

Gas Transportation Charging

- Changes from October 2020

We will start at 13.32

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Welcome from Ian Radley



Head of Gas System Operations

- 1st October marks the start of a new charging regime
- Working on revised charging regime since 2014
- Decision to Implement 678A given in May 2020
- We welcome your feedback

Who we are...



Colin Williams Commercial Codes Change Manager



Dave Bayliss Senior Revenue Analyst



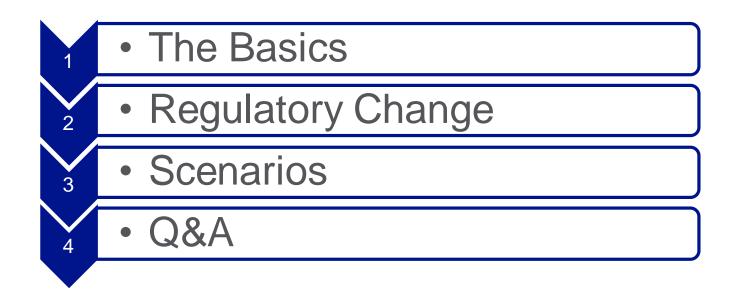
Jenny Pemberton Stakeholder Engagement Manager



Should last for approximately about 60 min Questions and polling via slido.com #Charging All callers will be placed on mute

We will circulate the slides and a recording of this webinar

Agenda





The Basics

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Drivers for changes

The Review of the **Gas Charging Arrangements** has changed the way that **Gas Transportation Charges are devised**. Its aim is to deliver more **stable**, **predictable** and **less volatile** charges and achieve timely **compliance** with the EU Tariff Code.

It has **incorporated customer**, **stakeholder** and **regulatory** involvement throughout its development culminating the changes being implemented this year.

Gas Charging - Background

National Grid's Gas Transporter Licence (the "Licence")	 Determines 'Allowed' Revenues Subject to Price Control (i.e. RIIO1 and RIIO2) Sets certain mandatory obligations related to charges and revenue recovery Timings (e.g. to limit changes and impacts) and purpose Key Principles (e.g. non-discriminatory)
Uniform Network Code (the "UNC")	 Provides the rules (to UNC signatories) and details process for access / use, auctions and for charging Sets the Charging Framework to charge NTS Users to recover allowed revenue. Charges are set on an ex-ante basis. Open governance for change (i.e. any signatory can propose changes to the UNC) Correlation between National Grid Allowed Revenues and Customer charges

Gas Charging – Changes from October 2020

- **Two types of charges** will be effective from 1 October, that will therefore be visible in all invoices issued from November with the ex-post invoicing that takes place.
 - Transmission Services Revenue, which broadly aligns to the Transmission Owner (TO) Revenue, will be recovered by **Transmission Services Charges**
 - Non-Transmission Services Revenues, which broadly aligns to the System Operator (SO) Revenue, will be recovered by Non-Transmission Services Charges
- Overview of the main charges and what they recover

Licence		vner (TO) Allowed enue	System Operator (SO) Allowed Revenue
UNC	Transmission Se	ervices Revenue	Non-Transmission Services Revenue
UNC	Entry Capacity Charges Entry Revenue Recovery Charges Exit Revenue Recovery Charges		General Non-Transmission Entry & Exit Charges St. Fergus Compression Pensions & Metering Charges



Regulatory Change

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NTS Transportation Charges: Changes being implemented for October 2020

Changes: Uniform Network Code (UNC) Modification proposal 0678A

- Ofgem approved UNC 0678A on 28 May 2020 to be effective from October 2020
 - <u>https://www.ofgem.gov.uk/system/files/docs/2020/05/unc678</u> <u>decision 0.pdf</u>

Postage Stamp pricing	 Stamp pricing for Transmission capacity reserve prices (i.e. one Entry and one Exit price irrespective of geographic location) with the payable price changing each year Except for long term Entry capacity allocated before 6 April 2017
Capacity reserve prices	 All capacity reserve prices the same (annual, daily, etc) except: 10% discount to reserve prices for interruptible / off peak capacity 50% discount to reserve prices for Storage Capacity
Transmission Revenue Recovery	Managing Transmission Revenue Recovery within year via capacity-based charges
Non-Transmission Charges	 Predominantly recovered via a commodity charge (broadly aligning to SO)

