Initial Modification Report No.8
Phased Reduction of Imbalance Tolerances, Alignment of Tolerance Load Bands with DM/NDM Categories & Update to Exit Reallocations Rules

6th December 2019

Please find below Initial Modification Report No.8 to the NI Network Gas Transmission Code raised by the Transporter, as required under sections 2 and 3 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.

Further detail is provided in section G below

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 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.

D 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 renominations 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.

E The date proposed for implementation

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

F How to Respond

Please send responses no later than 8th January 2020 to:

shippercommunications@gmo-ni.com

Gas Market Operator for Northern Ireland
4th Floor,
The Arena Building
85 Ormeau Road
Belfast
BT7 1SH

G. Phased Reduction of Imbalance Tolerances

1. Background

In December 2014, the Transporter published the first Interim Measures report for Northern Ireland to meet the requirements of the Balancing Regulation EU 312/2014. The Balancing Regulation sets down rules for Shipper balancing and residual balancing by the Transporter as well as specifying other features of gas trading at hubs and information flows, including the provision of forecast information. Interim Measures was adopted in Northern Ireland following approval by the Utility Regulator in 2015, providing for a transition to full compliance across the various aspects of the Balancing Regulation.

The Interim Measures Report 2014 set out, amongst other things, that Shipper imbalance tolerances were required in Northern Ireland due to the lack of a liquid short-term wholesale market and limited interconnection capacity (particularly VRF capacity) with adjacent markets. The Transporter noted that imbalance tolerances could need to be reduced over time, and that reductions could be implemented at short notice should Shipper behaviour be observed which suggested that it was appropriate.

2. Tolerance Review and Proposed Reductions to Imbalance Tolerances

In 2018, as part of the progress towards compliance under Interim Measures, the Transporter undertook a Tolerance Review, and in July 2019 published a consultation on its conclusions. The review examined Shipper balancing performance over the preceding 18 months and modelled what the cost outcomes would have been, had the tolerance levels been tighter. The findings are summarised below.

For category 3 and 4 consumer bands:

- the current tolerance levels for category 3 and 4 consumer bands are not considered to be a realistic reflection of the level of risk to the Shipper in managing the balance of inputs and offtakes;
- a reduction would not undermine the development of the short-term wholesale gas market;
- a reduction would not result in an unduly excessive increase in residual balancing costs.

For power sector Shippers:

- 2-3% does reflect the level of risk facing power sector Shippers given the uncertainties faced relating to i-SEM and the (relatively high) degree of operational control available to them.

The Tolerance Review Report proposed reductions in phases shown in the table below:

Category	Consumers	Current Tolerance	Phase 1	Phase 2
1	Power Generation	3%	3%	2%
2	Downstream consumers whose loads are greater than or equal to 1,465,416,000kWh/annum and who are not Power Generation Customers	3%	3%	2%
3	Downstream consumers whose loads are greater than or equal to 733,000 kWh/annum[1], but less than 1,465,416,000 kWh/annum	10%	5%	3%
4	Downstream consumers whose loads are less than 733,000 kWh/annum	20%	10%	5%

[1] Note that changes are also proposed to the load band categories, see 6.1 below, and that the proposed date for phase 2 differs from the Tolerance Review Consultation

3. Tolerance Review Conclusions

Shippers responses to the consultation are detailed in the summary report published on 29th November 2019. They raised a range of concerns about the ability of Shippers, particularly non-power station Shippers, to manage their balancing with lower tolerance levels, along with a number of other issues and suggestions which are being considered separately. The DNOs also suggested the alignment of load band categories as provided for in this Proposed Modification.

Clearly the actual impacts of tolerance reduction cannot be known until after implementation. Whether or not the proposed reductions will be successful in reducing residual balancing costs is contingent on Shippers being able to improve on their current balancing performance levels in response.

On balance, however, for the purposes of compliance it is considered important to proceed with the proposed changes. This is particularly the case given that the Tolerance Review indicated that the phase 1 proposed reductions should not have a significant impact on overall balancing costs or individual costs for Shippers.

4. Proposed Transition Dates

In line with the Tolerance Review it is proposed to implement the changes in two phases. The following dates are now proposed:

Phase 1: April 2020

Phase 2: April 2021

This timing is intended to give all parties appropriate time to prepare for implementation and to fully explore the opportunities for performance improvement.

5. Further Assessment Prior to Phase 2

In order to protect against the possibility of unforeseen developments or adverse impacts and to ensure that the phase 2 proposed reductions remain appropriate, the Transporter will monitor industry performance on an ongoing basis. It will also 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. This will provide the opportunity to make further adjustments should they be found to be necessary.

6. Other Associated Changes

6.1 Proposed Changes to Consumer Category Bands

As part of the Tolerance Review, it was highlighted that the definitions of load categories in the NI Network Gas Transmission Code Section 8 *(Balancing and Scheduling)* differ from those used by the Distribution Network Operators (DNOs).

