

## **CONSULTATION DOCUMENT**

**Modification Proposal to the Gas Transmission  
Transportation Charging Methodology**

**NTS GCM 03:**

**Introduction of an SO Commodity Charge for NTS  
Storage Facilities**

**27th September 2006**

<b>EXECUTIVE SUMMARY .....</b>	<b>31</b>
<b>1. INTRODUCTION .....</b>	<b>2</b>
<b>2. NATURE OF PROPOSAL.....</b>	<b>2</b>
<b>3. PROPOSED METHODOLOGY FOR SO STORAGE COMMODITY CHARGE.....</b>	<b>3</b>
<b>4. JUSTIFICATION.....</b>	<b>4</b>
Assessment against Licence Objectives.....	4
Assessment against EU Gas Regulations .....	4
<b>5. LEVEL AND IMPACT OF THE CHARGE.....</b>	<b>5</b>
<b>6. IMPLEMENTATION OF THE CHARGE .....</b>	<b>6</b>
<b>7. QUESTIONS FOR CONSULTATION .....</b>	<b>6</b>
<b>APPENDIX A.1 MODIFIED TEXT FOR TRANSPORTATION CHARGING METHODOLOGY STATEMENT.....</b>	<b>7</b>
<b>APPENDIX A.2 MODIFIED TEXT FOR STATEMENT OF TRANSPORTATION CHARGES.....</b>	<b>8</b>

## Executive Summary

This document sets out for consultation National Grid NTS's proposals for revising the Gas Transmission Transportation Charging Methodology (the "Charging Methodology") in regard to the application of the SO commodity charge at NTS storage facilities. The proposal seeks to introduce a new SO commodity charge that would apply to all NTS storage input and output gas flows from April 2007. A UNC modification proposal will also be raised to seek to ensure the changes to the charging methodology proposed in this paper are reflected in the UNC.

National Grid NTS is bringing forward this proposal following the Authority approval of PC73 ("Structure of the SO Commodity Charge") but subsequent rejection of a number of Network Code modifications that sought to provide for the SO commodity charge to be levied on NTS storage flows, in addition to all other NTS entry & exit flows. The proposed methodology in this paper seeks to address Ofgem's reasons for rejection of the previous modification proposals.

National Grid NTS proposes that :

- A new SO commodity charge is introduced that would apply to all storage input and output gas flows from April 2007 and would amend the charging methodology which currently provides for the application of the "full" standard SO commodity rate on NTS storage flows.
- The proposal would maintain the current charging arrangement in respect of storage own-use-gas quantities which currently attract the existing full SO commodity charge.
- The suggested methodology for the structure of a discounted SO commodity charge for storage points is based on a cost-reflective approach that targets a share of the SO costs that are driven by the operation and ongoing support of NTS storage facilities.
- The proposal would place the methodology and rules for the determination of the particular SO commodity rate to which the relevant daily quantities would apply within the NTS Charging Methodology.
- The proposal does not change the target level of revenue to be recovered through NTS SO commodity charges<sup>1</sup>.

National Grid NTS has brought forward this proposal as it believes that storage points should not be excluded from attracting an SO commodity charge and that this proposal would ensure consistency with its preferred approach of recovering relevant SO costs via SO commodity charges at all system entry and exit points.

This consultation has been placed on National Grid's industry information website : <http://www.nationalgrid.com/uk/Gas/Charges/>

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<sup>1</sup> The Standard SO commodity rate, the proposed SO storage commodity rate, the NTS Optional commodity rate, & the St Fergus compression charge

## 1. Introduction

- 1.1. In 2002, Transco raised a Pricing Consultation Paper PC73 (“Structure of the SO Commodity Charge”) that was subsequently not vetoed by Ofgem and provided for the SO commodity charge to be levied on all entry and exit flows, including storage, from October 2003. However, the associated “enabling” Network Code modifications (532,545,547)<sup>1</sup> were all vetoed by Ofgem<sup>2</sup> on the basis that Users at storage sites should not be expected to incur the full SO commodity charge since gas flows already attract the SO commodity charge on both entering and exiting the system. They stated in their decision letter that “...in principle, storage flows should not be excluded from the application of the SO commodity charge ..” and that “..consideration could be given to applying a discounted SO commodity charge to storage users so as to minimise the potential for double charging.”
- 1.2. Hence the charging methodology currently provides for the application, in principle, of the “full” standard SO commodity charge to NTS storage flows. This proposal contemplates an amendment to the charging methodology such that in respect of NTS storage flows, the standard commodity rate is replaced with a new SO storage commodity rate