Simple overview of how each main charge is calculated

Entry Capacity Reserve Prices	 Total required target Entry revenue (net of Existing Registered Holdings revenue) divided over a Forecast Contracted Entry Capacity (net of Existing Registered Holdings volumes) Storage has applicable discount applied (50%) Interruptible has applicable discount applied (10%)
Exit Capacity Reserve Prices	 Total required target Exit revenue divided over a Forecast Contracted Exit Capacity Storage has applicable discount applied (50%) Interruptible (off-peak) has applicable discount applied (10%)
Transmission Services Revenue Recovery charges	 Entry TSRRC – anticipated under or over recovery to Transmission Entry target divided by forecast Fully Adjusted Entry Capacity (net of any Existing Available holdings) Exit TSRRC - anticipated under or over recovery to Transmission Exit target divided by forecast Fully Adjusted Exit Capacity
Non-Transmission Charges	 General Non-Transmission Charge is calculated by dividing the target revenue needed by a forecast of Entry and Exit flows (net of any Storage Flows). St Fergus Compression Charge is calculated by dividing a forecast of the fuel costs at the NSMP Sub Terminal over a forecast of flows for those Shippers using the terminal.

NTS Transportation Charges: Charging Arrangements that could change

Changes that have been proposed, with decision due

- Managing potential inefficient bypass. This arrangement is also known as "Shorthaul". There is no such product from 1 October 2020 as a feature of the charging regime. UNC0728/A/B/C/D proposes conditional discounts for capacity and, for some, also commodity charges. This is with Ofgem for decision. (<u>https://www.gasgovernance.co.uk/0728</u>)
 - Ofgem are conducting a regulatory Impact Assessment and will publish the outcome in due course for consultation ahead of any final decision.
- Changes to Storage discounts. UNC0727 proposes to increase the 50% to 80%. This is with Ofgem for decision (<u>https://www.gasgovernance.co.uk/0727</u>)
- Changes to application of Transmission Services Revenue Recovery Charges (TSRRCs).
 UNC0729 proposes to extend the capacity discount afforded to Storage to any TSRRCs. This is with Ofgem for decision. (<u>https://www.gasgovernance.co.uk/0729</u>)



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Charges from October 2020

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NTS Transportation Charges: Changes being implemented for October 2020

Publications and updates to charges

Charges published: <u>https://www.nationalgrid.com/uk/gas-transmission/charging/transmission-system-charges</u> under "Final Notices"

- Transmission Services Entry and Exit Capacity Reference and Reserve Prices for Gas Year 20/21.
 - Forecasted Contracted Capacity used to set the reference/reserve prices
- Non-Transmission Charges for October 2020 including the Transmission Services Revenue Recovery charges and Non-Transmission Services Charges

Charges that can change

Transmission Services

- Transmission Services (entry and exit) Revenue Recovery charges
- **Non Transmission Services**
- General Non-Transmission Services Charges (Entry and Exit) and the St. Fergus Compression charge

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Charges applicable from October 2020

				Firm	Interruptible	Storage Firm	Storage Interruptible
		Capacity	Entry Capacity	0.0717 p/kWh/d	0.0645 p/kWh/d	0.0359 p/kWh/d	0.0323 p/kWh/d
Transmission Services	Entry	Capacity	Revenue Recovery Charge	0.0000 p/kWh/d	0.0000 p/kWh/d	0.0000 p/kWh/d	0.0000 p/kWh/d
	Exit	Capacity	Exit Capacity	0.0198 p/kWh/d	0.0178 p/kWh/d	0.0099 p/kWh/d	0.0089 p/kWh/d
		Capacity	Revenue Recovery Charge	0.0000 p/kWh/d	0.0000 p/kWh/d	0.0000 p/kWh/d	0.0000 p/kWh/d
General Non-	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh	0.0128 p/kWh	n/a	n/a
Transmission Services	Exit	Flow Based	GNTS (Commodity)	0.0128 p/kWh	0.0128 p/kWh	n/a	n/a

As prescribed in the UNC a multiplier of 1 has been applied to the Reference Price for all Exit & Entry capacity products to determine the Reserve Prices for each auction. The Reserve Price for Off-Peak / interruptible Capacity is subject to a 10% discount on the Capacity Reserve Price.