Specifically, category 3 (currently defined as 733,000kWh/annum to 1,465,416,000 kWh/annum) includes both Daily Metered (DM) and Non-Daily Metered (NDM) consumers. The 'DM threshold' (above which, daily metering is required) operated by PNGL and SGN is 2,196,000 kWh/annum, and Firmus is also planning changes to align with this.

The DNOs suggested that the category 3 boundaries be amended to align with DM customers, leaving category 4 to comprise all NDM customers (i.e. domestic and small industrial and commercial customers).

The Transporter agrees that this change is logical and is likely to be helpful to the overall intention of reducing tolerances. It will align the tolerance bands better with the different forecasting, nomination and balancing processes applied by Shippers for DM and NDM consumers respectively.

This Proposed Modification therefore includes the changes in definitions shown below for category 3 and category 4.

Category	Current Definitions	Proposed Definitions
1	Power Generation	Power Generation
2	Downstream consumers whose loads are greater than or equal to 1,465,416,000kWh/annum and who are not Power Generation Customers	Downstream consumers whose loads are greater than or equal to 1,465,416,000kWh/annum and who are not Power Generation Customers
3	Downstream consumers whose loads are greater than or equal to 733,000 kWh/annum, but less than 1,465,416,000 kWh/annum	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)
4	Downstream consumers whose loads are less than 733,000 kWh/annum	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)

It should be noted that the categories for emergency load shedding in the NI Network Gas Transmission Code Section 10.13 *(System Constraints, Exceptional Events and Emergencies)* referred to as the 'Priority Order' will remain unchanged. In the Priority Order, group 'd' customers will remain as domestic customer with loads less than 733,000 kWh/annum. This is because the Priority Order categories reflect the need to protect domestic consumers as far as possible in an emergency situation, over other larger NDM loads.

Minor changes to the text of section 10.13 are therefore also proposed to remove unnecessary references to Downstream Load Statements. In an emergency situation, the NINEC arrangements will be operating and these do not, in practice, rely on information from Downstream Load Statements.

6.2 Change to the Tolerance Table Headings and Load Categories Alignment for Scheduling

This Proposed Modification will amend the headings of the tables in section 8.2.1 and 8.4.4 of the NI Network Gas Transmission Code. At present both the Imbalance Tolerance Table and the Scheduling Tolerance Table are titled 'Exit Point Tolerances', reflecting the historical point-to-point regime and the consistency (to date) of the values therein. These will be amended to Imbalance Tolerance Table and Scheduling Tolerance Table respectively.

It is also proposed to make the same amendments to the load band categories for Scheduling Tolerances as is proposed for Imbalance Tolerances to align with DM and NDM categories, for the sake of consistency and ease of operation for Shippers.

For the avoidance of doubt, no changes to the tolerances percentages for scheduling are proposed.

6.3 Update to the Exit Reallocations Rules

The Transporter has also proposed some updates to the Exit Reallocations rules, to ensure that current practice is reflected and to clarify that the DNOs require the approval of the Transporter to operate a reallocations procedure on a regular basis.

The existing rules contain elements of drafting which pre-date the entry-exit regime and even domestic competition in the gas market in Northern Ireland, when specific allocation agreements were occasionally reached between some (but not necessarily all) of the parties at a shared exit point, for example enabling one party to act as a 'swing' shipper.

The proposed updates to the text reflect the fact that at non-DN Exit Points, reallocations are not routinely required and would therefore need to be requested and approved separately for each day concerned.

They also reflect the current procedures at DN Exit Points where the Transporter accepts transmission allocations submitted by the DNO which may have been subject to a reallocation methodology (applied by the DNO) and which is used routinely, rather than being a one-off amendment to quantities.

In particular, the proposed text clarifies that a DNO is required to request approval of the Transporter for reallocations to be applied, and such approval may be given and withdrawn at the sole discretion of the Transporter. It also sets out administrative details for requesting this approval and clarifies how the use of a Reallocation procedure could be ended by both the Transporter and the DNO, on one month's notice.

These changes are intended to make it clear that:

- approval for such a routine procedure does not need to be requested/given each day;
- the operation of a reallocation procedure must start on the first day of a month (and, if/when its' use is to be ended, it must end on the last day of a month); and
- that if approval is not in place, then the default mechanism (pro-rata) in section 7.6 applies.

On approval of this Proposed Modification, the Transporter intends to invite the DNOs to submit their requests for approval for use of a Reallocation Procedure to ensure that current practice can continue without change from the implementation date of 1st April 2020.

However, the proposed changes to the text are otherwise simple updates reflecting current operational practices, rather than implementing any substantive changes to the rules.

H: Proposed Legal Text

With effect from the Implementation Date of this Proposed Modification:

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;~~

~~(i) by the Relevant DNO on behalf of Shippers at the DN Exit Point; and~~

~~(ii) 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%

……..

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 = $C_{vm} \times C_f$ for Un1;

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

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

d = $C_{vm} \times C_f$ 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%

……..

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:

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.

……...

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;