Joint Office of Gas Transporters

UNC Modification	At what stage is this document in the process?

UNC 0671:

New Capacity Exchange process at NTS exit points for capacity below baseline

01	Modification
02	Workgroup Report
03	Draft Modification Report
04	Final Modification Report

Purpose of Modification:

This Modification, which applies to both DNOs and Shippers, proposes to introduce a new process to allow exchanges of both Enduring and Annual Exit Flat Capacity between NTS exit points where the capacity does not go above baseline. There will also be relief from the User Commitment obligations in respect of the capacity exchanged. This will enable Users to respond to changes in their consumers' requirements.

✅	The Proposer recommends that this modification should be: • assessed by a Workgroup. This modification will be presented by the Proposer to the Panel on 18 October 2018. The Panel will consider the Proposer's recommendation and determine the appropriate route.
❗	High Impact: Transporters, Shippers to NTS direct connects
❗	Medium Impact:
❗	Low Impact: Customers

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Contents

Timetable

The Proposer recommends the following timetable:

Initial consideration by Workgroup	01 November 2018
Workgroup Report presented to Panel	21 February 2019
Draft Modification Report issued for consultation	21 February 2019
Consultation Close-out for representations	14 March 2019
Final Modification Report available for Panel	19 March 2019 (short notice)
Modification Panel decision	21 March 2019

Any questions?

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Joint Office of Gas Transporters

1   Summary

What

Under the current requirements of TPD Section B any increase to Flat Capacity at any National Transmission System (NTS) Exit Point results in the application of a 4-year user commitment period during which time the new level of capacity has to be booked and paid for at a price set at each exit point. NTS Exit Prices are reset for every gas year (01 October Y to 30 September Y).

In many cases Gas Distribution Networks (DNOs) operate integrated networks within the Local Distribution Zones that can be fed from 2 or more NTS Exit Points and analysis is carried out to optimise the booking of flat capacity from the NTS offtakes. Optimisation can be carried out relative to a number of factors including ~~costs and/or~~ storage and facilitating entry capacity particularly for biomethane. These movements will typically be small relative to current volumes but could deliver definite benefits. Shippers may realise similar benefits.

The current rules around User Commitment mean that moving capacity (which has already met the requirements of any User Commitment at the original point) would then incur User Commitment for an additional 4 years at the new point, despite the fact that capacity is released at the original source for use by other users. This means there is a deterrent against moving capacity.

Why

The current Use Commitment arrangements restrict the ability of Users to move capacity in response to customer requirements. This may affect Users ability to meet their customers' requirements.~~DNO's ability to facilitate biomethane entry and flexible generation.~~

How

A new process is required to allow Users to coordinate increases in Enduring Annual Exit (Flat) Capacity at offtakes with equal decreases at others within the same NTS Exit Zone. Currently these processes exist separately. ~~A similar process to allow Users to coordinate an increases in Annual Exit (Flat) Capacity at offtakes with equal decreases at others in Years Y+2 and Y+3. We are not proposing to allow this process for Y+1 as this would have an impact on NTS revenue recovery for Y+1.~~ This process would only apply to cases where the capacity increase did not take capacity above the baseline capacity.

Where the capacity increase does not take the capacity at the increasing offtake above baseline at that offtake then the capacity exchange should be on a 1:1 basis because NTS has an obligation to make this capacity available.

We propose that relief from User Commitment obligations is provided for the amount of capacity moved from the decreasing offtake where a capacity exchange occurs and this User Commitment moves to the increasing offtake. There may still remain a User Commitment at the decreasing offtake in respect of the capacity remaining there and the movement of the capacity to the increasing offtake would result in a User Commitment at the increasing offtake to keep National Grid~~TS~~ whole. The key change compared to the current arrangements is that in respect of the capacity that is exchanged there will not be a User Commitment at both the decreasing and increasing offtake where no NTS investment is required.

This proposal will not amend the User Commitment obligations in Exit Capacity Relief Methodology Statement (ECSRMS); in particular it is not proposing a change from the current four year commitment period nor have a general rule that there is no User Commitment if there is no requirement for additional NTS investment

Allowing reductions in Annual NTS Exit (Flat) Capacity in Y+2 and Y+3 will have a similar financial effect for this product although User Commitment does not apply to this product.

We are not proposing to amend the User Commitment obligations in ECSRMS; in particularly we are not proposing a change from the current four year commitment period nor have a general rule that there is no User Commitment if there is no requirement for additional NTS investment.