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Storage flows are exempt from the General Non-Transmission Services Entry and Exit charges

Changes to Charges

				Date & Frequency of Charge Revision	
Transmission Services Entry Exit	Entry	Capacity	Entry Capacity	Annually for October – Price Payable for Gas Year and 4 years' worth of indicative prices.	
	Entry	Capacity	Revenue Recovery Charge	Ad-Hoc – Can be revised within the gas year, with a minimum of 1 months' notice.	
	E. H	Capacity	Exit Capacity	Annually for October – Price Payable for Gas Year and 4 years' worth of indicative prices.	
	Exit	Capacity	Revenue Recovery Charge	Ad-Hoc – Can be revised within the gas year, with a minimum of 1 months' notice.	
General Non-	Entry	Flow Based	GNTS * (Commodity)	Twice Yearly for April and October.	
Transmission Services	Exit	Flow Based	GNTS * (Commodity)	Twice Yearly for April and October.	

*This is our aspiration but we reserve the right to make more changes if necessary



Scenarios / Worked Examples

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Are these scenarios useful? Please explain your answer

Examples of the payable prices in for specific circumstances

- Key assumptions:
 - Take place in Gas Year Starting October 2020 using published prices
 - Except for TS RRCs where non-zero values are shown to illustrate the impact of an anticipated under / over recovery on Transmission
 - Any Existing (Registered) Contract prices are purely for illustration
 - Prices are shown for the appropriate denomination (i.e. capacity or flows)
 - Assumes a capacity booking and that there are flows against such capacity
 - Assumes both Entry and Exit charges apply (including options where either could be Storage)

- A Shipper delivering gas to an NTS Directly Connected Site (non storage)
- Capacity purchased at **Reserve Price** at Entry & Exit
- RRC Charges set at zero

				Shipper
Transmission Services		Capacity	Entry Capacity	0.0717 p/kWh/d
	Entry	Capacity	Revenue Recovery Charge	0.0000 p/kWh/d
	Exit	Capacity	Exit Capacity	0.0198 p/kWh/d
		Capacity	Revenue Recovery Charge	0.0000 p/kWh/d
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh
	Exit	Flow Based	GNTS (Commodity)	0.0128 p/kWh

- A Shipper delivering gas to an NTS Directly Connected Site (non storage)
- Long Term Capacity purchased at Reserve Price at Exit, but with a bid of 0.0550, greater than the auction Reserve Price of 0.0500 at Entry (Entry Auction Price for example only)
- RRC Charges set at zero

				Shipper	
Transmission Services		Capacity	Entry Capacity	0.0767 p/kWh/d	Entry Capacity price = Payable price for the year + Auction Premium (0.0717 + 0.0050)
	Entry	Capacity	Revenue Recovery Charge	0.0000 p/kWh/d	
	Exit	Capacity	Exit Capacity	0.0198 p/kWh/d	
		Capacity	Revenue Recovery Charge	0.0000 p/kWh/d	
General Non-	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh	
Transmission Services	Exit	Flow Based	GNTS (Commodity)	0.0128 p/kWh	

- A Shipper delivering gas to an NTS Directly Connected Site (non storage)
- Capacity purchased at **Reserve Price** at Entry & Exit
- An RRC at Entry of 0.0025 and Exit of 0.0020

				Shipper
		Capacity	Entry Capacity	0.0717 p/kWh/d
Transmission Services	Entry	Capacity	Revenue Recovery Charge	0.0025 p/kWh/d
	Exit	Capacity	Exit Capacity	0.0198 p/kWh/d
		Capacity	Revenue Recovery Charge	0.0020 p/kWh/d
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh
	Exit	Flow Based	GNTS (Commodity)	0.0128 p/kWh

