

CODE OF OPERATIONS
PART E

THE PROVISIONS OF PART E WHICH RELATE TO THE VIRTUAL INVENTORY PRODUCT (VIP) HAVE BEEN HIGHLIGHTED. VIP HAS NOT YET BEEN REVIEWED IN THE CONTEXT OF THE CODE MODIFICATIONS TO TAKE ACCOUNT OF THE REQUIREMENTS OF EU CODES; ALL VIP DRAFTING HAS BEEN RETAINED BUT THE AVAILABILITY OF THE VIP PRODUCT IS SUSPENDED WITH EFFECT FROM 1 OCTOBER 2015.

BALANCING
SHRINKAGE

VERSION 4.0
AS AMENDED TO INCORPORATE
CODE MODIFICATION (A020: 04 APRIL 2008),
(A034: 11 DECEMBER 2009)
(TO ACCOMMODATE MEA: 01 APRIL 2009)
(DIRECTION FROM CER RE: DISBURSEMENT ACCOUNT: 01 OCTOBER 2010)
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1. BALANCING

1.1 General

- 1.1.1 Each Shipper shall use reasonable endeavours to ensure that, in respect of each Day, its Initial Inputs and Final Inputs are equal to its Initial Outputs and Final Outputs respectively.
- 1.1.2 The Transporter shall be Cash Neutral with respect to the settlement of all Balancing Charges and Scheduling Charges.
- 1.1.3 Where a Shipper has a Daily Imbalance Quantity (as calculated in accordance with Section 1.5) in respect of a Day, Daily Imbalance Charges shall apply or shall arise for such Daily Imbalance Quantity in accordance with Section 1.6.
- 1.1.4 A Shipper may trade all or part of its Daily Imbalance Quantity for a Day with another Shipper (which has an opposing Daily Imbalance Quantity for the same Day) by transacting an After Day Trade with such other Shipper in accordance with Section 1.9.

1.2 System Imbalance

- 1.2.1 The Transporter shall have the right at all times to take any Balancing Action(s) it deems necessary to ensure the physical balance of the Transportation System.
- 1.2.2 System Imbalance Charges shall be debited from or credited to the Disbursements Account in accordance with Section 1.4.

1.3 Balancing Gas Contracts

- 1.3.1 The Transporter shall enter into such Balancing Gas Contracts as it considers necessary to provide or dispose of Natural Gas in respect of any Balancing Actions required during a Gas Year.
- 1.3.2 A Balancing Gas Contract shall be awarded following a competitive tender.
- 1.3.3 The Transporter shall make capacity available to facilitate submission of Entry Nomination(s) with respect to quantities of Balancing Gas required by the Transporter pursuant to a Balancing Gas Buy[±].
- 1.3.4 Where the person providing Balancing Gas pursuant to a Balancing Gas Buy is a Shipper, Nominations with respect to Balancing Gas in respect of the Day shall be made separately and independently from

[±]This has not been extended to IP Entry points because of the requirement to allocate capacity at interconnection points by way of auctions.

any other Nominations made by such Shipper in respect of a Day. Where the person providing Balancing Gas pursuant to a Balancing Gas Buy is not a Shipper the Transporter shall for the purpose of the provision of Balancing Gas to the Transportation System in respect of a Day be entitled to make Nominations and receive Allocations in respect of Balancing Gas.

