

Stage 01: Proposal

XXXX Demand Data  
for the NTS Exit (Flat)  
Capacity Charging  
Methodology

Defines the demand flow data, used within the NTS Charging  
Transportation Model for calculating NTS Exit (Flat) Capacity  
charges from 1<sup>st</sup> October 2012, as the forecast undiversified 1-  
in-20 peak day demand.

The Proposer recommends  
This Proposal is sent directly to Consultation

Medium Impact:  
All participants holding NTS Exit (Flat) Capacity affected

Low Impact:  
UNC Panel, the Authority, Workstreams and Joint Office

What stage is  
this document  
in the process?

01 Proposal

02 Workstream  
Report

03 Draft Modification  
Report

04 Final Modification  
Report

Use file/properties/  
custom to adjust the  
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## About this document:

This document is a Proposal, which will be presented by the Proposer to the Panel on 20<sup>th</sup> January 2011. The Panel will consider the Proposer's recommendation, and agree whether this Proposal should proceed to consultation or be referred to a Workgroup for development.



### Any questions?

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## 1 Summary

### Why Change?

A supply and demand match is required within the NTS charging Transportation Model, which is used for NTS capacity charge setting purposes. The data used for NTS Exit (Flat) Capacity charge setting purposes from 1<sup>st</sup> October 2012 in accordance with the NTS charging methodology, is as follows;

- The modelled demand flow is the obligated (baseline plus incremental) level of NTS Exit (Flat) Capacity, other than at bi-directional sites with physical entry capability (Storage, IUK, and BBL) where the modelled demand flow is zero.
- The modelled supply flow is derived from the supply/demand data set out in the most recent Ten Year Statement for each year for which prices are being set.

Increases in the obligated level of NTS Exit (Flat) Capacity and reductions in the level of NTS available supplies have resulted in an unworkable charging methodology as the aggregate obligated NTS Exit (Flat) Capacity level (at non bi-directional sites) is greater than the available NTS Supplies.

### Solution

It is proposed that;

- For bi-directional sites the modelled demand will be the undiversified NTS forecast 1-in-20 peak day demand.
- For bi-directional sites with physical entry capability (storage, IUK, and BBL) the forecast is zero.
- For bi-directional sites with no physical entry capability (Moffat) the forecast is the undiversified NTS forecast 1-in-20 peak day demand.
- For DN offtakes, the modelled demand will be the undiversified NTS forecast 1-in-20 peak day demand for the DN, and will be prorated to the relevant DN offtakes based on the booked NTS Exit (Flat) Capacity.
- For other directly connected (DC) offtakes (NTS Power Generation & Industrials) the forecast will be the obligated (baseline plus incremental) capacity level other than where DC sites have not been commissioned or have been decommissioned.

This would ensure that a supply and demand match could be achieved for charge setting purposes. Subject to the approval of this Modification Proposal, National Grid would publish an undiversified NTS forecast 1-in-20 peak day demand in the Ten Year Statement from 2011, consistent with this proposal, to match the Charging Methodology.

### Impacts and Costs

The proposal represents a change to NTS internal manual processes and hence there are no systems impacts and no costs have been identified for Users.

#### What Supply Data is used for NTS Capacity Charge setting purposes?

The nodal supply data for the Transport Model is derived from the supply data set out in the most recent Ten Year Statement for each year for which prices are being set. The aggregate storage and Interconnector flows will be adjusted such that a supply and demand balance is achieved. This initial supply and demand match is achieved by reducing supplies in a merit order to match the forecast demand.

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## Implementation

Implementation is required primarily such that prices can be set prior to 1<sup>st</sup> May 2012 such that they become applicable from 1<sup>st</sup> October 2012. National Grid is required to produce indicative prices ahead of the annual NTS Exit (Flat) Capacity application windows.

## The Case for Change

The Proposal would result in a workable Charging Methodology for the derivation of NTS Exit Capacity Prices.

Using demand flow data within the NTS charge setting Transportation Model would better reflect connected NTS load at peak conditions and would better reflect the data used within the NTS planning and investment processes. As a consequence of using this data, charges should better reflect the cost incurred in making NTS Exit (Flat) Capacity available.

## Recommendations

[TBA]

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## GCM05

The enduring NTS Exit (Flat) Capacity charge setting arrangements were introduced via NTS Gas Charging Methodology proposal GCM05.

For more information see; [http://www.nationalgrid.com/uk/Gas/Charges/consultations/archive\\_consultation\\_papers/](http://www.nationalgrid.com/uk/Gas/Charges/consultations/archive_consultation_papers/)

## 2 Why Change?

A supply and demand match is required within the NTS charging Transportation Model, which is used for NTS capacity charge setting purposes. The data used for NTS Exit (Flat) Capacity charge setting purposes from 1<sup>st</sup> October 2012 in accordance with the prevailing NTS charging methodology, is as follows;

- The modelled demand flow is the obligated (baseline plus incremental) level of NTS Exit (Flat) Capacity, other than at bi-directional sites with physical entry capability (storage, IUK, and BBL) where the modelled demand flow is zero. This equates to a level of 7800 GWh/day for 2012/13.
- The modelled supply flow is derived from the supply/demand data set out in the most recent Ten Year Statement for each year for which prices are being set.