- A Shipper delivering gas to an NTS Directly Connected Site (non storage)
- Capacity purchased at **Reserve Price** at Entry & Exit
- An RRC at Entry of -0.0030 and Exit of -0.0020

				Shipper
Transmission Services		Capacity	Entry Capacity	0.0717 p/kWh/d
	Entry	Capacity	Revenue Recovery Charge	-0.0030 p/kWh/d
	Exit	Capacity	Exit Capacity	0.0198 p/kWh/d
		Capacity	Revenue Recovery Charge	-0.0020 p/kWh/d
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh
	Exit	Flow Based	GNTS (Commodity)	0.0128 p/kWh

- A Shipper delivering gas to an LTS Connected Site
- Capacity purchased at **Reserve Price** at Entry & Exit
- RRC Charges set at zero

				DN	Shipper	
Transmission Services		Capacity	Entry Capacity		0.0717 p/kWh/d	
	Entry	Capacity	Revenue Recovery Charge		0.0000 p/kWh/d	
	Exit	Capacity	Exit Capacity	0.0198 p/kWh/d		The DNO will procure capacity
		Capacity	Revenue Recovery Charge	0.0000 p/kWh/d		at the Offtake. These costs will then be passed through to customers via the appropriate DN Charging mechanisms.
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)		0.0128 p/kWh	
	Exit	Flow Based	GNTS (Commodity)		0.0128 p/kWh	

- A Shipper delivering gas to an LTS Connected Site
- Capacity purchased at **Reserve Price** at Entry & Exit
- An RRC of 0.0025 at Entry and of 0.0020 at Exit

				DN	Shipper	
		Capacity	Entry Capacity		0.0717 p/kWh/d	
	Entry	Capacity	Revenue Recovery Charge		0.0025 p/kWh/d	
Transmission Services	Exit	Capacity	Exit Capacity	0.0198 p/kWh/d		The DNO will procure capacity
		Capacity	Revenue Recovery Charge	0.0020 p/kWh/d		at the Offtake and be liable for any Exit RRC charge. These costs will then be passed through to customers via the appropriate DN Charging mechanisms.
General Non-	Entry	Flow Based	GNTS (Commodity)		0.0128 p/kWh	
Transmission Services	Exit	Flow Based	GNTS (Commodity)		0.0128 p/kWh	
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- A Shipper delivering gas to an NTS Storage Site
- Capacity purchased at **Reserve Price** at Entry & Exit
- RRC Charges set at zero

				Shipper	
	Entry	Capacity	Entry Capacity	0.0717 p/kWh/d	
Transmission		Capacity	Revenue Recovery Charge	0.0000 p/kWh/d	
Services	Exit	Capacity	Exit Capacity	0.0099 p/kWh/d	Storage sites subject to a 50% discount on the Reserve Price.
		Capacity	Revenue Recovery Charge	0.0000 p/kWh/d	
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh	
	Exit	Flow Based	GNTS (Commodity)		GNTS charges are applied to all flows excluding storage flows.

- A Shipper delivering gas to an NTS Storage Site
- Capacity purchased at **Reserve Price** at Entry & Exit
- An RRC of 0.0025 at Entry and 0.0020 at Exit

				Shipper	
	Entry	Capacity	Entry Capacity	0.0717 p/kWh/d	
Transmission		Capacity	Revenue Recovery Charge	0.0025 p/kWh/d	
Services	Exit	Capacity	Exit Capacity	0.0099 p/kWh/d	Storage sites subject to a 50% discount on the Reserve Price.
		Capacity	Revenue Recovery Charge	0.0020 p/kWh/d	No discount to the RRC charge for Storage sites.
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh	
	Exit	Flow Based	GNTS (Commodity)		GNTS charges are applied to all flows excluding storage flows.