## 2. Nature of Proposal

- 2.1. It is proposed that:
  - A new SO commodity charge is introduced that would apply to all storage input and output gas flows from April 2007.
  - The proposal would maintain the current charging arrangement in respect of storage own-use-gas quantities which currently attract the existing full SO commodity charge.
  - The suggested methodology for the structure of a discounted SO commodity charge for storage points is based on a cost-reflective approach that targets a share of the SO costs that are driven by the operation and ongoing support of NTS storage facilities.
  - The proposal would place the methodology and rules for the determination of the particular SO commodity rate to which the relevant daily quantities would apply within the NTS Charging Methodology.
- 2.2. The proposal does not change the target level of revenue to be recovered through the NTS SO commodity charges<sup>3</sup>.

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<sup>1</sup> “Application of SO Commodity Charges to all NTS Loads”, “Application of SO Commodity Charges to Storage Facilities”, “Reconciled SO Commodity Charges at Storage Facilities”

<sup>2</sup> In Ofgem’s decision letter No. 0532

<sup>3</sup> The Standard SO commodity rate, the proposed SO storage commodity rate, the NTS Optional commodity rate, & the St Fergus compression charge

### 3. Proposed Methodology for SO storage commodity charge

- 3.1. Those SO costs that are reflected in the level of the standard SO commodity charge consist of shrinkage, operating margins, SO internal costs, the outcome of the SO incentive arrangements (revenue or cost), exit capacity TO costs, and any previous over/under recovery. SO costs relating to residual gas balancing and capacity buy-back are subject to neutrality processes defined in the UNC and are therefore not deemed relevant for the setting of SO commodity charges.
- 3.2. The suggested methodology for the structure of a new SO commodity charge for storage points is based on identifying which of the relevant SO costs described above are incurred as a result of the provision and use of NTS storage facilities. The methodology apportions any relevant costs in a way that ensures equitability between Users at all entry and exit points and seeks to avoid any price distortions.
- 3.3. Each of the relevant cost elements are listed below, and the rationale for classifying whether these costs are included in the new SO storage charge or not is also included :

*Shrinkage* – this component is comprised of two main elements; compressor gas and unaccounted for gas. Those costs relating to gas compression have been excluded as the use of compression is a function of distance gas travelled, and it is considered that gas contained in storage has not necessarily used more of the NTS than gas that has bypassed storage. Unaccounted for gas largely arises from errors in metering equipment used to measure gas flows into and out of the NTS. Storage meters will contribute to such costs on an equal basis per unit of flow as all other entry and exit meters, and hence it is felt reasonable to include these costs within the new storage commodity charge.

*Internal costs* - Internal costs relate to staff, IT systems, and ongoing sustainable costs (e.g. property) and have no direct cost driver. Therefore it is considered that a portion of the costs should be attributed to storage sites on the basis that they do incur a share of the costs associated with administration and data handling.

*Operating margins* - the costs of operating margins are driven mainly by the need to support firm exit flows at or around peak periods Hence these costs are not related to exit flows at storage facilities as these are classified as interruptible sites. Therefore they have not been included.

*Exit Capacity TO costs* - these relate to charges foregone, as a result of the TO not levying a capacity charge on interruptible sites, and represents a cost on the SO who funds the TO for the “lost” revenue. Since all storage sites are interruptible, it would seem appropriate that this cost element is included.

*Revenue Adjustments* - these are comprised of any SO under/over-recovery and the outcome of the SO incentive schemes, the combination of the two elements resulting in either a net cost or revenue. As the proposed SO storage commodity charge is a variation of the standard commodity charge, and in the absence of any identifiable cost-drivers, it is proposed that the new storage commodity charge will be modified for the purposes of any revenue adjustments. Clearly the outcome of the TPCR may result in a change to the level and scope of the SO incentive schemes. However, it is anticipated that any changes to the components of the incentive scheme would require changes to the precise

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calculation of the SO storage commodity charge rather than a change to the proposed methodology.