Through the Gas TCMF, issues associated with the NTS Exit (Flat) Capacity price setting methodology, to be used from 1st October 2012, were raised;

### Issue One - Demands vs. Supplies

The first issue identified was that using baseline plus incremental capacity, for the demand flow data, could create a demand level so high that the modelled supplies would not be able to achieve the required supply/demand balance, resulting in an unworkable methodology. This has proved to be the case as a consequence of the updated 2010 Ten Year Statement supply data. The modelled demand flow - the obligated (baseline plus incremental) level of NTS Exit (Flat) Capacity, other than at bi-directional sites with physical entry capability (storage, IUK, and BBL) where the modelled demand flow is zero, equates to a level of 7800 GWh/day for 2012/13. The Ten Year Statement available supplies for 2012/13, taking into account IUK capability, are 7718 GWh/day.

### Issue Two - Price Variability

The second issue identified was the variability of NTS Exit Capacity prices at the southern Scottish and Northern DN NTS Exit Points, and the Moffat NTS Exit Point.

This variability occurs when the modelled supplies at St. Fergus are insufficient to meet the higher Scottish and Northern DN, and Moffat modelled demand flows. This is a consequence of reduced St Fergus supplies and baselines plus incremental NTS Exit (Flat) Capacity being used to model demand flows. As a result, a greater proportion of supply flows are required from the south of the network to meet the demand further north, leading to higher NTS Exit (Flat) Capacity prices.

### Issue Three - Baseline may no longer be reflective of “connected load”

In developing the enduring NTS Exit (Flat) Capacity charge setting arrangements, the intention was to better reflect the “connected load”, recognising that the concepts of Firm and Interruptible capacity were no longer applicable. The resultant move towards the use of the baseline plus incremental capacity as the demand flow level may now no longer be reflective of the “connected load”.

In respect of the DN’s, some offtakes are not booked up to the baseline level but other offtake bookings have triggered incremental capacity, with the aggregate baseline plus incremental level being in excess of the forecasted 1-in-20 peak day demand.

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For Moffat, the aggregate booking level has triggered a significant amount of incremental capacity despite the capability of the downstream infrastructure being far less than the amount of capacity booked.

Offtake Data (GWh/day) for 2012/13		
Offtake	Obligated Capacity	Forecast Demand
Moffat	529	273
DN	5466	4344

DRAFT



## Gas TCMF Discussions and Options

Following discussions at the Gas Transmission Charging Methodologies Forum (TCMF) between May and September 2010, discussion paper GCD09 was issued to seek views on the merits of a number of alternative options for modelling supply and demand flows within National Grid's Transportation Model.

It is the modelled supply and demand flows, along with the network pipe distances, that drive the calculation of the long run marginal costs (LRMCs) and hence the price differences across the NTS.

For the avoidance of doubt, the options identified in GCD09 did not relate to the capacity data used in the Tariff section of the Transportation Model, which uses Baseline (TO) NTS Exit (Flat) Capacity data at all NTS Exit Points in order to ensure that prices are adjusted so that the implied revenue level (price multiplied by the baseline (TO) NTS Exit (Flat) Capacity quantity) equals National Grid's target TO exit revenue. This ensures that if baseline (TO) NTS Exit (Flat) Capacity is fully booked, the resulting capacity revenue would equal National Grid's target TO exit revenue. If baseline (TO) NTS Exit (Flat) Capacity is not fully booked, revenue associated with unsold baseline capacity will be collected from a TO Exit Commodity Charge.

In respect of demand flows, the options identified in GCD09 were;

- Baseline plus Incremental NTS Exit (Flat) Capacity
- Annual NTS Exit (Flat) Capacity Bookings
- Forecast
- Maximum Supply Point Offtake Rate (MSPOR)
- Capability of the downstream facility
- Zero (currently used for physically bi-directional sites with physical entry capability: storage, IUK, and BBL)

It was anticipated that a combination of these options could be applied such that each different offtake type might be modelled by a separate data source.

In respect of beach/UKCS supply flows, the options identified were;

- Ten Year Statement forecast supplies (no change from current method)
- Baseline supply data
- Average of Ten Year Statement forecast data
- Ten Year Statement Forecast Supplies (Data from Ten Year Statement before the first Y+4 Enduring Annual NTS Exit (Flat) Capacity applications for the relevant Gas Year)

2.6.4 For the purposes of the Code, in relation to the Total System, any part of the Total System, a System or any part of a System, and in respect of any Gas Year:

"1-in-20 peak day demand" is the peak day demand that, in a long series of winters, with connected load being held at the levels appropriate to the winter in question, would be exceeded in one out of 20 winters, each winter being counted only once;

Respondents to NTS charging discussion paper GCD09 were asked for views on these options, for the purposes of developing charging methodology proposals.

Feasibility of Demand Flow Options	
Baseline plus Incremental NTS Exit (Flat) Capacity	This is the prevailing methodology applicable from 1 <sup>st</sup> October 2012 and is no longer workable if used for all NTS Exit Points.
Annual NTS Exit (Flat) Capacity Bookings	Daily bookings and some annual bookings would not be available at the time of setting charges. This option may result in Users, relying on the daily and off-peak products, not appropriately contributing to TO costs.
Forecast	This option represents the most realistic expectation of maximum flow.
Maximum Supply Point Offtake Rate (MSPOR)	This option is not anticipated to result in a workable methodology due to the high aggregate level of MSPOR.
Capability of the downstream facility	No definitive value for capability, other than the obligated (baseline plus incremental) capacity level was identified for offtakes other than interconnectors.
Zero (currently used for bi-directional sites with physical entry capability: storage, BBL, and IUK)	This option represents the prevailing peak forecast for storage offtakes, BBL and IUK.

Respondents to GCD09 suggested that there may be some benefit in waiting for the 2011 NTS Exit (Flat) Capacity reduction window before raising a charging methodology proposal; however, the level of obligated (baseline plus incremental) capacity would not be reduced as a result of capacity reductions.