- A Shipper delivering gas to an NTS Directly Connected Site (non storage)
- Interruptible Capacity purchased at Reserve Price at Entry & Exit
- RRC Charges set at **zero**

				Shipper	
Transmission Services	Entry	Capacity	Entry Capacity	0.0645 p/kWh/d	10% discount to the Entry Capacity Reserve price
		Capacity	Revenue Recovery Charge	0.0000 p/kWh/d	
	Exit	Capacity	Exit Capacity	0.0178 p/kWh/d	10% discount to the Exit Capacity Reserve Price
		Capacity	Revenue Recovery Charge	0.0000 p/kWh/d	
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh	
	Exit	Flow Based	GNTS (Commodity)	0.0128 p/kWh	

- A Shipper delivering gas to an **NTS Directly Connected site** (non storage)
- Interruptible Capacity purchased at Reserve Price at Entry & Exit
- An RRC of 0.0025 at Entry and 0.0020 at Exit

				Shipper	
Transmission	Entry	Capacity	Entry Capacity	0.0645 p/kWh/d	10% discount to the Entry Capacity Reserve price
		Capacity	Revenue Recovery Charge	0.0025 p/kWh/d	RRC charged against fully adjusted capacity, which includes interruptible capacity. No discount applied to RRC.
Services	Exit	Capacity	Exit Capacity	0.0178 p/kWh/d	10% discount to the Exit Capacity Reserve Price
		Capacity	Revenue Recovery Charge	0.0020 p/kWh/d	RRC charged against fully adjusted capacity, which includes interruptible capacity. No discount applied to RRC.
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh	
	Exit	Flow Based	GNTS (Commodity)	0.0128 p/kWh	

Scenario 11a

- A Shipper delivering gas to an NTS Directly Connected Site (non storage)
- Existing Capacity at Entry (price 0.0200), Exit Capacity purchased at Reserve Price
- An RRC of 0.0025 at Entry and 0.0020 at Exit

				Shipper	
	Entry	Capacity	Entry Capacity	0.0200 p/kWh/d	Existing Contract Capacity (purchased pre 6 April 2017) price protected at the price procured.
Transmission		Capacity	Revenue Recovery Charge		Existing Capacity is exempt from RRC Charge.
Services	Exit	Capacity	Exit Capacity	0.0198 p/kWh/d	
		Capacity	Revenue Recovery Charge	0.0025 p/kWh/d	
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh	
	Exit	Flow Based	GNTS (Commodity)	0.0128 p/kWh	

Scenario 11b

- A Shipper delivering gas to an NTS Directly Connected Site (non storage)
- Existing Capacity at Entry (price 0.0200) only meets 50% of capacity requirements, additional capacity purchased at Reserve Price, Exit Capacity purchased at Reserve Price
- An RRC of 0.0025 at Entry and 0.0020 at Exit

				Shipper		
		Capacity	Entry Capacity	0.0200 p/kWh/d	Existing Contract Capacity (purchased pre 6 April 2017) price protected at the price procured.	
	Entry			0.0717 p/kWh/d	Additional Capacity purchased at Reserve Price	
Trenemiesien	Littiy	Capacity Rec	Revenue Recovery	-	Existing Capacity is exempt from RRC Charge.	
Transmission Services			Charge	0.0025 p/kWh/d	Additional Capacity subject to RRC.	
	Exit	Capacity	Exit Capacity	0.0198 p/kWh/d		
		Capacity	Revenue Recovery Charge	0.0025 p/kWh/d		
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)	0.0128 p/kWh		
	Exit	Flow Based	GNTS (Commodity)	0.0128 p/kWh		

Scenario 12a

- Shipper B delivering gas to an NTS Directly Connected site (non storage)
- Shipper A has traded/transferred Existing Capacity at Entry with Shipper B after 6 April 2017
- Existing Capacity at Entry (price 0.0200), Exit Capacity purchased at Reserve Price
- An RRC of 0.0025 at Entry and 0.0020 at Exit

