

Gas
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GCD 12: Managing Inefficient bypass in Charging

GCD 12: 01 May 2020 and 06 May 2020

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Agenda

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Agenda

01	Introduction and Scope (5 minutes)	04
02	Baseline MOD678A (5 minutes)	07
03	MOD 0718/A/B/C (5 minutes)	10
04	Analysis MOD 0718/A/B/C (10 minutes)	17
05	Calculator (10 minutes)	23
06	GCD 12 Documents	26
07	Q&A	28
08	Contact Details	30

Gas
Transmission

01: Introduction and scope

GCD 12: 01 May 2020 and 06 May 2020

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Introduction

- UNC0718/A/B/C were raised formally in March 2020, requesting urgency for their progression through the UNC change process. This was to ensure that implementation of the change could be achieved as quick as possible.
- Ofgem rejected the urgency request on the conditional nature of the proposal, saying that modifications need to be presented off a known UNC baseline not subject to a specific decision not yet made. As a result these were withdrawn and are expected to be raised under a new modification number in due course, following a UNC0678 (<https://www.gasgovernance.co.uk/0678>) decision.
- Full details of all 0718 proposals including analysis and legal text is included on the following page of the Joint Office of Gas Transporters website:
 - <https://www.gasgovernance.co.uk/0718>
- In order to facilitate a likely expedited change request (urgency) following a UNC0678 decision National Grid is running an informal consultation, using Gas Charging Discussion Document 12 (GCD12) that aims to support early views on the proposals, to enable a shorter formal consultation on the UNC change.
- The purpose would be to implement at the earliest opportunity, following receipt, and taking account of the UNC0678 decision

Introduction: Scope of this Material

This material and session is intended to:

- Help understanding of the four proposals presented under 0718, highlight the key features and the differences.
- Present a numerical comparison between the four proposals to show the sensitivities under each proposal and why impacts would be different across the proposals. This also highlights the assumptions made across the analysis.
- Provide a tool to assist interested parties to better understand the impacts for them. This is via the use of a calculator developed for this purpose and available to all who wish to use it. This will enable population by a party with data that may be relevant to them to assist in understanding the differences across the proposals.
- Provide a set of comparisons based on a UNC0678A baseline, in line with the minded to position from Ofgem's Impact Assessment.
- In combination with the GCD12 material (linked to or within the material), enable a consultation response to be submitted to National Grid by close of 15 May 2020. This can also help inform, at the right time, a formal UNC consultation response.

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02: Baseline UNC 0678A

GCD 12: 01 May 2020 and 06 May 2020

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Baseline UNC 0678A - Background

Baseline for changes:

- The Gas Charging Review, under UNC 0678 (and alternatives) is currently with Ofgem for decision
- In December 2019, Ofgem published their impact assessment and minded to position with a preference for 0678A and for implementation October 2020.
- Ofgem considered only 0678 and 0678A to be compliant with the EU Tariff Code – neither had a method of managing inefficient bypass of the NTS via Transportation Charging.
- The changes presented are only required should Ofgem decide to implement 0678 or 0678A. Should it be any other option these proposals would likely be revisited.
- With Ofgem's minded to position for 0678A, these analysis presented in these proposals (and this presentation) use 0678A as a baseline.

Baseline UNC 0678A - Changes it would make

Key aspects of 0678A

- **Transmission Services (TS)**
 - Postage Stamp based Capacity Charges (i.e. one price for Entry Capacity and one Price for Exit Capacity) – no geographic variation. Capacity reserve prices linked to revenue to better facilitate revenue recovery from capacity charges.
 - Capacity (except for legacy Entry bought before 6 April 2017) payable prices change year to year.
 - No Commodity charges for Transmission Services (TS).
 - Any revenue recovery (to manage over or under recovery) will be via a capacity based charge – levied separately to capacity reserve charges and based on bookings
- **General Non-Transmission Services (GNTS)**
 - General Non-Transmission Services (GNTS) broadly aligns to SO charges as they stand now, with some exceptions.
 - Some targeted charges (e.g. DN Pensions Deficit, St Fergus Compression, Metering) with the remainder recovered by General Non Transmission Services Entry and Exit Charges

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03: UNC 0718/A/B/C

GCD 12: 01 May 2020 and 06 May 2020

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Mechanics of UNC 0718 and Alternatives

Common Characteristics

- Transmission Services Discount is applied to Entry Capacity Reserve Price and Exit Capacity Reserve Price
- The Transmission Services Discount starts at 90% and reduces as the distance increases, with a collar of 10% at the defined distance limitation
- An Eligible Route is made up of a defined Entry Point and Exit Point, and is specific to a single Shipper.
- Existing Contracts are not eligible for discount, but can be used to enable discounts at the Exit side of a Route
- Traded Capacity is not eligible for discount, but Firm capacity traded in can be used at either end of a Route to enable discount at the opposite end.