Respondents to GCD09 suggested that there may be some benefit in waiting for the impact of the application of NTS exit capacity substitution following the 2011 NTS Exit (Flat) Capacity application window before raising a charging methodology proposal. The level of obligated (baseline plus incremental) NTS Exit (Flat) Capacity would only reduce as a result of unsold NTS Exit (Flat) Capacity being substituted for incremental NTS Exit (Flat) Capacity with a high exchange rate. This seems unlikely to have a significant impact on the level of obligated NTS Exit (Flat) Capacity given the level of unsold capacity and the potential for incremental NTS Exit (Flat) Capacity. It should be noted that if NTS exit capacity substitution occurred with a one to one ratio then there would be no change in the obligated NTS Exit (Flat) Capacity level as a result of incremental capacity being met through substitution.

Based on responses to the GCD09 discussion paper and from analysis of the options, National Grid has concluded that modelling the demand flows as forecast demand would be the most appropriate solution.

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Feasibility of Supply Flow Options	
Ten Year Statement forecast supplies (no change from current method)	This is the prevailing methodology applicable from 1 <sup>st</sup> October 2012 and would remain viable workable should demands be modelled at the forecast level. This option represents the most realistic expectation of maximum flow.
Baseline supply data	This option may allow for a supply demand balance should demand flows continue to be modelled as the obligated (baseline plus incremental) capacity. This option does not represent a realistic expectation of maximum flow.
Average of Ten Year Statement forecast data	This option may have the potential to reduce price volatility but further analysis has been requested.
Ten Year Statement Forecast Supplies (Data from Ten Year Statement before the first Y+4 Enduring Annual NTS Exit (Flat) Capacity applications for the relevant gas year)	This option may have the potential to reduce price volatility but further analysis has been requested. Using the data from the time of the relevant investment decisions relating to NTS Exit (Flat) Capacity may be more cost reflective.

Based on responses to the GCD09 discussion paper and from analysis of the options, National Grid has concluded that making changes to the modelled supply flows would not be appropriate at this time. National Grid will carry out further analysis, as requested, and will consider the consistency of the data used for both NTS Entry and Exit capacity charge setting purposes before bringing forward further proposals.

## The Proposal

It is proposed that;

- For bi-directional sites the modelled demand will be the undiversified NTS forecast 1-in-20 peak day demand.
- For bi-directional sites with physical entry capability (storage, IUK, and BBL) the forecast is zero.
- For bi-directional sites with no physical entry capability (Moffat) the forecast is the undiversified NTS forecast 1-in-20 peak day demand.
- For DN offtakes, the modelled demand will be the undiversified NTS forecast 1-in-20 peak day demand for the DN, and will be prorated to the relevant DN offtakes based on the booked NTS Exit (Flat) Capacity.
- For other directly connected (DC) offtakes (NTS Power Generation & Industrials) the forecast will be the obligated (baseline plus incremental) capacity level other than where DC sites have not been commissioned or have been decommissioned.

This would ensure that a supply and demand match could be achieved for charge setting purposes. Subject to the approval of this Modification Proposal, National Grid would publish an undiversified NTS forecast 1-in-20 peak day demand in the Ten Year Statement from 2011, consistent with this proposal, to match the Charging Methodology.

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## 4 Relevant Objectives

The Proposer believes that XXXX will better facilitate the achievement of **Relevant Objectives a, b and c**



### Charging Methodology Relevant Objectives

"relevant objectives" means, in respect of the UNC charging methodologies, only; in relation to the charging methodology regulated by Standard Special Condition A5 the "relevant methodology objectives" listed in paragraph 5 of that condition,

Proposer's view of the benefits of XXXX against the Code Relevant 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;	See explanation below
(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;	See explanation below
(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	See explanation below
(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

Implementation would be expected to better facilitate the achievement of the Relevant Objectives on the basis of Standard Special Condition A5 of the National Grid NTS Licence:

### Reflecting the costs incurred by the licensee in its transportation business

Using demand flow data within the NTS charge setting Transportation Model would better reflect connected NTS load at peak conditions and would better reflect the data used within the NTS planning and investment processes. As a consequence of using this data, charges should better reflect the cost incurred in making NTS Exit (Flat) Capacity available.

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## **Taking account of developments in the transportation business**

The prevailing methodology for setting NTS Exit (Flat) Capacity charges from 1<sup>st</sup> October 2012 uses baseline plus incremental capacity (obligated capacity), for the demand flow data. It was highlighted that this could create a demand level so high that the modelled supplies would not be able to achieve the required supply/demand balance, resulting in an unworkable NTS charging methodology. This has proved to be the case as a consequence of the level of obligated capacity triggered and the updated 2010 Ten Year Statement supply data.

## **Facilitating effective competition between gas shippers and between gas suppliers**

Basing the NTS charging methodology on data that will be published in the Ten Year Statement from 2011 should ensure a transparent charging methodology such that Users can replicate the charging setting process and forecast future charge levels. National Grid believes that promoting transparency of the charging methodology is consistent with the facilitation of competition between gas shippers.

Ensuring that the charging methodology is cost reflective should ensure that shippers face the costs resulting from their connection decisions and hence cross subsidies are avoided. National Grid believes that avoiding cross subsidies is consistent with the facilitation of competition between gas shippers.

## **Licence Compliance**

In the Proposer's opinion the Modification Proposal does not conflict with paragraphs 2, 2A and 3 of Standard Special Condition A4 of the Transporter's Licence as the proposal is consistent with setting NTS Exit (Flat) Capacity charges from 1<sup>st</sup> October 2012 and from the 1<sup>st</sup> October in each subsequent year.