1.4 **Disbursements Account²**

- 1.4.1 The Transporter shall establish an account ("**Disbursements Account**") which shall be operated in accordance with this Section 1.4.
- 1.4.2 The Transporter shall have the right in the performance of its obligations hereunder to apply any amounts credited to the Disbursements Account for the purpose of discharging any payments due in respect of Balancing Gas, Balancing Charges, Shrinkage Gas, Shrinkage Costs associated with the Transportation System which are not included in the Tariff and Non-Compliant Gas together with any other costs arising in connection with any of the matters listed above.
- 1.4.3 The Transporter shall, after the Due Date in respect of invoices issued in respect of a Month, calculate for that Month:
- (a) the total amount received by the Transporter on or before the Due Date (including by way of utilisation of a Shipper's Monthly Disbursements Credit in accordance with Section 1.4.5) from Shippers and any other party in respect of Balancing Charges, Scheduling Charges and any cash out with respect to any Operational Requirement or reconciliation of Natural Gas in the Transportation System pursuant to any applicable OBA [or IP OBA Provisions](#) in respect of the relevant Month which shall be credited to the Disbursements Account ("**Monthly Disbursements Account Receipts**"); and
 - (b) the total costs incurred by the Transporter which have not otherwise been recovered by the Transporter in respect of Balancing Gas, Balancing Charges, Non-Compliant Gas **and VIP Utilisation at the end or termination of a Shipper's I/C Inventory Space Booking Period**, and cash out or reconciliation of any Natural Gas in the Transportation System at the end of any applicable OBA [or IP OBA Provisions](#) together with any

²~~We have not noted any proposals in the business rule to restructure the Disbursement Account to limit it to balancing issues only; in the circumstances we have not endeavoured to do so however the Disbursement account as currently structured would not fully reflect the requirements of the regulations.~~

provision made by the Transporter in respect of such items payable in respect of the same Month and any other costs arising in connection with any of the matters listed above ("**Monthly Disbursements Account Payments**").

- 1.4.4 At the time of calculating the Monthly Disbursements Account Receipts and the Monthly Disbursements Account Payments for a Month, the Transporter shall calculate the amount of any Monthly Disbursements Account Excess for the relevant Month in accordance with Section 1.4.5 or the amount of any Monthly Disbursements Account Deficit for the relevant Month in accordance with Section 1.4.6. Each Shipper's share of such excess or deficit shall be the same proportion as that which the Shipper's Final Entry Allocations, [Final IP Entry Allocations](#) ~~-(including Final IP VEntryP Allocations~~ (but excluding any Final Sub-Sea I/C Offtake Allocations) and Final Exit Allocations bears to the aggregate of all Shippers' [Final IP Entry Allocations](#) Final Entry Allocations and Final Exit Allocations, (including [IP VExitP Allocations](#) and [FinalSouth-North IP CSEP Offtake Allocations](#) but excluding Final Sub-Sea Offtake Allocations) respectively in that Month.
- 1.4.5 If the amount of Monthly Disbursements Account Receipts for a Month exceeds the Monthly Disbursements Account Payments for a Month ("**Monthly Disbursements Account Excess**") then the Transporter shall notify each Shipper of its share of the amount of such excess ("**Monthly Disbursements Credit**"). The Shipper may apply such Monthly Disbursements Credit against any subsequent Monthly Disbursements Liability incurred by the Shipper in that Gas Year.
- 1.4.6 If the amount of Monthly Disbursements Account Receipts for a Month is less than the Monthly Disbursements Account Payments for that Month ("**Monthly Disbursements Account Deficit**") then each Shipper shall reimburse the Transporter for its share of the amount of such deficit ("**Monthly Disbursements Liability**") and the Transporter shall include such amount in the next Monthly Invoice to the Shipper in accordance with Part I (*Legal and General*) Section 11 (*Invoicing and Payment*).
- 1.4.7 The Transporter shall, after the end of each Gas Year, following the issue of an invoice/credit with respect to any Shipper's Additional Balancing Action Contribution, calculate for that Gas Year:
- (a) the total amount received from all Shippers (including any payments received from any Shipper in respect of its Monthly Disbursements Liabilities whether such payments are made by way of utilisation of a Shipper's Monthly Disbursements Credit

in accordance with Section 1.4.5 or otherwise) and amounts received from Shippers in respect of any Shipper's Additional Balancing Action Contributions and any other person in respect of Balancing Charges, Shrinkage Costs not included in the Tariff and Scheduling Charges and any cash out with respect to any Operational Requirement or reconciliation of Natural Gas in the Transportation System pursuant to any applicable OBA [or IP OBA Provisions](#) which shall be credited to the Disbursements Account ("**Annual Disbursements Account Receipts**"); and