2   Governance

Justification for Authority Direction

This modification should be subject to Authority Direction as it is likely to have a material effect on commercial activities associated with the transmission of gas through pipes (Self Governance criterion bb) because GDNs will be more able to respond to price differences for NTS Firm Exit Capacity at offtakes. This will enable it will enable DNOs to optimise the management of their system and for Shippers and DNOs respond to the changing needs of customers (such as flexible generation and biomethane producers). as well as minimising the cost of NTS Firm Exit Capacity. Consequently, this modification is also likely to have a material effect on the operation of one or more pipeline systems (Self Governance criterion cc) because if DNOs can make changes in how the gas flows round its integrated networks it provides more flexibility in meeting the needs of the growing number of flexible generation and biomethane plants.

Requested Next Steps

This modification should:

- be assessed by a Workgroup.

The benefits of this change, which will require system changes, can be realised in the 2020/2119/20 planning process if implemented by 01 July 202019; however, it would be desirable if it were implemented in advance of this date, so the Modification timetable has been set with a view to implementing by 01 June 202019. This timetable will allow four transmission Workgroup meetings and submission of a draft modification report to the February Modification Panel.

3   Why Change?

Changes in operational requirements to meet customer requirements mean that DNOs and Shippers may wish to move capacity between offtakes but there is no coordinated process that enables this process. For example a Shipper may have a customer with two or more sites directly connected to the NTS who wish to move production from one site to another. DNOs likewise may have similar reasons to move capacity between offtakes but recently have the addition consideration of facilitating biomethane entry that may mean that they need to rebalance inputs from the NTS to create as much entry capacity as possible on their downstream System. DNOs need to purchase Firm Exit Capacity as they need to be certain that they have enough exit capacity to meet a 1 in 20 demand which is a requirement of their Safety Case. For this reason, they cannot use non-firm capacity to meet these requirements. Changes in operational requirements to meet customer requirements mean that DNOs and Shippers may wish to move capacity between offtakes but there is no coordinated process that enables this process.

We have deliberately refrained from using terms that have other meanings in other documents such as "don~~e~~or", "recipient", "swaps" and "substitution" to avoid confusion with other processes.

New process required

TPD B has separate processes for increases in Enduring Annual NTS Exit (Flat) Capacity in 3.2.1 to 3.2.9 and reductions in 3.2.14 to 3.2.26 but they operate as separate processes and to different timescales. A User can apply for increase in the whole of the Annual Application window (1st to 31st July) (3.2.4) but can only apply for decreases in the period 1st to 15th July (3.2.15). The reason for the shorter window for reductions is to allow for any changes to be reflected in commodity charges for Y+1 (under current charging arrangements, under UNC modification proposal 0678 this would change to capacity charges) thereby ensuring NTS fully recovers its allowed exit revenue. A new process that allowed coordinated increases and decreases between offtakes stated by the User, in a defined window, would address this. This process will only ~~We are not proposing that this~~ operate~~s except~~ in a defined window each year. This process would allow movement of capacity from more than one offtake (decreasing offtake(s)) to more than one offtake (increasing offtakes(s)), that the User would clearly state in their application. The process would only apply where the capacity at the increasing offtake(s) did not go above baseline capacity. This process will apply to both Enduring Annual Exit (Flat) Capacity for Y+2, Y+3,Y+4, Y+5, Y+6 and Y+7 ~~and Annual Exit (Flat) Capacity for Y+2 and Y+3~~ but not Y+1 to avoid potential impacts on the collection of NTS allowed exit capacity revenue.~~.~~

We note that the Capacity ~~W~~weighted Distance model which is the basis for ~~most of~~ modification proposal the ~~0621~~ 0678 ~~series of~~ modifications will result in charges that are broadly higher the further downstream of the NTS that an offtake is situated and the relative prices at different offtakes reflect the relative distance from entry points. These charges are designed to ~~We acknowledge that these charges recover the~~recover the fixed NTS exit capacity revenue and therefore would not compensate NTS for delivering the same capacity at more remote offtakes; however where there is spare capacity at an offtake, that is the Firm Exit (Flat) Capacity sold is less than the baseline capacity then this should be made ~~this should be made~~ available at an exchange rate of 1:1 for exchanges taking place in the same NTS Exit Zone. ~~and T~~the window for this process should be 1st to 15th July in line with the current window for Capacity decreases. Where there are conflicts between Shipper Users for example one applying for a Capacity increase and one applying for an exchange then the increase would take priority.~~.~~

Changes to financial commitments required

Enduring Annual Exit (Flat) Capacity is booked in Gas Year Y for Gas Years Y+1, Y+2, Y+3, Y+4 , Y+5, Y+6 and Y+~~6~~7. ~~Annual NTS Exit (Flat) Capacity is booked in Gas Year Y for Gas Years Y+1, Y+2 and Y+3.~~