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## 5 Impacts and Costs

This proposal represents a change to internal NTS manual processes.

### Costs

Indicative industry costs

No industry cost identified

### Impacts

#### Impact on Transporters' Systems and Process

Transporters' System/Process	Potential impact
UK Link	<ul style="list-style-type: none"><li>• None</li></ul>
Operational Processes	<ul style="list-style-type: none"><li>• Internal changes to manual price setting processes</li></ul>
User Pays implications	<ul style="list-style-type: none"><li>• None</li></ul>

#### Impact on Users

Area of Users' business	Potential impact
Administrative and operational	<ul style="list-style-type: none"><li>• None</li></ul>
Development, capital and operating costs	<ul style="list-style-type: none"><li>• None</li></ul>
Contractual risks	<ul style="list-style-type: none"><li>• Implementation of this proposal would impact on the setting of NTS Exit (Flat) Capacity charges which Users will attract as a result of previous applications for NTS.</li></ul>
Legislative, regulatory and contractual obligations and relationships	<ul style="list-style-type: none"><li>• None</li></ul>

#### Impact on Transporters

Area of Transporters' business	Potential impact
System operation	<ul style="list-style-type: none"><li>• None</li></ul>
Development, capital and operating costs	<ul style="list-style-type: none"><li>• None</li></ul>
Recovery of costs	<ul style="list-style-type: none"><li>• The proposal would allow NTS to recover transportation costs associated with providing NTS Exit (Flat) Capacity</li></ul>
Price regulation	<ul style="list-style-type: none"><li>• The proposal would allow NTS to recover transportation costs associated with providing NTS Exit (Flat) Capacity</li></ul>
Contractual risks	<ul style="list-style-type: none"><li>• None</li></ul>
Legislative, regulatory and contractual obligations and relationships	<ul style="list-style-type: none"><li>• Implementation of this proposal would facilitate a cost reflective NTS pricing Methodology in regard to NTS Exit (Flat) Capacity Prices as required by the NTS Licence.</li></ul>
Standards of service	<ul style="list-style-type: none"><li>• The proposal would allow NTS to</li></ul>

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Impact on Transporters	
	provide timely notice of indicative and actual NTS Exit (Flat) Capacity Prices



Impact on Code Administration	
Area of Code Administration	Potential impact
Modification Rules	<ul style="list-style-type: none"> <li>None</li> </ul>
UNC Committees	<ul style="list-style-type: none"> <li>None</li> </ul>
General administration	<ul style="list-style-type: none"> <li>None</li> </ul>

Impact on Code	
Code section	Potential impact
UNC TPD Section Y	For NTS Exit (Flat) Capacity charge setting from 1 <sup>st</sup> October 2012, the definition of nodal demand flow data, used within the NTS charging Transportation Model, would be redefined.

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	Implementation of this proposal would facilitate a cost reflective NTS pricing

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Impact on Core Industry Documents and other documents	
	Methodology in regard to NTS Exit (Flat) Capacity Prices.
Transportation Pricing Methodology Statement	Implementation of this proposal would facilitate a workable NTS pricing Methodology in regard to NTS Exit (Flat) Capacity Prices.

Other Impacts	
Item impacted	Potential impact
Security of Supply	None
Operation of the Total System	
Industry fragmentation	None
Terminal operators, consumers, connected system operators, suppliers, producers and other non code parties	None

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### Actual Charges

Implementation is required primarily such that prices can be set and notified by 1<sup>st</sup> May 2012 such that they become applicable from 1<sup>st</sup> October 2012.

### Indicative Charges

National Grid is required to produce indicative prices ahead of the annual NTS Exit (Flat) Capacity application windows and the next window will be July 2011. Indicative charges form part of the Enduring NTS Exit (Flat) Capacity User commitment process as Users are committed to holding and paying for four years of capacity, or holding and paying for capacity for a sufficient duration such that charges that will be paid are greater than or equal to the User commitment value. The User commitment quantity is defined as an amount equal to four years of charges based on the indicative charges applicable at the time of user commitment.

National Grid has published indicative NTS Exit (Flat) Capacity charges two months ahead of each of the 2009 and 2010 applications windows and intends to do so before the 2011 application window. If an approved workable methodology is not available, National Grid will consider either delaying the publication of indicative charges or publishing indicative charges based on the proposed methodology, based on a view that this might be the best estimate of charges given available information. National Grid will seek industry views on the appropriate method of setting indicative charges, should an approved methodology not be available, in 2011.

## 7 The Case for Change

In addition to that identified the above, the Proposer has identified the following:

### Advantages

- The Proposal will lead to a workable methodology for calculating NTS Exit (Flat) Capacity prices as supplies are forecast to be sufficient to meet forecast demand
- The modelled demand flows will more accurately reflect peak connected load. The undiversified NTS forecast 1-in-20 peak day demand should reflect peak load for storage and offtakes to connected systems. The obligated (baseline plus incremental) NTS Exit (Flat) Capacity level should reflect the connected load at other NTS direct connects.
- The Proposal will achieve the relevant charging methodology relevant objectives, primarily generating prices which reflect the costs incurred
- The proposal is based on information which will be openly published in the Ten Year Statement from 2011.
- Calculation of the charges will be replicable through publication of the Transportation Model
- Charges will be less dependent on User capacity booking strategies at Moffat and DNO offtakes.