- 3.4. The methodology and in particular the cost-apportionment approach avoids storage users bearing an inappropriate share of the overheads associated with operating the NTS and minimises the potential for double counting. This is also consistent with Ofgem's views expressed in its decision letter on Network Code modification 0532.
- 3.5. The resultant commodity rate will be based on a forecast of the relevant SO costs to be recovered and a forecast of the NTS storage entry and exit flows. Both of these forecasts will be subject to uncertainty, and any consequential under/over recovery will be included within the SO 'K' mechanism and the year on year adjustment of the standard SO commodity charge.

#### **4. Justification**

##### **Assessment against Licence Objectives**

The National Grid plc Gas Transporter Licence in respect of the NTS requires that proposed changes to the Charging Methodology shall achieve the relevant methodology objectives. We believe that the proposals contained in this paper would satisfy the relevant objectives as follows :

- 4.1. Reflect the costs incurred by the licensee in its transportation business;

The proposed new charge has been derived based on a methodology that identifies those SO costs that can be readily attributed to the administration and support of storage sites by the system operator, and therefore is considered an approach that better reflects the costs incurred by the NTS. The proposal should also address concerns that the alternative options of either applying the full SO commodity charge at storage or continuing to levy a zero commodity charge were not appropriate.

- 4.2. So far as is consistent with (1) properly take account of developments in the transportation business;

The increasing importance and number of NTS storage facilities has highlighted the need to introduce a specific SO storage commodity charge set at a level appropriate to the impact on the relevant SO costs of supporting storage sites. Furthermore, introduction of the charge would ensure consistency with the intent of PC73.

- 4.3. So far as is consistent with (1) and (2) facilitate effective competition between gas shippers and between gas suppliers.

The introduction of the charge would remove the present anomaly in which Users at storage sites avoid SO commodity charges, and yet the charge has been set at a level that is not expected to distort shipper behaviour regarding the use of storage facilities, thus facilitating shipper/supplier competition.

National Grid NTS is obliged to keep its Charging Methodology under review at all times for the purposes of ensuring that it achieves the relevant objectives.

##### **Assessment against EU Gas Regulations**

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- 4.4. EC Regulation 1775/2005 on conditions for access to the natural gas transmission networks (binding from 1 July 2006) states that the principles for network access tariffs or the methodologies used to calculate them shall:
- Be transparent
  - Take into account the need for system integrity and its improvement
  - Reflect actual costs incurred for an efficient and structurally comparable network operator
  - Be applied in a non-discriminatory manner
  - Facilitate efficient gas trade and competition
  - Avoid cross-subsidies between network users
  - Provide incentives for investment and maintaining or creating interoperability for transmission networks
  - Not restrict market liquidity
  - Not distort trade across borders of different transmission systems.
- 4.5. National Grid NTS believes that its charging proposals put forward in this paper are consistent with the principles listed above in that they would not be expected to lead to market distortion by discouraging the use of storage, the charge would be applied consistently across all NTS storage sites, and it would reflect the costs incurred by the network operator.

## **5. Level and impact of the Charge**

- 5.1. Based on current estimates of SO costs and annual storage throughput flows for 2006/7, and if the proposed methodology change was now in place, the new SO storage commodity charge rate would be set at 0.0062 p/kWh, and would generate SO revenue of £4.5m for this formula year.
- 5.2. In order to maintain collectable SO commodity revenue in line with target SO revenue, this would require a lowering of the standard SO commodity charge from 0.0114 p/kWh<sup>1</sup> to 0.0112 p/kWh, i.e. a reduction of 1.8%.
- 5.3. At this stage, there is uncertainty of the likely level of the proposed SO storage commodity rate that would apply from 1 April 2007, as this would be subject to the finalising of the allowable revenues as part of the Transmission Price Control Review process, forecasts of gas costs, and the level of SO under/over-recovery during the current financial year.
- 5.4. The St. Fergus compression charge and the NTS Optional Commodity tariff would be unaffected.