User Commitment applies to Enduring Annual NTS Exit (Flat) Capacity (TPD 3.2.17). ~~Annual NTS Exit (Flat) Capacity is not subject to User Commitment but the User is committed to paying for Annual NTS Exit (Flat) Capacity booked in previous years; this provides certainty for NTS in terms of revenue recovery for Y+1.~~ The current rules around User Commitment mean that moving capacity (which has already met the requirements of any User Commitment at the original point) would then incur User Commitment for an additional 4 years at the new point, despite the fact that capacity is released at the original source for use by other Users. ~~The requirement to pay for Annual NTS Exit (Flat) Capacity and the lack of a process to reduce it creates an obligation for Y+1 to Y+3.~~ This means that even where Shipper Users and DNOs can revise their operating strategy to facilitate customer requirements there is a financial disincentive to move capacity. This is likely to result in reduced ability for DNOs to change flow patterns on DNO systems to support the requirements of DNO customers or to respond to price signals from the NTS. It should be noted the operational considerations mean that capacity is moved from a cheaper offtake to a more expensive offtake.

We are proposing that Wwhere ~~capacity (both~~ Enduring Annual NTS Exit (Flat) Capacity ~~and Annual NTS Exit (Flat) Capacity) for Y+2 and Y+3 but not Y+1)~~ is moved between one set of offtakes (decreasing offtakes) to another set of offtakes (increasing offtakes) within the same NTS Exit Zone then, where the resulting capacity at the increasing offtake(s) is no greater than baseline capacity, ~~then~~ no additional User Commitment shall ~~should~~ be acquired by the User. Where a ~~We propose that where there was a~~ User Commitment existed at the decreasing offtake then the User Commitment ~~(in the case of Enduring Annual NTS Exit (Flat) Capacity) and the commitment to pay (in the case of Enduring ACnnual NTS Exit (Flat) Capacity)~~ should move with the capacity that is moved to the increasing offtake to keep NTS whole. Any User Commitment ~~or commitment to pay~~ associated with the capacity remaining at the decreasing offtake will remain. The capacity that is moved to the increasing offtake will create a User Commitment ~~or a commitment to pay~~ at the increasing offtake. ~~.~~ As User Commitment is a financial concept it s value will be transferred to the increasing offtakes and expressed in a number of years of commitment subject to two caps. First a cap of four years and second that the number of years at the increasing offtakes not being less than the maximum number of years left at one of the decreasing offtakes. ~~would be calculated as a commitment at the new offtake round to the nearest year (part years will be rounded down if they are less than 0.5 of a year and rounded up if they are 0.5 of a year or greater), we think that this is proportionate and having User Commitments of part years would be unnecessarily complex. The User Commitment would be capped at four years.~~

TPD B 3.2.17 gives NTS the discretion to relieve Users from User Commitment where a User applies for a reduction in capacity in if the User has applied to hold enduring capacity at another NTS exit point and this capacity can be provided due to the reduction that the User has applied for. This ~~provison~~provision will be amended to state that relief is given from the User Commitment at the Decreasing Offtakes for the capacity being exchanged when the User Commitment is moved to the Increasing Offtakes.

~~The new provisions to allow users to exchange Annual Exit (Flat) Capacity will also relieve Users from the obligation to pay for Annual NTS Exit (Flat) Capacity where some of this capacity is moved to another offtake for either of Y+2 or Y+3 but not Y+1; but for the avoidance of doubt not where a User only wishes to reduce its Annual NTS Exit (Flat) Capacity. We have excluded Y+1 in recognition of the effect on NTS exit revenue recovery.~~

Non applicability to Interconnection Points

This proposal will not apply to exit capacity and Interconnection Points (IPs) as this proposal contains elements that would cause it to breach the Capacity Allocation Mechanism (CAM) code where it to apply to IPs. CAM requires:

- Capacity that is not a CAM product (that is Enduring) should not be held at an IP.
- Capacity acquired through a non CAM auction should not be transferred into an IP.
- Capacity that is unbundled should not be transferred into an IP.
- Capacity that is not sold on a common booking platform (e.g. PRISMA) should not be held at an IP.
- Long term capacity is sold as bundled at IPs, and bundles should not be broken.

This proposal would adversely impact the 3rd, 4th and 5th requirements and would therefore not satisfy relevant objective (g) were it to apply to IPs.

