Final Modification Report No.8

Phased Reduction of Imbalance Tolerances, Alignment of Tolerance Load Bands with DM/NDM Categories & Update to Exit Reallocations Rules

11th February 2020

The Transporter has prepared this Final Modification Report No.8 in accordance with section 8 of the Code Modification Rules.

A Description of the nature and purpose of the modification

This proposal is being made to put in place a phased reduction of Imbalance Tolerances for Shippers. Reduction in Imbalance Tolerances is required, following the Tolerance Review which was consulted on by the Transporter in July 2019 and in order to improve compliance with the Balancing Regulation EU 312/2014 in line with the Interim Measures Reports (concerning the development of balancing and trading arrangements in Northern Ireland) which have been published by the Transporter to date.

This Proposed Modification would reduce Imbalance Tolerances in two phases: phase 1 would commence from 1st April 2020, i.e. on implementation of this Proposed Modification, and phase 2 would commence from 1st April 2021.

The Proposed Modification would also amend section 8 to align the tolerance band categories used for both Imbalance and Scheduling charges with the categories used by the Distribution Network Operators for non-daily metered and daily metered consumers, and modify the naming of the Scheduling and Imbalance Tolerance Tables, for clarity.

The Proposed Modification also contains an update to the Exit Allocations rules clarifying that Distribution Network Operators are required to obtain prior approval for Re-allocations and minor associated amendments in section 10 to remove references to Downstream Load Statements.

B How the modification better facilitates the relevant objective

The Relevant Objective, (condition 2.4 of the Transporter Licences) will be better facilitated by the NI Network Gas Transmission Code as a result of this modification. This change is intended to provide an increase in the incentive (implemented in two phases) for Shippers to balance their own daily inputs and outputs on the NI Gas Transmission Network and hence reduce residual balancing costs and to support compliance with Balancing Regulation EU 312/2014. It is also intended to improve co-ordination for Shippers with the distribution network codes by better alignment of load categories and clarifications to the Exit Allocations rules. Together these changes should improve the reliable and efficient operation of the NI Gas Transmission Network.

C Third Party Representations and the views of the Transporter

The Transporter received 5 responses to the Initial Modification Report.

ESB highlights its belief that tolerance levels should not be reduced for power generators during Phase 2 of the planned amendments. It comments that the level of tolerance will not incentivise changes to balancing behaviours within the power generation sector. PPB also supports this view. Although PPB states it is generally supportive of the objective of incentivising Shippers to balance their inputs and outputs, it believes this is only meaningful where the consumer can exercise control over their usage. PPB comment that power generators have no control over their dispatch, but instead must comply with all dispatch instructions issued by SONI.

PPB highlights the impact renewable electricity generation will have on the market commenting that this will increase the volatility in generation by 'flexible' conventional generation which will primarily be provided by gas fired generators which due to the forecasting difficulties will be required to change generation levels at short notice. PPB notes that the introduction of I-SEM in October 2018 coupled up the Day Ahead Markets across the EU and there is an ongoing project to couple up Intraday markets across the EU. The next stage in the plan is to couple up Balancing markets. PPB highlights that this will further increase the requirement for flexibility in gas fired plants.

The Transporter acknowledges the challenges that market participants face as a result of the ISEM changes, in particular the increased frequency and uncertainty of dispatch notices. However, it should still be the case that even though there are more frequent dispatches a power generator should still know how much gas is required to generate the electricity required and therefore should be in a position to nominate at both entry and exit points accurately.

ESB stresses the importance of assessing and reviewing the tolerance changes prior to implementation of Phase 2. They state that the review should take into account the discussions and work of the gas/power forum, market development and the actions of market participants during the intervening period. feDL and feSL acknowledge the requirement for compliance and the decision to proceed with the proposed tolerance level reductions in two phases however, they also highlight the importance of monitoring and assessing industry performance following the implementation of Phase 1. PNGL also comments that assessment of industry performance should be carried out prior to Phase 2 and any necessary further adjustments should be made.

ESB suggests that the further assessment of Phase 1 and the Phase 2 proposed changes prior to Phase 2 implementation should be included in the legal text for Transition Arrangements.

The Transporter welcomes the support for its proposal to monitor industry performance on an ongoing basis and to make a further assessment of performance and identify any issues or impacts arising during Q3/Q4 of 2020, prior to the phase 2 transition date.