### Disadvantages

- It might be perceived that forecast demand levels will be more variable compared to the obligated (baseline plus incremental) NTS Exit (Flat) Capacity level of NTS Exit (Flat) Capacity; however, it is the changes in this level of capacity that have resulted in this proposal being brought forward.
- It might be perceived that using different data sources for different classes of NTS Exit Point is inappropriate; however, National Grid NTS believes that the proposal represents the best estimate of connected load for all NTS Exit Points.



#### GCD09

National Grid has consulted on the options for the source of demand flow data within the NTS Charging Transportation Model via Gas Charging Discussion paper GCD09.

Information can be found at;

<http://www.nationalgrid.com/uk/Gas/Charges/consultations/CurrentPapers/>

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## 8 Recommendation



The Proposer invites the Panel to:

- DETERMINE that Modification Proposal XXXX progress to [TBA]

### NTS Charging Methodology Forum

The issues associated with this proposal have been discussed at the NTS Charging Methodology Forum. Information regarding the Charging Methodology Forum can be found at;

<http://www.nationalgrid.com/uk/Gas/Charges/TCMF/>

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## 9 Further Information

The following tables shows the indicative NTS Exit (Flat) Capacity Prices compared with the indicative prices calculated in accordance with the prevailing Charging Methodology ahead of the 2010 application window;

NTS Exit (Flat) Capacity Prices (p/kWh/day)							
Exit Point	DC/DN	2012/13		2013/14		2014/15	
		As-Is (May 2010)	Proposed	As-Is (May 2010)	Proposed	As-Is (May 2010)	Proposed
AM_PAPER	DC	0.0153	0.0177	0.0163	0.0192	-	0.0190
AVONMOUTH_LNG	DC	0.0090	0.0149	0.0140	0.0163	-	0.0161
BACTON INTERCONNECTOR	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
BACTON_BAIRD	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
BAGLAN_BAY_PG	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
BARKING_PG	DC	0.0101	0.0118	0.0109	0.0131	-	0.0128
BARROW_BAINS	DC	0.0059	0.0083	0.0064	0.0094	-	0.0091
BARROW_BS	DC	0.0059	0.0083	0.0064	0.0094	-	0.0091
BARROW_GATEWAY	DC	0.0059	0.0083	0.0064	0.0094	-	0.0091
BARTON_STACEY_(MRS)	DC	0.0205	0.0222	0.0217	0.0240	-	0.0237
BILLINGHAM_ICI	DC	0.0032	0.0070	0.0058	0.0080	-	0.0016
BP_GRANGEMOUTH	DC	0.0082	0.0001	0.0110	0.0001	-	0.0001
BP_SALTEND_HP	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
BRIDGEWATER_PAPER	DC	0.0201	0.0245	0.0212	0.0264	-	0.0262
BRIGG_PG	DC	0.0029	0.0052	0.0033	0.0062	-	0.0059
BRIMSDOWN_PG	DC	0.0106	0.0123	0.0114	0.0136	-	0.0133
BRINE_FIELD_PS	DC	0.0026	0.0063	0.0051	0.0073	-	0.0009
BRUNNER_MOND	DC	0.0171	0.0209	0.0180	0.0226	-	0.0224
CARRINGTON_PS	DC	0.0176	0.0203	0.0191	0.0220	-	0.0218
CAYTHORPE_(MRS)	DC	0.0001	0.0009	0.0001	0.0016	-	0.0014
CENTRAX	DC	0.0216	0.0240	0.0236	0.0259	-	0.0256
CHESHIRE_(MRS)	DC	0.0164	0.0208	0.0173	0.0226	-	0.0224
CONNAHS_QUAY_PS	DC	0.0205	0.0249	0.0216	0.0268	-	0.0265
CORBY_PS	DC	0.0079	0.0102	0.0085	0.0115	-	0.0112
CORYTON_PG	DC	0.0104	0.0115	0.0111	0.0128	-	0.0125
CORYTON_PG_2	DC	0.0104	0.0115	0.0111	0.0128	-	0.0125
COTTAM_PG	DC	0.0019	0.0043	0.0023	0.0052	-	0.0049
DAMHEAD_CREEK	DC	0.0097	0.0096	0.0104	0.0107	-	0.0105
DEESIDE_PS	DC	0.0202	0.0245	0.0212	0.0264	-	0.0262
DIDCOT_A	DC	0.0168	0.0185	0.0179	0.0201	-	0.0199



### Indicative Charges

Indicative charges represent National Grid's best estimate of potential future charges based on information available at the time that charges are set; however, these charges are subject to change as updated data becomes available.