4 Code Specific Matters

Reference Documents

Section B:

http://www.gasgovernance.co.uk/sites/default/files/TPD%20Section%20B%20-%20System%20Use%20&%20Capacity_52.pdf

Exit Capacity Release Methodology Statement:

https://www.nationalgridgas.com/sites/gas/files/documents/Exit%20Capacity%20Release%20Methodology%20Statement%20%28Approved%29%20v12.0-%20Effective%2031%20July%202017.pdf

Exit Capacity Substitution and Revision Methodology Statement:

https://www.nationalgridgas.com/sites/gas/files/documents/Exit%20Capacity%20Substitution%20Methodology%20Statement%20%28Approved%29%20v7.0%20-%20Effective%2031%20July%202017.pdf

Knowledge/Skills

Knowledge of NTS processes for exit capacity.

5   Solution

TPD B

1) Introduce a new annual process of Capacity exchanges between NTS Exit Points~~offtakes~~ specified by the User within the reduction period in the Annual Allocation Window (1st to 15th July) but not outside this window for ~~both~~ Enduring Annual Exit (Flat) Capacity for Y+2, Y+3, Y+4, Y+5, Y+6 and Y+7. ~~and Annual Exit (Flat) Capacity for Y+2 and Y+3 (but not Y+1)~~

2) Amount of Enduring Annual Exit (Flat) Capacity exchanged by each User in aggregate and at each Offtake does not have to be the same for each of years Y+2, Y+3, Y+4, Y+5, Y+6 and Y+7.

3) Only applies to NTS Exit Points in the same Exit Zone.

4) Process applies to DNO Users and Shippers Users

~~1)~~

~~2)~~5) 1:1 exchange rate applies.

6) The process is only available during the window and not at any other time in a Gas Year

7) Applications for exchanges must be submitted between 1st and 15th July.

8) Results must be notified by 30th September.

9) Where there are two or more DNOs Users or Shipper Users at an NTS Exit Point requests for Capacity increases shall be satisfied before requests for Capacity exchanges

~~3)~~10) Where there are several tranches of Enduring Annual Exit (Flat) Capacity at a decreasing NTS Exit Point the tranche with the largest User Commitment outstanding will be exchanged first

~~4) Process applies to all User both DNO and Shippers~~

~~5)~~11) Process does not apply to ~~bundled exit~~ capacity at ~~interconnector~~ Interconnection Points

~~6)~~12) Process applies to any NTS Exit Points~~offtakes in GB~~

~~7)~~13) Define Decreasing NTS Exit Point~~Offtake((~~s) as those from which capacity is moving

~~8)~~14) Define Increasing NTS Exit Point(~~Offtake(~~s) as those to which capacity is moving

~~9)~~15) These changes can be many to one, or one to many NTS Exit Points~~offtakes~~

16) Process limited to cases where the resulting Exit Capacity ~~capacity~~ at the increasing offtake(s) is no greater than the Licence Baseline Exit Capacity as defined in Table 8 of Special Condition 5G (Determination of Incremental Obligated Exit Capacity volumes).

~~10)~~17) ~~baseline capacity~~After exchange Exit Capacity at decreasing NTS Exit Points cannot be negative.

~~11)~~18) Results are applicable from following 1st October and capacity becomes chargeable from 1st October in applicable Gas Year.

~~12)~~ Amend TPD B 3.2.17 to require NTS to provide relief from User Commitment at the Decreasing Offtake(s) where a Capacity Exchange occurs for the capacity that is exchanged. ~~.~~

~~13)~~19) Remove the ~~u~~User Commitment from the Decreasing Offtake(s) for the capacity that is being moved from them.

~~14)~~20) Require a new User Commitment to apply to the Increasing NTS Exit Points~~Offtake~~(s) for the ~~c~~Capacity that is being moved to them. Calculated by:

a. For each tranche of Enduring Annual Exit (Flat) Capacity exchanged from each of the decreasing NTS Exit Points establish the number of years remaining for which the capacity that is being exchanged must be paid for to fulfil the User Commitment outstanding for that tranche.
b. Calculate the value of the User Commitment for each tranche of Enduring Annual Exit (Flat) Capacity exchanged from each of the decreasing NTS Exit Points
c. Sum the UC for all of the decreasing NTS Exit Points
d. Allocate the UC to each of the increasing NTS Exit Points in proportion to the Enduring Annual Exit (Flat) Capacity moved to each of the increasing NTS Exit Points
e. Calculate the number of years of for which the Enduring Annual Exit (Flat) Capacity moved to each increasing NTS Exit Points has to been paid for to fulfil the UC allocated to that NTS Exit Point subject to:
   i. The number of years does not exceed 4 years
   ii. The number of years at each NTS Exit Point to which Enduring Annual Exit (Flat) Capacity has been moved is at least the same as the maximum number of years remaining in respect of any of the tranches of Enduring Annual Exit (Flat) Capacity moved from any of the decreasing offtakes comprised in the exchange