The inclusion of the further assessment in the transition text was considered however making the phase 2 changes dependent on the further assessment posed a further delay in compliance with Balancing Regulation EU 312/2014.

As stated in the Initial Modification Report, further assessment will provide the opportunity to make additional adjustments should they be found to be necessary.

ESB also noted that they believe that the small adjustment in Northern Ireland remains very high and welcome GMO's commitment to review its level.

The small adjustment levels were previously set in response to Shipper behaviour and the impact such behaviour can have on the NI transmission system which given its small size and configuration is not as flexible as other EU networks where it could be argued that smaller adjustment

percentages are more appropriate. However, the Transporter plans to review the current levels and will update Shippers accordingly at the Shipper Forum.

ESB supports the introduction of a forum between the gas and power sectors and states that it is a 'positive step for the whole system'. PNGL is also supportive of the forum and comments that it would be useful for DNOs to be represented at these meetings. PNGL also comment that it would be beneficial for UR to be involved in the meetings.

The Transporter welcomes the support and improved interaction. The Transporter is willing to engage with any part of the Shipping community and wider energy industry. The TSOs and Power Generators meeting focuses on specific power generation and gas transmission matters. Should it be relevant and deemed appropriate to wider industry, the matters will be discussed at the Shipper Forum. Should UR or another party decide that a wider forum focusing on gas and electricity interaction should be set up the Transporter would be in full support.

feDL and feSL are supportive of the changes to the definitions of the load categories, aligning category 3 with the Daily Metered sector. PNGL is also supportive of this change and comments that future changes to the 'Priority Order' for emergency load shedding listed within Section 10.13 of the NI Network Gas Transmission Code should be considered.

The Transporter will consider similar changes to the 'Priority Order' however notes that any changes are more complex to implement as it would require changes to Safety Cases and Emergency Procedures, not just the Code.

Both feDL and feSL highlight the importance of GMO NI focusing on creating a greater link between forecast nomination advice and Shipper nomination behaviour. PNGL is also supportive of this line of work.

The Transporter welcomes these comments and the Transporter has commenced work on this area to determine the feasibility of such changes. The Transporter will update Shippers on developments at the Shipper Forum.

feDL comment that in relation to the proposed changes to the rules regarding Exit Reallocations, given that discussions regarding potential linkage between Transmission nominations and DNO forecasts at Distribution Exit Points, any amendments in this regard should be considered in the context of a review of the Transmission Nomination and Allocation Arrangements. feSL comments that the proposed updates to the Exit Allocation rules are not entirely appropriate and believe effective balancing cannot necessarily be achieved through using the 'pro-rata to Nomination' methodology. PNGL are supportive of the changes to the reallocation rules.

The Transporter believes that the proposed changes are appropriate and necessary. The Transporter has not removed the option for a DNO to request reallocations. However, the Transporter has introduced text to make it explicit that it has control over the allocations process. It could be argued that reallocations are no longer appropriate and the practice has unintended consequences on Shipper imbalances or incentives to nominate correct which is not compatible with linking nominations to forecasts which is currently being considered. The proposed changes give the Transporter the ability to take appropriate action in the future.

PNGL notes the conclusion from GMO NI's analysis of the impact on Shippers where meter estimates were required due to the absence of reliable TSO metering data. They comment that although GMO NI states no Shippers were penalised on days where estimates were required, PNGL still believe that this is a potential risk for Shippers and would therefore encourage GMO NI to continue to monitor the situation.

Whilst the Transporter's analysis conclude that no Shippers were penalised, the Transporter will continue to monitor the impact of meter estimates.

D The clauses of the NI Network Gas Transmission Code that require amendment

On implementation, this Proposed Modification would amend text in sections 7, 8 and 10 and add a Transition Section at the end of section 26. The Transition Section contains the amendments to be made to section 8, on the date specified within the Transition Section.

E Impact on the networks of the Designated Pipeline Operators, Adjacent Transporters and/or relevant agreements in respect of the NI Network:

The Transporter has considered the impacts the modification may have and concluded as follows:

Operation of the networks of the Designated Pipeline Operators (DPOs)

At present, based on responses to the Tolerance Review Consultation, the Transporter assesses that the implementation of the phase 1 tolerance reductions in this Proposed Modification should have a neutral-to-positive impact on the need for residual balancing on the networks of the DPOs, which should generally improve the stability and efficiency of their operation of their networks.