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		As-Is (May 2010)	Proposed	As-Is (May 2010)	Proposed	As-Is (May 2010)	Proposed
DIDCOT_PS	DC	0.0168	0.0184	0.0178	0.0201	-	0.0198
DRAKELOW_PS	DC	0.0129	0.0153	0.0138	0.0167	-	0.0165
DYNEVOR_ARMS_LNG	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
EASINGTON&ROUGH_TERMINAL	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
ENRON_(BILLINGHAM)	DC	0.0032	0.0070	0.0058	0.0080	-	0.0016
GARTON_(MRS)	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
GLENMAVIS	DC	0.0107	0.0001	0.0137	0.0001	-	0.0001
GLENMAVIS_LNG	DC	0.0107	0.0001	0.0137	0.0001	-	0.0001
GOOLE_GLASS	DC	0.0006	0.0030	0.0009	0.0038	-	0.0036
GRAIN_GAS	DC	0.0097	0.0096	0.0104	0.0107	-	0.0105
GREAT_YARMOUTH	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
HATFIELD_MOOR_(MRS)	DC	0.0011	0.0035	0.0014	0.0046	-	0.0043
HAYS_CHEMICALS	DC	0.0170	0.0214	0.0180	0.0232	-	0.0230
HOLEHOUSE_FARM_(MRS)	DC	0.0172	0.0216	0.0182	0.0234	-	0.0231
HORNSEA_(MRS)	DC	0.0001	0.0001	0.0001	0.0004	-	0.0001
ICI_RUNCORN	DC	0.0202	0.0246	0.0213	0.0265	-	0.0263
IMMINGHAM_PG	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
KEADBY_BS	DC	0.0018	0.0041	0.0021	0.0050	-	0.0047
KEADBY_PS	DC	0.0018	0.0041	0.0021	0.0050	-	0.0047
KEMIRAINCE_CHP	DC	0.0199	0.0242	0.0209	0.0262	-	0.0259
KINGS_LYNN_PS	DC	0.0029	0.0046	0.0033	0.0055	-	0.0053
LANGAGE_PG	DC	0.0246	0.0269	0.0267	0.0289	-	0.0287
LITTLE_BARFORD_PS	DC	0.0094	0.0111	0.0101	0.0123	-	0.0121
LONGANNET	DC	0.0075	0.0001	0.0103	0.0001	-	0.0001
MARCHWOOD	DC	0.0216	0.0239	0.0236	0.0258	-	0.0256
MEDWAY_PS	DC	0.0098	0.0097	0.0105	0.0108	-	0.0106
MILFORD_HAVEN_REFINERY	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
MOFFAT	DC	0.0154	0.0015	0.0186	0.0023	-	0.0020
PARTINGTON_LNG	DC	0.0176	0.0203	0.0191	0.0220	-	0.0217
PEMBROKE_PG	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
PETERBOROUGH_PS	DC	0.0060	0.0076	0.0065	0.0087	-	0.0084
PETERHEAD_PG	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
PHILLIPS_SEAL_SANDS	DC	0.0026	0.0063	0.0051	0.0073	-	0.0009
ROCKSAVAGE_PG	DC	0.0202	0.0246	0.0213	0.0265	-	0.0263
ROOSECOTE_PS	DC	0.0059	0.0083	0.0064	0.0094	-	0.0091
RYE_HOUSE_PS	DC	0.0111	0.0127	0.0118	0.0141	-	0.0138
SALTEND	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001

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		As-Is (May 2010)	Proposed	As-Is (May 2010)	Proposed	As-Is (May 2010)	Proposed
SAPPIPAPERMILLCHP	DC	0.0142	0.0165	0.0151	0.0180	-	0.0178
SEABANK_POWER_phase_II	DC	0.0091	0.0149	0.0141	0.0164	-	0.0161
SEABANK_POWER_phase1	DC	0.0108	0.0131	0.0122	0.0145	-	0.0142
SELLAFIELD_PS	DC	0.0099	0.0123	0.0106	0.0136	-	0.0133
SEVERNSIDE_ICI	DC	0.0091	0.0148	0.0140	0.0162	-	0.0160
SHOTTON_PAPER	DC	0.0204	0.0248	0.0215	0.0267	-	0.0265
SPALDING_PG	DC	0.0033	0.0057	0.0037	0.0067	-	0.0064
SPALDING_PG_2	DC	0.0033	0.0057	0.0037	0.0067	-	0.0064
ST_FERGUS_BS	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
STALLINGBOROUGH	DC	0.0001	0.0001	0.0001	0.0008	-	0.0006
STAYTHORPE	DC	0.0049	0.0072	0.0053	0.0083	-	0.0080
STUBLACH	DC	0.0164	0.0208	0.0173	0.0226	-	0.0224
SUTTON_BRIDGE_PS	DC	0.0043	0.0060	0.0047	0.0069	-	0.0067
TEESSIDE_BASF	DC	0.0026	0.0064	0.0051	0.0073	-	0.0009
TEESSIDE_HYDROGEN	DC	0.0026	0.0064	0.0052	0.0073	-	0.0009
THORNTON_CURTIS_(KILLINGHOLME)	DC	0.0001	0.0001	0.0001	0.0001	-	0.0001
WEST_BURTON_PS	DC	0.0019	0.0042	0.0022	0.0051	-	0.0049
WYRE_PS	DC	0.0131	0.0154	0.0139	0.0169	-	0.0166
ZENECA	DC	0.0032	0.0070	0.0058	0.0080	-	0.0016
BACTON_OT	EA	0.0001	0.0001	0.0001	0.0001	-	0.0001
BRISLEY	EA	0.0003	0.0020	0.0005	0.0028	-	0.0025
CAMBRIDGE	EA	0.0066	0.0082	0.0071	0.0093	-	0.0091
EYE	EA	0.0056	0.0073	0.0061	0.0083	-	0.0081
GREAT_WILBRAHAM	EA	0.0056	0.0073	0.0061	0.0083	-	0.0081
MATCHING_GREEN	EA	0.0097	0.0114	0.0104	0.0126	-	0.0124
ROUDHAM_HEATH	EA	0.0019	0.0036	0.0022	0.0045	-	0.0042
ROYSTON	EA	0.0075	0.0091	0.0080	0.0103	-	0.0100
WEST_WINCH	EA	0.0027	0.0043	0.0030	0.0052	-	0.0050
WHITWELL	EA	0.0094	0.0110	0.0101	0.0123	-	0.0120
YELVERTON	EA	0.0001	0.0015	0.0001	0.0022	-	0.0020
ALREWAS_EM	EM	0.0134	0.0158	0.0143	0.0172	-	0.0170
BLABY	EM	0.0099	0.0123	0.0106	0.0136	-	0.0133
BLYBOROUGH	EM	0.0019	0.0043	0.0023	0.0052	-	0.0049
CALDECOTT	EM	0.0076	0.0099	0.0081	0.0111	-	0.0108
DROINTON_OT	EM	0.0145	0.0169	0.0155	0.0184	-	0.0181
GOSBERTON	EM	0.0030	0.0053	0.0034	0.0063	-	0.0060
KIRKSTEAD	EM	0.0010	0.0033	0.0012	0.0042	-	0.0039