Mechanics of UNC 0718

Transmission Services

- Initial Eligible Quantity Entry based on (Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation) less any Existing Contract Capacity
- Initial Eligible Quantity Exit based on Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation
- Maximum Eligible Route Distance of 18km

General Non-Transmission Services

- No discount applied

Mechanics of UNC 0718A

Transmission Services

- Initial Eligible Quantity Entry based on (Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation) less any Existing Contract Capacity
- Initial Eligible Quantity Exit based on Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation
- Maximum Eligible Route Distance of 18km

General Non-Transmission Services

- Discount applied of 80% to any eligible Entry and Exit flows (limited to lower of Exit or Entry) providing route is eligible under Transmission Services.

Mechanics of UNC 0718B

Transmission Services

- Initial Eligible Quantity Entry based on (Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation) less any Existing Contract Capacity
- Initial Eligible Quantity Exit based on Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation
- Maximum Eligible Route Distance of 28km

General Non-Transmission Services

- Discount applied of 69% to any eligible Entry and Exit flows (limited to lower of Exit or Entry) providing route is eligible under Transmission Services.

Mechanics of UNC 0718C

Transmission Services

- Initial Eligible Quantity Entry based on (Lower of Entry Capacity, Exit Capacity) less any Existing Contract Capacity
- Initial Eligible Quantity Exit based on Lower of Entry Capacity, Exit Capacity
- Maximum Eligible Route Distance of 18km

General Non-Transmission Services

- No discount applied

Overview UNC 0718/A/B/C proposals

		0718	0718A	0718B	0718C
		v1.0 (6/3/2020)	v2.0 (10/3/2020)	v2.0 (10/3/2020)	v1.0 (6/3/2020)
Charge Group	Element	National Grid	South Hook Gas Company	Vitol SA Geneva	RWE
Transmission Services Conditional Discount	Charge which the discount is applied to	Entry Capacity Reserve Price and Exit Capacity Reserve Price	Entry Capacity Reserve Price and Exit Capacity Reserve Price	Entry Capacity Reserve Price and Exit Capacity Reserve Price	Entry Capacity Reserve Price and Exit Capacity Reserve Price
	DCSL Distance (km)	18	18	28	18
	Initial Eligible Quantity (Entry)	(Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation) <i>less</i> any Existing Contract Capacity	(Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation) <i>less</i> any Existing Contract Capacity	(Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation) <i>less</i> any Existing Contract Capacity	(Lower of Entry Capacity, Exit Capacity) <i>less</i> any Existing Contract Capacity
	Initial Eligible Quantity (Exit)	Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation	Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation	Lower of Entry Capacity, Exit Capacity, Entry Allocation, Exit Allocation	Lower of Entry Capacity, Exit Capacity
Non-Transmission Services Conditional Discount	Charge which the discount is applied to	N/A	General Non-Transmission Services Charge	General Non-Transmission Services Charge	N/A
	Discount (%)	N/A	80	69	N/A
	Eligible Quantity	N/A	Lower of Entry Allocation, Exit Allocation	Lower of Entry Allocation, Exit Allocation	N/A

Variation in treatment of element from UNC Modification Proposal 0718

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04: Analysis UNC 0718/A/B/C

GCD 12: 01 May 2020 and 06 May 2020

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Comparison of UNC 0718 Alternatives

Comparison between the proposals

- Using the same format as analysis given in the UNC 0670R Review workgroups, we have run a comparison of each of the four alternatives presented
- 0718C differs to the others as it does not consider utilised capacity
- The following slide outlines each of the data items being compared looking at the eligible routes for the respective modifications.
 - They use the same underlying data on capacity and utilisation (e.g. there will be examples where utilisation is not 100% of the capacity) and this will show across the proposals in terms of the impacts under each.

Comparison of UNC 0718 Alternatives

Assumptions

- The analysis was run based on the parameters defined in Modification 0678A as the Baseline for the Conditional Product to work against.
- Analysis was run for Gas Year 2020/21 using version 3.1 of the Transmission Services Sensitivity Tool provided as part of 0678 and its alternatives.
- The analysis also uses the Forecasted Contracted Capacity values taken from the FCC model, used as part of the Sensitivity Tool, to simulate Capacity based Charges
- Current throughput figures from sites currently using the NTS Optional Commodity Charge (OCC) product were used to enable calculation of the flow based General Non-Transmission Services Charges and socialisation figures.
- A forecasted General Non-Transmission Services Rate of 0.0104p/kWh/day has been calculated using figures taken from the latest Charge Setting Report for April 2020