The Transporter will undertake a further assessment of industry performance and the potential impacts of phase 2 prior to their scheduled implementation.

Adjacent Transporters & Relevant NI Agreements

A reduction in residual balancing by the Transporter could imply fewer and/or smaller changes to the upstream profile notifications (i.e. the PTL Daily Profile in the NI Network Gas Transmission Code) required under the Inter-operator arrangements for Moffat. This could also mean fewer curtailments are needed (under section 6.7.14 to 6.7.21 of the Code), although both profile notifications and curtailments are dependent on a number of other factors as well. Alternatively, if reduced tolerances lead to more frequent Shipper nominations for individual balancing, the opposite effect on upstream profile notifications and curtailments is also a possibility.

In respect of phase 1, the Transporter has considered these potential impacts and do not believe there is likely to be a substantial change to the current situation. Phase 2 tolerance reductions may have a greater impact, but it is not possible to foresee the likelihood or degree of that impact with any certainty.

F The date proposed for implementation

The Transporter proposes that this Modification should take effect from 1st April 2020.

G Changes from the Initial Modification Report

No changes have been made to the legal text following the consultation on the Initial Modification Report.

H Final Legal Text

Modify section 7.7 to read as follows:

7.7 Exit Reallocations

7.7.1 A change to Initial Exit Allocations at a Shared Exit Point in respect of a Gas Flow Day (a **"Reallocation"**) may be requested and accepted in accordance with this section 7.7.

7.7.2 At an Exit Point other than a DN Exit Point, a~~A~~ Reallocation may only be requested:

~~(a) at an Exit Point other than a DN Exit Point;~~

(a~~i~~) by all Shippers whose Exit Allocations would change as a result of any such Reallocation writing jointly to the Transporter; and

(b~~ii~~) during the period between the commencement of D+1 and 16:00 ~~hours~~ on D+5;

~~(b) at a DN Exit Point;~~

~~• by the Relevant DNO on behalf of Shippers at the DN Exit Point; and~~

~~• during the period between the commencement of D+1 and 16:00 hours on M+5;~~

(c) once in respect of a ~~each~~ Gas Flow Day unless the Exit Quantity is adjusted in accordance with section 14 *(Measurement and Testing)* in which case a further Reallocation may be requested;

and a Reallocation requested under this section 7.7.2 may be accepted in accordance with section 7.7.9.

7.7.3 At a DN Exit Point, subject to sections 7.7.4, 7.7.5, 7.7.6 and 7.7.7, a Reallocation Procedure (a **"Reallocation Procedure"**) may be operated by the Relevant DNO under which it may submit Reallocations to the Transporter in respect of each Gas Flow Day in Month M only:

(a) between 05:00 on D+1 and 16:00 on M+5;

(b) once, unless the Exit Quantity is adjusted in accordance with section 14 *(Measurement and Testing)* in which case a further Reallocation may be submitted;

and the Transporter shall only accept Reallocations which have been submitted in accordance with this section 7.7.3 and which are consistent with the approved Reallocation Procedure and the requirements of section 7.7.9.

7.7.4 Where a DNO wishes to use a Reallocation Procedure, it shall first write to the Transporter specifying:

(a) the DN Exit Point where approval for use of a Reallocation Procedure is requested;

(b) the procedure the DNO wishes to operate;

(c) the date on which the DNO wishes to commence using the Reallocation Procedure, which shall be the first Gas Flow Day in a Month;

and approval for the use of the Reallocation Procedure may be given or withdrawn at the sole discretion of the Transporter, subject to section 7.7.6.

7.7.5 Where a DNO wishes to cease the use of a Reallocation Procedure which has been approved under section 7.7.4, it shall inform the Transporter and all Shippers with an Exit Point Registration at the Relevant Exit Point in writing:

(a) specifying the date on which the DNO wishes to cease using the Reallocation Procedure, which shall be the last Gas Flow Day in a Month; and

(b) giving no less than one Month's notice.

7.7.6 Where the Transporter withdraws approval for the use of a Reallocation Procedure it shall inform the Relevant DNO and all Shippers with an Exit Point Registration at the Relevant Exit Point in writing:

(a) specifying the date on which the Reallocation Procedure shall cease to operate, which shall be the last Gas Flow Day in a Month; and

(b) giving no less than one Month's notice.