   Or expressed in algebra
   ~~a. Establish the value of User Commitment at the Decreasing offtakes for the capacity that is moved~~
   ~~b. Work out the value per kWh for all the capacity being moved from the Decreasing Offtakes~~
   ~~c. At each Increasing Offtake pro-rata the value of User Commitment by the share of the capacity being moved to each Increasing Offtake~~
   ~~Convert this into years of User Commitment at each Increasing Offtake by dividing the share of the value from stage (c) by the price of the Enduring Exit Exit (Flat) Capacity at that offtake. Round this to the nearest year (part years will be rounded down if they are less than 0.5 of a year and rounded up if they are 0.5 of a year or greater) subject to a maximum User Commitment of four years~~

   For any year t where t equals $Y+2, Y+3, Y+4, Y+5, Y+6$ and $Y+7$
   For any group of decreasing NTS Exit Point i
   For any tranche, j, of Enduring Annual Exit (Flat) Capacity at NTS Exit Point i, Q_{ji} that is subject to the Exchange Process with associated number of years Y_{ji} remaining to satisfy the User Commitment UC_{ji} where
   $0 =< Y_{ji} =< 4$
   Then the User Commitment at the decreasing NTS Exit Points UC_D

$$UC_{D_t} = \sum_i \sum_j Q_{i,j} Y_{j,i} P_{j,i}$$

Where $P_{j,i}$ is the price of the Enduring Annual Exit (Flat) Capacity at the NTS Exit Point i when the User Commitment for tranche j was incurred.

For any group of increasing offtakes k

Let the quantify of Enduring Annual Exit (Flat) Capacity at NTS Exit Point k, that is subject to the Exchange Process be be Q_k

Then,

$$\sum_i \sum_j Q_{ij} = \sum_k Q_k$$

The share of UC_k allocated to be recovered at increasing NTS Exit Point k is given by

$$UC_k = \frac{Q_k}{\sum_i \sum_j Q_{ij}} * UC_{D_t}$$

The actual UC, UCA_k recovered at offtake k is given by

$$UCA_k = \sum_k Q_{,k} P_k Y_k$$

Where P_k is the price of the Enduring Annual Exit (Flat) Capacity at offtake k for the year t.

and the number of years remaining to satisfy the User Commitment UC_k is Y_k which can increase in increments of of 0.833 recurring (=1/12)

Subject to the constraints that

$Y_k = Max(Y_{j,i})$ for all i and j and

$0 =< Y_k =< 4$

d.

6 Impacts & Other Considerations

Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

No.

Consumer Impacts

~~There will be indirect impacts on consumers on GDN networks as they will benefit from any reduction in the costs of NTS exit capacity and s~~Some consumers will directly benefit in cases where the DNO can adjust flows to enable them to better meet their ~~customer~~ requirements.

Cross Code Impacts

None

EU Code Impacts

None

Central Systems Impacts

Xoserve's initial view is that there will be central systems impacts, if so this will affect the proposed implementation timescales.

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7 Relevant Objectives

Impact of the modification on the Relevant Objectives:

Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	None
b) Coordinated, efficient and economic operation of (i) the combined pipe-line system, and/ or (ii) the pipe-line system of one or more other relevant gas transporters.	Positive
c) Efficient discharge of the licensee's obligations.	None
d) Securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.	None
e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards… are satisfied as respects the availability of gas to their domestic customers.	None
f) Promotion of efficiency in the implementation and administration of the Code.	None
g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	None

Demonstration of how the Relevant Objectives are furthered inserted here.

This proposal furthers relevant objective (b) by ~~encouraging response to price signals from NTS that should reduce costs for DNOs. It will also~~ allow Shippers to adjust their firm capacity requirements between NTS offtakes to meet their customers' requirements.   It will allow DNOs that ~~which~~ have integrated systems to adjust flows from the NTS to enable them to better facilitate their customers' requirements especially from flexible electricity generation plants and green gas production facilities.

8 Implementation

WWU would like this modification to be implemented by 01 July 2020~~19~~ so that it can be used in the process for setting NTS capacity for 01 October 2020~~19~~.

~~For implementation on 01 June 2019 an Authority direction to implement must be made by 30 April 2019.~~

~~For implementation on 01 July 2019 an Authority direction to implement must be made by 29 May 2019.~~

~~For an Authority direction received after 29 May 2019 implementation would be 01 October 2019.~~

9   Legal Text

Text Commentary

To be provided

Text

To be provided

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that Authority Direction should apply

- Refer this proposal to a Workgroup for assessment.