- (b) the total costs incurred by the Transporter in respect of Balancing Gas, Balancing Charges, Shrinkage Gas, Shrinkage Costs (other than the cost of Distribution System Shrinkage Gas where not included in the Tariff), Shipper's Balancing Action Refund(s), Non-Compliant Gas together with any outstanding Monthly Disbursements Credit(s) (which have not been applied by Shippers against their Monthly Disbursements Liabilities) and any cash out with respect to any Operational Requirement or reconciliation of Natural Gas in the Transportation System pursuant to any applicable OBA [or IP OBA Provisions](#) and any provision made by the Transporter in respect of such items payable in respect of the same Gas Year and any other costs arising in connection with any of the matters listed above ("**Annual Disbursements Account Payments**").

- 1.4.8 At the time of calculating the Annual Disbursements Account Receipts and Annual Disbursements Account Payments for a Gas Year, the Transporter shall calculate the amount of any Annual Disbursements Account Excess in accordance with Section 1.4.9 and the amount of any Annual Disbursements Account Deficit in accordance with Section 1.4.10. Each Shipper's share of such excess or deficit shall be calculated in accordance with Section 1.4.11.
- 1.4.9 If the amount of the Annual Disbursements Account Receipts for a Gas Year exceeds the Annual Disbursements Account Payments for a Gas Year ("**Annual Disbursements Account Excess**") then the Transporter shall notify each Shipper of its share of the amount of such excess.
- 1.4.10 If the amount of the Annual Disbursements Account Receipts for a Gas Year is less than the Annual Disbursements Account Payments for such Gas Year ("**Annual Disbursements Account Deficit**") then each Shipper shall reimburse the Transporter for its share of the amount of such deficit.

- 1.4.11 The Transporter shall calculate each Shipper's credit from the Annual Disbursements Account Excess or contribution to the Annual Disbursements Account Deficit (as the case may be) in respect of such Gas Year as follows:

$$\frac{A}{B} * C$$

where:

- A = the sum of a Shipper's aggregate [Final IP Entry Allocations](#), Final Entry Allocations and aggregate Final Exit Allocations, [Final IP VExit](#) Allocations, [Final IP VEntry](#) Allocations, ~~Final~~[South-North IP](#) CSEP Offtake Allocations and Final CSEP Exit Allocations for a Gas Year (but excluding all Final Sub-Sea I/C Offtake Allocations);
- B = the sum of the aggregate of all Shippers' [Final IP Entry Allocations](#), Final Entry Allocations, Final [IP VExit](#) Allocations, Final [IP VEntry](#) Allocations and the aggregate of all Shippers' Final Exit Allocations and Final CSEP Exit Allocations and Final ~~South-North IP~~ CSEP Offtake Allocations (but excluding all Final Sub-Sea I/C Offtake Allocations) for the Gas Year; or
- C = in the case of an Annual Disbursements Account Excess the amount of such excess; and
in the case of an Annual Disbursements Account Deficit the amount of such deficit.
- 1.4.12 If there is an Annual Disbursements Account Excess, the Transporter shall, within twelve (12) days following notification to each Shipper of its share of such excess pursuant to Section 1.4.9, refund each such Shipper's share of the amount of such excess plus the amount of any outstanding Monthly Disbursements Credit(s) due to (less any outstanding Monthly Disbursements Liability due by) such Shipper.
- 1.4.13 If there is an Annual Disbursements Account Deficit, each Shipper shall pay to the Transporter the amount of such Shipper's share of the deficit (plus any outstanding Monthly Disbursements Liability due by such Shipper), provided however that each Shipper may credit any outstanding Monthly Disbursements Credit against any such liability and the Transporter shall issue to the Shipper an invoice in respect of its share of such deficit in accordance with Part I (*Legal and Miscellaneous*) Section 11 (*Invoicing and Payment*).