7.7.7 Where approval for the use of a Reallocation Procedure has been withdrawn or has not been provided by the Transporter in accordance with this section 7.7, Reallocations at a DN Exit Point shall be made by the Transporter in accordance with section 7.6.

7.7.5~~8~~ Shippers holding an Exit Point Registration in respect of a DN Exit Point authorise the Transporter to accept Reallocations ~~requests~~ at the DN Exit Point from the Relevant DNO submitted in accordance with this section 7.7. ~~section 7.7.2(b)(i).~~

7.7.~~3~~ 9 A Reallocation requested under section 7.7.2 or submitted by a DNO under section 7.7.3 shall be accepted by the Transporter only if the Transporter is satisfied that the aggregate quantity of gas which would be allocated to such affected Shippers in respect of D, if section 7.6.1 were applied, is equal to the ~~total quantity of gas which the affected Shippers have requested be reallocated~~ Exit Quantity in respect of the relevant Exit Point for the relevant Gas Flow Day.

7.7.4~~4~~10 A Reallocation accepted by the Transporter in accordance with this section 7.7~~.3~~ shall, subject to section 14 *(Measurement and Testing)*, become a Final Exit Allocation.

~~7.7.5 Shippers holding an Exit Point Registration in respect of a DN Exit Point authorise the Transporter to accept Reallocation requests at the DN Exit Point from the Relevant DNO in accordance with section 7.7.2(b)(i).~~

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Modify section 8.2.1 to read as follows:

Imbalance Tolerance Percentage

8.2.1 Within 10 Business Days of providing a Downstream Load Statement in respect of an Exit Point in accordance with section 22.8, a Shipper shall be informed by the Transporter of its weighted average tolerance, expressed as a percentage, using the information contained in the Downstream Load Statement as set out below (a Shipper's "**Imbalance Tolerance Percentage**" or **"ITP"**):

$$ITP\ (as\ \%) = \frac{100}{TC_{vm}} \times (a + b + c + d)$$

where:

a = $\sum C_{vm} \times C_f$ for Un1

b = $\sum C_{vm} \times C_f$ for Un2;

c = $\sum C_{vm} \times C_f$ for Un3;

d = $\sum C_{vm} \times C_f$ for Un4;

$\sum C_{vm}$ = the maximum quantity in kWh/d which may reasonably be required to supply all of the Shippers' demand in the relevant downstream load category listed in column (2) in the table below (a **"Downstream Load Category"**) at all Exit Points on a Gas Flow Day D as set out in the relevant Downstream Load Statement;

TC_{vm} = aggregate of each $\sum C_{vm}$ of each Downstream Load Category;

Un = the number identifying the Downstream Load Category listed in column (1) of the table below; and

C_f = Downstream Load Category weighting factor listed in column (3) of the table below.

~~Exit Point~~ Imbalance Tolerance Table

(1)	(2)	(3)
Number identifying Downstream Load Category (Un)	Downstream Load Category	Downstream Load Category weighting (C_f)
1	Power generation consumers	3%
2	Downstream consumers whose loads are greater than or equal to 1,465,416,000 kWh/annum and are not power generation consumers	3%
3	Downstream consumers whose loads are greater than or equal to ~~733,000~~ 2,196,000 kWh/annum but less than 1,465,416,000 kWh/annum (generally classified in a DNO's distribution network code as daily metered consumers)	~~10~~ 5%
4	Downstream consumers whose loads are less than ~~733,000~~ 2,196,000 kWh/annum (generally classified in a DNO's distribution network code as non-daily metered consumers)	~~20~~ 10%

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Modify section 8.4.4 to read as follows:

8.4.4 For each Gas Flow Day D, in respect of each Exit Point for each Shipper a **"Scheduling Tolerance Percentage"** or "**STP"** shall be determined, expressed as a percentage, as:

$$STP\ (\text{as a } \%) = \frac{100}{TC_{vm}} \times (a+b+c+d)$$

where:

a = C_{vm} x C_f for Un1;

b = C_{vm} x C_f for Un2;

c = C_{vm} x C_f for Un3;

d = C_{vm} x C_f for Un4;

C_{vm} = the maximum quantity in kWh/d which may reasonably be required to supply all of the Shippers demand in the relevant Downstream Load Category at the Exit Point on a Gas Flow Day D as set out in the relevant Downstream Load Statement;

TC_{vm} = aggregate of each C_{vm} of each Downstream Load Category;

Un = the number identifying the Downstream Load Category listed in column (1) of the table below; and

C_f = Downstream Load Category weighting factor listed in column (3) of the table below.