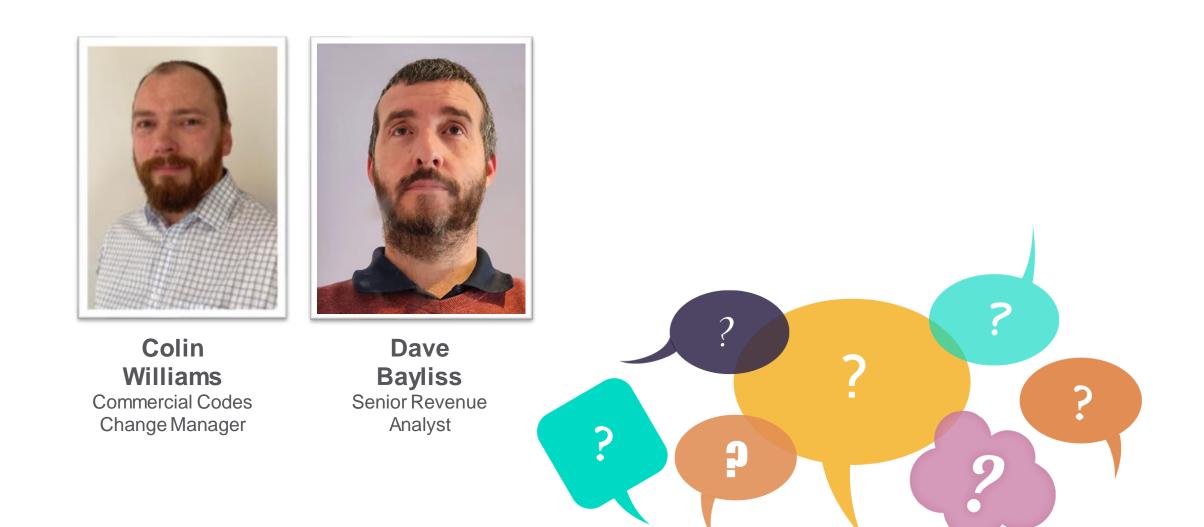
				Shipper A	Shipper B	
Transmission Services	Entry	Capacity	Entry Capacity	0.0200 p/kWh/d		Shipper A retains the liability as the primary capacity holder, at the Existing Capacity price.
		Capacity	Revenue Recovery Charge		0.0025 p/kWh/d	Shipper B is liable for RRC costs as the capacity transferred becomes part of their Fully Adjusted Capacity holdings.
	Exit	Capacity	Exit Capacity		0.0198 p/kWh/d	
		Capacity	Revenue Recovery Charge		0.0020 p/kWh/d	
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)		0.0128 p/kWh	
	Exit	Flow Based	GNTS (Commodity)		0.0128 p/kWh	

Scenario 12b

- Shipper B delivering gas to an NTS Directly Connected site (non storage)
- Shipper A has traded/transferred Existing Capacity at Entry with Shipper B before 6 April 2017
- Existing Capacity at Entry (price 0.0200), Exit Capacity purchased at Reserve Price
- An RRC of 0.0025 at Entry and 0.0020 at Exit

				Shipper A	Shipper B	
	Entry	Capacity	Entry Capacity	0.0200 p/kWh/d		Shipper A retains the liability as the primary capacity holder, at the Existing Capacity price.
Transmission Services		Capacity	Revenue Recovery Charge			As the capacity was transferred prior to 6 April 2017, the capacity traded is exempt from RRC charges.
	Exit	Capacity	Exit Capacity		0.0198 p/kWh/d	
		Capacity	Revenue Recovery Charge		0.0020 p/kWh/d	
General Non- Transmission Services	Entry	Flow Based	GNTS (Commodity)		0.0128 p/kWh	
	Exit	Flow Based	GNTS (Commodity)		0.0128 p/kWh	

Q & A



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Next steps

- Publish this webinar on website for reference and kept under review
- Feedback on scenarios / worked examples
- Charging discussions and industry developments:
- NTS Charging methodology Forum
- Review your feedback and develop an engagement plan for future



In terms of Charging, is there anything else you would find helpful to build understanding and increase transparency?



5

Charging and Related Topics: Contact Details

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Questions and Contact information

General charging questions on prices and publications Email: <u>box.NTSGasCharges@nationalgrid.com</u>

Capacity questions Email: <u>capacityauctions@nationalgrid.com</u>

Regulatory changes and new methodology Email: <u>box.gsoconsultations@nationalgrid.com</u>