- 1.4.14 For the avoidance of doubt, a Monthly Disbursements Credit may only be set against a subsequent Monthly Disbursements Liability in respect of the same Gas Year or the Shipper's liability in respect of an Annual Disbursements Account Deficit for the same Gas Year.
- 1.4.15 The Transporter shall, after the end of each Gas Year and prior to the Annual Disbursements Account Reconciliation referred to in Section 1.4.7, calculate, for that Gas Year, the total net annual cost of the Balancing Actions ("**Net Annual Balancing Action Cost**") undertaken by the Transporter in respect of the preceding Gas Year which cost may be negative amount.
- 1.4.16 Each Shipper's required contribution (the "**Shipper's Annualised Balancing Action Contribution**") to the Net Annual Balancing Action Cost shall be calculated according to the following formula:

$$S = (X/Y) * Z$$

Where:

S = the Shipper's Annualised Balancing Action Contribution;

X = the sum of a Shipper's aggregate [Final IP Entry Allocations](#), Final Entry Allocations, Final [IP VEntry](#) Allocations and aggregate Final Exit Allocations, Final [IP VExit](#) Allocations, Final CSEP Exit Allocations and Final [South-North-IP](#) CSEP Offtake Allocations for a Gas Year (but excluding all Final Sub-Sea I/C Offtake Allocations);

Y = the sum of the aggregate of all Shippers' [Final IP Entry Allocations](#), Final Entry Allocations, Final [IP VEntry](#) Allocations and the aggregate of all Shippers' Final Exit Allocations, Final [IP VExit](#) Allocations, Final CSEP Exit Allocations and Final [South-North-IP](#) CSEP Offtake Allocations (but excluding all Final Sub-Sea I/C Offtake Allocations) for the Gas Year;

Z = the Net Annual Balancing Action Cost.

- 1.4.17 The Transporter shall review amounts received from and credited to each Shipper in respect of the cost of Balancing Actions in respect of the same Year through such Shipper's Monthly Disbursements Credit(s) and/or Monthly Disbursements Invoices to establish such Shipper's actual contribution to the cost of Balancing Actions in the relevant Gas Year as accounted for through the Monthly

Disbursements Account mechanism (“**Shipper’s Interim Balancing Action Contribution**”);

- 1.4.18 Where a Shipper’s Interim Balancing Action Contribution is less than the Shipper’s Annualised Balancing Action Contribution the Transporter shall invoice the Shipper for the amount of the difference (the “**Shipper’s Additional Balancing Action Contribution**”).
- 1.4.19 Where the Shipper’s Interim Balancing Action Contribution is in excess of the Shipper’s Annualised Balancing Action Contribution then the Transporter shall account to the Shipper for such excess (the “**Shipper’s Balancing Action Refund**”).

1.5 Daily Imbalance Quantity Calculation

- 1.5.1 Each Shipper shall have attributed to it a quantity (“**Initial Daily Imbalance Quantity**” or “**IMB_{Initial}**”) for each Day, which shall be calculated by the Transporter after the Initial Allocations have been made on D+1 and which shall be calculated by subtracting a Shipper’s Initial Outputs from its Initial Inputs on the Day in accordance with the following formula:

$$\mathbf{IMB_{Initial} = Initial\ Inputs - Initial\ Outputs}$$

where:

$$\mathbf{Initial\ Inputs = All_{Initial} + IBP_{Buy};}$$

$$\mathbf{Initial\ Outputs = All_{OutInitial} + IBP_{Sell},}$$

where:

$All_{Initial}$ = the sum of a Shipper’s [Initial IP Entry Allocations](#) plus Initial Entry Allocations ~~(plus including Initial IP VEntry P-Offtake Allocations)~~ **plus the Shipper’s VIP Withdrawal Allocations** and **minus the Shipper’s VIP Injection Allocations** in respect of Day D;