~~Exit Point~~ Scheduling Tolerance Table

(1)	(2)	(3)
Number identifying Downstream Load Category (Un)	Downstream load category	Downstream Load Category weighting (C_f)
1	Power generation consumers	3%
2	Downstream consumers whose loads are greater than or equal to 1,465,416,000 kWh/annum and are not power generation consumers	3%
3	Downstream consumers whose loads are greater than or equal to ~~733,000~~ 2,196,000 kWh/annum but less than 1,465,416,000 kWh/annum (generally classified in a DNO's distribution network code as daily metered consumers)	10%
4	Downstream consumers whose loads are less than ~~733,000~~ 2,196,000 kWh/annum (generally classified in a DNO's distribution network code as non-daily metered consumers)	20%

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Modify section 10.13 to read as follows:

10.13 Exit Control in an Emergency

10.13.1 Where Emergency Steps include the reduction or discontinuance of the offtake of gas at an Exit Point, the Transporter shall first seek voluntary reductions by Shippers and, if the Transporter

cannot achieve the requisite reduction voluntarily, it shall endeavour to reduce offtake from the NI Network, in so far as is practicable, in the following order (the **"Priority Order"**), to the extent ~~that the relevant Downstream Load Statement confirms~~ that gas made available for offtake at the Exit Point is supplied to:

(a) power generation consumers;

(b) consumers whose loads are greater than or equal to 1,465,416,000 kWh/annum other than power generation consumers;

(c) consumers whose loads are greater than or equal to 733,000 kWh/annum but less than 1,465,416,000 kWh/annum;

(d) consumers whose loads are less than 733,000 kWh/annum.

10.13.2 The Transporter shall endeavour, in so far as it is practicable, to treat each Exit Point equally within each ~~Downstream Load Category~~ category of consumer in accordance with section 10.13.1.

10.13.3 In so reducing offtake, the Transporter shall give due consideration, upon notice from a Shipper and, where practicable, so as to enable End Users to discontinue offtake in such a manner as to preserve so far as possible essential services, or to allow the End User to change to alternative fuels (where practicable).

10.13.4 Where, pursuant to the Emergency, the Transporter instructs a Shipper to give any notification or communication to an End User or supplier, the Shipper shall comply with that instruction.

10.13.5 Without prejudice to the Transporter's ability to take any Emergency Steps, the Transporter may take steps physically to isolate any Exit Point where a Shipper does not comply with any instruction given under this section 10.

10.13.6 The order in which, following an Emergency, offtake of gas at Exit Points is restored shall, so far as is practicable, be the reverse of the Priority Order.

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Insert the Transition section shown below immediately following section 26: South Section (or section 25):

T. TRANSITION ARRANGEMENTS FOR THE SECOND PHASE REDUCTION OF THE IMBALANCE TOLERANCE PERCENTAGE

T1 Introduction

T1.1 This section T provides for the implementation of the second phase reduction in the Imbalance Tolerance Percentage.

T2 Definitions

T2.1 In this section T1, **"Transition Date"** means 1st April 2021.

T3 Second Phase Reduction in Imbalance Tolerance Percentage

T3.1 With effect from the Transition Date, the imbalance tolerance table in section 8.2.1 shall be modified as shown below:

Imbalance Tolerance Table

(1)	(2)	(3)
Number identifying Downstream Load Category (Un)	Downstream Load Category	Downstream Load Category weighting (C_f)
1	Power generation consumers	2%
2	Downstream consumers whose loads are greater than or equal to 1,465,416,000 kWh/annum and are not power generation consumers	2%
3	Downstream consumers whose loads are greater than or equal to 2,196,000 kWh/annum but less than 1,465,416,000 kWh/annum (generally classified in a DNO's distribution network code as daily metered consumers)	5%
4	Downstream consumers whose loads are less than 2,196,000 kWh/annum (generally classified in a DNO's distribution network code as non-daily metered consumers)	10%

T3.2 For the avoidance of doubt, with effect from the Transition Date and thereafter on an enduring basis, a Shipper's ITP shall be determined using the imbalance tolerance table in section 8.2.1 as modified by section T3.1 of this Transition Section.

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Modify Appendix 1(Definitions and Interpretations) to include the following defined term:

"Reallocation Procedure" has the meaning given to it in section 7.7.3;