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<sup>1</sup> Effective from 1<sup>st</sup> October 2006

## 6. Implementation of the Charge

- 6.1. It is anticipated that the proposed SO charge would be based on Storage Users' daily allocated quantities, both on entry and exit, (known as "UDQIs" and "UDQOs"), and that these chargeable amounts would be derived separately i.e. where a User flows gas in both directions on a particular gas day there will be no netting off. This approach of calculating commodity charges on commercial flows rather than physical flows would be consistent with the process adopted for deriving commodity charges for bi-directional interconnectors.

## 7. Questions for Consultation

National Grid NTS invites views on whether the proposed changes to our Transportation Charging Methodology meet National Grid Gas's relevant GT Licence objectives, specifically that:

- a new SO commodity charge is introduced that will apply to storage input and output gas flows
- that the charge becomes effective from 1 April 2007

The closing date for submission of your responses is **xxxxx October 2006**.

Your response should be e-mailed to [dominic.j.harrison@uk.ngrid.com](mailto:dominic.j.harrison@uk.ngrid.com) or alternatively by post to Dominic Harrison, Regulatory Frameworks, National Grid, NG House, Gallows Hill, Warwick, CV34 6DA. If you wish to discuss any matter relating to this charge methodology consultation then please call ☎ 01926 656316.

Responses to this consultation will be incorporated within National Grid NTS's conclusion report. If you wish your response to be treated as confidential then please mark it clearly to that effect.

## Appendix A.1 Modified text for Transportation Charging Methodology Statement

### 2.6 NTS SO Commodity Charge

This is a charge per unit of gas transported by the NTS and is applied independently at entry and exit points. The charge is payable on both entry and exit flows. The target revenue to be raised by the charge is the NTS SO allowed revenue, including any incentive additions or deductions, less any revenue to be obtained from the St. Fergus compression charge and the Optional NTS commodity tariff.

The NTS SO commodity charge is applied in two different forms :-

1. The standard NTS SO commodity charge. This charge is applied to all NTS entry and exit points but is not applied at storage facilities (apart from storage “own use gas” – see below). The standard commodity rate is set by dividing the target revenue less any revenue collected through the NTS SO Storage commodity charge (see below) by forecast system throughput.
2. The discounted NTS SO storage commodity charge. This charge is levied on all storage injection and withdrawal flows (net of storage “own use gas” quantities), and will apply at those NTS storage and constrained LNG locations given in Table 2.2.4. The charge is set by an assessment of the relevant SO costs that are driven by the ongoing support of storage sites, divided by a forecast of the annual storage flows.

At NTS storage facilities, an amount of gas is utilised as part of the operation of the facility, known as storage “own use” gas. This is effectively the difference between the quantity that is injected into storage and the quantity that is available for withdrawal back into the system. For the purposes of charging, the gas is treated as leaving the NTS at that exit point, and hence attracts the standard NTS SO commodity charge, according to the following formula :

$$\text{Charge payable by a User} = (\text{SUG} / n) * \text{CR}$$

where :

SUG is the quantity of storage use gas attributed to the User and is notified to National Grid NTS pursuant to the terms of the Storage Connection Agreement in respect of the NTS Storage Facility;

n is the number of days in the calendar month in which such Day falls; and

CR is the standard NTS SO Commodity Rate (i.e. that rate that would apply in relation to an NTS Connected System Exit Point in the event the gas flowing out of the NTS was not being delivered into a Storage Facility).

## Appendix A.2 Modified Text for Statement of Transportation Charges

### 2.5.2 NTS SO Commodity Charge

The NTS SO commodity charge is a uniform rate, independent of entry and exit flows, and is levied on both NTS entry and NTS exit flows. The rate is offered in two different forms, the standard rate and the discounted rate. The standard rate is levied on all NTS entry points and exit points, excluding storage facilities, where the standard charge is only applied in respect of storage “own use” gas. The discounted rate is applied to storage input and output quantities (net of storage “own use” gas). The rates are identified in the schedule below.

<b>Invoice</b>	<b>Charge Code</b>
COM	NCO

	<b>Pence per kWh</b>
Standard SO Exit	0.0114
Storage SO Exit	0.0062

<b>Invoice</b>	<b>Charge Code</b>
ECO	NCE

	<b>Pence per kWh</b>
TO Entry	0.0164
Standard SO Entry	0.0114
Combined Rate	0.0278
Storage SO Entry	0.0062