IBP_{Buy} = the sum of a Shipper’s IBP Buy Allocations in respect of Day D;

$All_{OutInitial}$ = the sum of a Shipper’s Initial Exit Allocations (including Sub-Sea I/C Offtake Allocations and [South-North-IP CSEP Offtake Allocations](#)) and the Shipper’s Initial CSEP Exit Allocations

and the Shipper's initial IP VExit~~P~~
Allocations in respect of Day D; and

IBP_{Sell} = the sum of a Shipper's IBP Sell Allocations
in respect of Day D.

The Transporter shall notify to each Shipper the Initial Daily Imbalance Quantity in respect of such Shipper as soon as reasonably practicable, but not later than 17:30 hours on D+1. The Transporter shall disregard the Shipper's IP Entry Allocation and/or Entry Allocation in respect of Shrinkage Gas for the purpose of calculating the Shipper's Initial Daily Imbalance Quantity.

~~For the avoidance of doubt each Shipper shall have a separate imbalance calculation by reference to each Shipper ID pursuant to which the Shipper submits or is deemed to submit any Nominations and/or receive Allocations pursuant to this Code.²~~

1.5.2 At any time between 17:30 hours on D+1 and 17:00 hours on M+7 a Shipper's Initial Daily Imbalance Quantity for a Day may become a Revised Daily Imbalance Quantity as a consequence of:

- (a) a Reallocation or IP Reallocation between 17:00 hours on D+1 and 16:00 hours on D+5; and/or
- (b) an ADT Buy or ADT Sell in respect of Day D in accordance with Section 1.9.

1.5.3 Each Shipper shall have a quantity ("**Final Daily Imbalance Quantity**" or "**IMB_{Final}**") for each Day of the preceding Month which shall be determined by the Transporter after the Final Allocations have been made and which shall be calculated by subtracting a Shipper's Final Outputs from its Final Inputs on the Day in accordance with the following formula:

$$IMB_{\text{Final}} = \text{Final Inputs} - \text{Final Outputs}$$

where:

$$\text{Final Inputs} = All_{\text{InFinal}} + IBP_{\text{Buy}} + ADT_{\text{Buy}}$$

$$\text{Final Outputs} = All_{\text{OutFinal}} + IBP_{\text{Sell}} + ADT_{\text{Sell}}$$

where:

²~~Deleted – Shipper ID concept now deleted?~~

All _{Inf} Final	=	the sum of a Shipper's <u>Final IP Entry Allocations and Final Entry Allocations and the Shipper's IP VEntry Allocations</u> <u>[plus the Shipper's VIP Withdrawal Allocations and the Shipper's IPVEntryP Allocations]</u> <u>and minus the Shipper's VIP Injection Allocations</u> in respect of Day D;
IBP _{Buy}	=	the sum of a Shipper's IBP Buy Allocations in respect of Day D;
All _{Out} Final	=	the sum of a Shipper's Final Exit Allocations (including Sub-Sea I/C Offtake Allocations and <u>Final South-North-IP CSEP Offtake Allocations</u>) and the Shipper's Final CSEP Exit Allocations and the Shipper's Final <u>IP_VExitP</u> Allocations in respect of Day D;
IBP _{Sell}	=	the sum of a Shipper's IBP Sell Allocations in respect of Day D;
ADT _{Buy}	=	the sum of a Shipper's ADT Buys in respect of Day D; and
ADT _{Sell}	=	the sum of a Shipper's ADT Sells in respect of Day D.

The Transporter shall notify to the Shipper the Final Daily Imbalance Quantity in respect of such Shipper as soon as reasonably practicable, but not later than 17:30 hours on M+7. The Transporter shall disregard the Shipper's Final Entry Allocation in respect of Shrinkage Gas for the purpose of calculating the Shipper's Final Daily Imbalance Quantity.