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MARKET_HARBOROUGH	EM	0.0087	0.0110	0.0093	0.0122	-	0.0120
SILK_WILLOUGHBY	EM	0.0022	0.0045	0.0025	0.0055	-	0.0052
SUTTON_BRIDGE	EM	0.0044	0.0061	0.0049	0.0071	-	0.0068
THORNTON_CURTIS_LDZ	EM	0.0001	0.0001	0.0001	0.0001	-	0.0001
TUR_LANGTON	EM	0.0089	0.0112	0.0095	0.0125	-	0.0122
WALESBY	EM	0.0001	0.0009	0.0001	0.0016	-	0.0014
ASSELBY	NE	0.0001	0.0025	0.0003	0.0033	-	0.0030
BALDESBY	NE	0.0052	0.0076	0.0057	0.0087	-	0.0055
BURLEY_BANK	NE	0.0045	0.0068	0.0049	0.0078	-	0.0076
GANSTEAD	NE	0.0001	0.0001	0.0001	0.0001	-	0.0001
PANNAL	NE	0.0040	0.0064	0.0044	0.0074	-	0.0071
PAULL	NE	0.0001	0.0001	0.0001	0.0001	-	0.0001
PICKERING	NE	0.0001	0.0036	0.0015	0.0044	-	0.0042
RAWCLIFFE	NE	0.0003	0.0026	0.0005	0.0035	-	0.0032
TOWTON	NE	0.0023	0.0046	0.0026	0.0056	-	0.0053
BISHOP_AUCKLAND	NO	0.0050	0.0071	0.0076	0.0081	-	0.0034
BISHOP_AUCKLAND_TEST_FACILITY	NO	0.0050	0.0071	0.0076	0.0081	-	0.0034
COLDSTREAM	NO	0.0118	0.0001	0.0149	0.0001	-	0.0001
CORBRIDGE	NO	0.0094	0.0026	0.0124	0.0034	-	0.0031
COWPEN_BEWLEY	NO	0.0030	0.0068	0.0056	0.0078	-	0.0014
ELTON	NO	0.0034	0.0079	0.0061	0.0089	-	0.0025
GUYZANCE	NO	0.0120	0.0001	0.0150	0.0007	-	0.0005
HUMBLETON	NO	0.0113	0.0001	0.0143	0.0001	-	0.0001
KELD	NO	0.0120	0.0092	0.0129	0.0103	-	0.0101
LITTLE_BURDON	NO	0.0039	0.0083	0.0065	0.0094	-	0.0030
MELKINTHORPE	NO	0.0127	0.0085	0.0136	0.0096	-	0.0093
SALTWICK_PC	NO	0.0152	0.0013	0.0184	0.0021	-	0.0018
SALTWICK_VC	NO	0.0152	0.0013	0.0184	0.0021	-	0.0018
THRINTOFT	NO	0.0055	0.0095	0.0077	0.0107	-	0.0047
TOW_LAW	NO	0.0069	0.0090	0.0097	0.0102	-	0.0055
WETHERAL	NO	0.0135	0.0059	0.0162	0.0069	-	0.0067
HORNDON	NT	0.0101	0.0118	0.0109	0.0131	-	0.0128
LUXBOROUGH_LANE	NT	0.0104	0.0120	0.0111	0.0133	-	0.0131
PETERS_GREEN	NT	0.0098	0.0115	0.0105	0.0127	-	0.0125
PETERS_GREEN_SOUTH_MIMMS	NT	0.0098	0.0115	0.0105	0.0127	-	0.0125
WINKFIELD_NT	NT	0.0185	0.0202	0.0196	0.0219	-	0.0216
AUDLEY_NW	NW	0.0180	0.0204	0.0190	0.0221	-	0.0218

