that gas shippers flowing gas through distributed gas entry points could face non cost reflective LDZ system charges. In our view the proposal removes this potential barrier to the development of distributed gas.

(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.

A charging methodology which better reflects the effect on costs of distributed gas facilitates more appropriately allocates costs within the GB gas market. This supports the development of effective competition. In addition, the modification provides confidence to potential entrants about the charging regime that will be faced by distributed gas. This certainty and appropriate allocation of costs may facilitate the development of alternative gas sources. This could in turn better facilitate more effective competition between gas shippers, since additional sources of gas will be available to the market.

Decision notice

In accordance with Standard Special Condition A11 of the Gas Transporters Licence, the Authority hereby directs that modification proposal UNC 391 be made.

Andrew Burgess

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Signed on behalf of the Authority and authorised for that purpose