Comparison of UNC 0718 Alternatives

	Description
TS Standard Rate Contribution	Ineligible Capacity for eligible routes (as defined by the business rules applicable to the alternative) multiplied by Standard Entry and Exit Rates
TS Discounted Rate Contribution	Eligible Capacity multiplied by Standard Rates and Discount Factor
Standard GNTS Contribution	Ineligible Flow for eligible routes multiplied by Standard General Non-Transmission Rates
Discounted GNTS Contribution	Eligible Flow multiplied by Standard General Non-Transmission Rates
Potential TS Socialisation	Revenue effectively not paid due to discounts applicable to Capacity Charges
TS Socialisation as % of TO MAR	Transmission Services Revenue effectively not paid, expressed as a percentage of TO Maximum Allowed Revenue
GNTS Socialisation	Revenue not paid due to discounts applicable to Flow Charges
GNTS Socialisation as % of SO MAR	General Non-Transmission Services Revenue not paid, expressed as a percentage of SO Maximum Allowed Revenue
Total Socialisation as % of Total MAR	Total revenue not paid expressed as a percentage of total Maximum Allowed Revenue
Routes Considered	Number of currently active NTS OCC routes which are able to achieve a discount based on the respective alternative.
Max Effective Rate Discount	The highest discount level achieved by any route under the respective alternative
Longest Route Considered	The distance in km of the longest route which can achieve a discount under the respective alternative

Comparison of UNC 0718 Alternatives

	0718	0718A	0718B	0718C
Contribution: TS Standard Rate	£91,050,510.89	£91,050,510.89	£112,398,543.94	£0.00
Contribution: TS Discounted Rate	£12,599,653.97	£12,599,653.97	£29,932,749.22	£39,190,887.90
Contribution: GNTS Standard Rate	£23,335,962.13	£0.00	£0.00	£23,335,962.13
Contribution: GNTS Discounted Rate	£0.00	£4,667,192.43	£9,566,479.33	£0.00
Potential TS Socialisation	£54,825,410.84	£54,825,410.84	£59,230,544.91	£120,262,440.82
TS Socialisation as % of TO MAR	7.2%	7.2%	7.8%	15.9%
GNTS Socialisation	£0.00	£18,668,769.70	£21,293,131.42	£0.00
GNTS Socialisation as % of SO MAR	0.0%	8.8%	10.0%	0.0%
Total Socialisation as % of Total MAR	5.7%	7.6%	8.3%	12.4%
Routes Considered	17	17	22	19
Max Effective Rate Discount	67%	87%	85%	90%

The values presented here are indicative and should be taken as a means to better understand the sensitivities across each of the proposals, and not a view of the precise final charges in the event any of the modifications, when presented, are approved.

Comparison of UNC 0718 Alternatives:

Points to note

- 0718 & 0718A offer the same Transmission Services discount to the same 17 routes, so the Transmission Services socialisation figures are identical, they diverge when considering the General Non-Transmission Services socialisation.
- 0718B works over a longer distance so enables 5 additional routes, increasing the Transmission Services socialisation and the General Non-Transmission Services socialisation, though this is tempered slightly by a decreased General Non-Transmission Services discount offered.
- For 0718C we have used the minimum of the Entry and Exit Forecasted Contracted Capacity (FCC) to calculate the capacity eligible for discount, this is regardless of whether or not that capacity has been utilised.
- This means two additional routes within the distance boundary become eligible for the capacity discount, but because they have no flow registered against them the General Non-Transmission Services contribution still matches 0718, here it is the Transmission Services contribution which differs.

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05: Calculator

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Use and demonstration of the Calculator

Use and demonstration of the Calculator

- National Grid has developed a calculator to compare the four proposals using a UNC0678A baseline to enable the impacts of each to be seen based on user inputted data.
- The data required for it to work is not prepopulated, however calculations are. It requires the user to enter the route, distance and expected capacity and usage against this capacity. Calculations will update as data is entered.
- The calculator is available on the National Grid website <https://www.nationalgridgas.com/charging/gas-charging-discussion-gcd-papers>
- Three scenarios for each of the four proposals are pre-populated to work with data as entered by a user.
- Data to populate this can be found, linked in the calculator, if users wish to use information from the 0718 proposals' papers and 0678 sensitivity tool.

Please note:

Demonstration of how to use the calculator – to see on screen will require access to the WebEx screen sharing facility.

Calculator Tool Use:

Use of the Calculator

- The calculator is provided as a tool to help interested parties understand how the calculations under each proposal works and the resulting impact on overall charges to highlight the sensitivities across each.
- This has been developed and tested on Excel 365.
 - National Grid does not have the ability to test across different operating systems or versions of Excel or similar spreadsheet program.
- If you experience issues downloading or running this calculator or have questions to query any results when using it, please let us know.
- Contact: box.gsoconsultations@nationalgrid.com

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06: GCD 12 Documents

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GCD 12 and related Documents

GCD 12 documents:

<https://www.nationalgridgas.com/charging/gas-charging-discussion-gcd-papers>

UNC Modification Proposal 0678 and Alternatives:

<https://www.gasgovernance.co.uk/0678>

UNC Modification Proposal 0718 and Alternatives:

<https://www.gasgovernance.co.uk/0718>

UNC Request 0670R:

<https://www.gasgovernance.co.uk/0670>

EU Tariff Code (Regulation 2017/460):

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32017R0460>

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07: Q&A

GCD 12: 01 May 2020 and 06 May 2020

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Q&A

Any Questions?

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08: Contact Details

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Contact National Grid

For any queries, comments, or more information please contact:

Box.gsoconsultations@nationalgrid.com

Or directly:

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