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		As-Is (May 2010)	Proposed	As-Is (May 2010)	Proposed	As-Is (May 2010)	Proposed
BLACKROD	NW	0.0152	0.0175	0.0162	0.0191	-	0.0188
ECCLESTON	NW	0.0200	0.0236	0.0210	0.0255	-	0.0252
HOLMES_CHAPEL	NW	0.0193	0.0216	0.0203	0.0234	-	0.0231
LUPTON	NW	0.0094	0.0118	0.0101	0.0130	-	0.0128
MALPAS	NW	0.0199	0.0223	0.0210	0.0241	-	0.0238
MICKLE_TRAFFORD	NW	0.0193	0.0237	0.0203	0.0256	-	0.0253
PARTINGTON	NW	0.0176	0.0203	0.0191	0.0220	-	0.0218
SAMLESBURY	NW	0.0138	0.0161	0.0147	0.0176	-	0.0173
WARBURTON	NW	0.0178	0.0201	0.0189	0.0218	-	0.0215
WESTON_POINT	NW	0.0202	0.0246	0.0213	0.0265	-	0.0263
ABERDEEN	SC	0.0001	0.0001	0.0001	0.0001	-	0.0001
ARMADALE	SC	0.0099	0.0001	0.0128	0.0001	-	0.0001
BALGRAY	SC	0.0016	0.0001	0.0042	0.0001	-	0.0001
BATHGATE	SC	0.0095	0.0001	0.0124	0.0001	-	0.0001
BROXBURN	SC	0.0110	0.0001	0.0140	0.0001	-	0.0001
CARESTON	SC	0.0001	0.0001	0.0020	0.0001	-	0.0001
DRUM	SC	0.0067	0.0001	0.0095	0.0001	-	0.0001
HUME	SC	0.0128	0.0001	0.0159	0.0001	-	0.0001
KINKNOCKIE	SC	0.0001	0.0001	0.0001	0.0001	-	0.0001
LANGHOLM	SC	0.0134	0.0035	0.0165	0.0044	-	0.0042
LAUDERHILL	SC	0.0144	0.0001	0.0176	0.0008	-	0.0005
LOCKERBIE	SC	0.0144	0.0026	0.0176	0.0034	-	0.0032
MOSSIDE	SC	0.0001	0.0001	0.0001	0.0001	-	0.0001
NETHER_HOWCLEUGH	SC	0.0147	0.0008	0.0178	0.0015	-	0.0012
PITCAIRNGREEN	SC	0.0039	0.0001	0.0066	0.0001	-	0.0001
SOUTRA	SC	0.0145	0.0006	0.0177	0.0014	-	0.0011
ST_FERGUS_OT	SC	0.0001	0.0001	0.0001	0.0001	-	0.0001
STRANRAER	SC	0.0154	0.0015	0.0186	0.0023	-	0.0020
FARNINGHAM	SE	0.0120	0.0119	0.0128	0.0132	-	0.0129
FARNINGHAM_B	SE	0.0120	0.0119	0.0128	0.0132	-	0.0129
SHORNE	SE	0.0110	0.0109	0.0118	0.0121	-	0.0119
TATSFIELD	SE	0.0137	0.0136	0.0146	0.0150	-	0.0147
WINKFIELD_SE	SE	0.0185	0.0202	0.0196	0.0219	-	0.0216
BRAISHFIELD_A	SO	0.0220	0.0237	0.0233	0.0256	-	0.0253
BRAISHFIELD_B	SO	0.0220	0.0237	0.0233	0.0256	-	0.0253
CRAWLEY_DOWN	SO	0.0202	0.0225	0.0220	0.0243	-	0.0240
HARDWICK	SO	0.0133	0.0149	0.0141	0.0164	-	0.0161

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IPSDEN	SO	0.0165	0.0181	0.0175	0.0197	-	0.0195
IPSDEN_2	SO	0.0165	0.0181	0.0175	0.0197	-	0.0195
MAPPOWDER	SO	0.0170	0.0194	0.0188	0.0210	-	0.0208
WINKFIELD_SO	SO	0.0185	0.0202	0.0196	0.0219	-	0.0216
AYLESBEARE	SW	0.0192	0.0215	0.0210	0.0233	-	0.0231
CHOAKFORD	SW	0.0246	0.0269	0.0267	0.0289	-	0.0287
CIRENCESTER	SW	0.0086	0.0109	0.0099	0.0122	-	0.0119
COFFINSWELL	SW	0.0218	0.0242	0.0238	0.0261	-	0.0258
EASTON_GREY	SW	0.0091	0.0115	0.0105	0.0128	-	0.0125
EVESHAM	SW	0.0056	0.0080	0.0068	0.0091	-	0.0088
FIDDINGTON	SW	0.0044	0.0067	0.0054	0.0077	-	0.0075
ILCHESTER	SW	0.0149	0.0173	0.0166	0.0188	-	0.0186
KENN_SOUTH	SW	0.0203	0.0226	0.0222	0.0245	-	0.0242
LITTLETON_DREW	SW	0.0099	0.0123	0.0113	0.0136	-	0.0133
PUCKLECHURCH	SW	0.0108	0.0131	0.0122	0.0145	-	0.0142
ROSS_SW	SW	0.0016	0.0039	0.0025	0.0048	-	0.0046
SEABANK_LDZ	SW	0.0092	0.0150	0.0142	0.0165	-	0.0162
ALREWAS_WM	WM	0.0134	0.0158	0.0143	0.0172	-	0.0170
ASPLEY	WM	0.0164	0.0187	0.0174	0.0204	-	0.0201
AUDLEY_WM	WM	0.0180	0.0204	0.0190	0.0221	-	0.0218
AUSTREY	WM	0.0122	0.0145	0.0135	0.0159	-	0.0157
LEAMINGTON_SPA	WM	0.0082	0.0105	0.0095	0.0118	-	0.0115
LOWER_QUINTON	WM	0.0067	0.0091	0.0079	0.0102	-	0.0099
MILWICH	WM	0.0152	0.0175	0.0161	0.0191	-	0.0188
ROSS_WM	WM	0.0016	0.0039	0.0025	0.0048	-	0.0046
RUGBY	WM	0.0093	0.0116	0.0106	0.0129	-	0.0126
SHUSTOKE	WM	0.0134	0.0157	0.0148	0.0172	-	0.0169
STRATFORD_UPON_AVON	WM	0.0068	0.0092	0.0081	0.0103	-	0.0101
MAELOR	WN	0.0207	0.0231	0.0218	0.0249	-	0.0247
DOWLAIS	WS	0.0001	0.0001	0.0001	0.0005	-	0.0003
DYFFRYN_CLYDACH	WS	0.0001	0.0001	0.0001	0.0001	-	0.0001
GILWERN	WS	0.0001	0.0010	0.0001	0.0017	-	0.0015

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