- 1.5.4 A Shipper's Initial Daily Imbalance Quantity and/or Final Daily Imbalance Quantity can be either negative or positive according to the following:
- if the sum of a Shipper's Initial Inputs for a Day exceeds the sum of its Initial Outputs for that Day, the Shipper's Initial Daily Imbalance Quantity for that Day shall be positive;
 - if the sum of a Shipper's Initial Outputs for a Day exceeds the sum of its Initial Inputs for that Day, the Shipper's Initial Daily Imbalance Quantity for that Day shall be negative;
 - if the sum of a Shipper's Final Inputs for a Day exceeds the sum of its Final Outputs for that Day, the Shipper's Final Daily Imbalance Quantity for that Day shall be positive; and

- (d) if the sum of a Shipper's Final Outputs for a Day exceeds the sum of its Final Inputs for that Day, the Shipper's Final Daily Imbalance Quantity for that Day shall be negative.

1.5.5 For the avoidance of doubt an Entry Allocation [or an IP Entry Allocation](#) with respect to a nomination of Balancing Gas pursuant to a Balancing Gas Buy shall be excluded from a Shipper's Initial Inputs and Final Inputs for the purpose of the Daily Imbalance Quantity calculation. An Allocation [or IP Allocation](#) in respect of a quantity of Natural Gas nominated as a result of a Balancing Gas Sell shall be included in a Shipper's Initial Input and Final Input (respectively) for the purpose of the Daily Imbalance Quantity calculation.

1.6 Daily Imbalance Charges

1.6.1 For the purposes of this Code:

- (a) "**First Tier Imbalance Quantity**" means that portion of a Shipper's Final Daily Imbalance Quantity in respect of a Day that is less than or equal to the Shipper Portfolio Tolerance for the Shipper on that Day;
- (b) "**Second Tier Imbalance Quantity**" means that portion of a Shipper's Final Daily Imbalance Quantity in respect of a Day that is greater than the Shipper Portfolio Tolerance for the Shipper on that Day;

~~(c)~~ "**First Tier Imbalance Price**" means ~~a price for each Day comprising the Euro equivalent of the UK OCM System Average Price published by Transeo in respect of that Day a price calculated as follows for each Day:~~

~~(i) where the Final Daily Imbalance Quantity is positive, the Euro equivalent of the System Average Price multiplied by 1.0; and~~

~~(ii) where the Final Daily Imbalance Quantity is negative the Euro equivalent of the System Average Price multiplied by 1.0.~~

~~(d)~~ "**Second Tier Imbalance Price**" means a price calculated as follows for each Day:

- (i) where the Final Daily Imbalance Quantity is positive, the lower of:

- (1) the ~~System Average Price~~~~First Tier Imbalance Price~~ multiplied by 0.95 less the Imbalance Gas Transportation Costs; or
 - (2) a price being the Euro equivalent of the UK OCM System Marginal Sell Price published by ~~National Grid~~~~Transee~~ in respect of that Day (“**System Marginal Sell Price**”) less the Imbalance Gas Transportation Costs; and
- (ii) where the Final Daily Imbalance Quantity is negative, the higher of:
- (1) the ~~First Tier Imbalance Price~~~~System Average Price~~ multiplied by 1.05 plus the Imbalance Gas Transportation Costs; or
 - (2) a price comprising the Euro equivalent or the UK OCM System Marginal Buy Price published by Transco in respect of that Day (“**System Marginal Buy Price**”) plus the Imbalance Gas Transportation Costs.

~~(d)~~(e) “System Average Price” means the UK OCM System Average Price published by National Grid in respect of the Day.

- 1.6.2 Where a Final Daily Imbalance Quantity for a Shipper is either positive or negative, a Daily Imbalance Charge calculated in accordance with this Section 1.6 shall be payable by or credited to a Shipper, as set out in Part I (*Legal and General*) Section 11 (*Invoicing and Payment*).
- 1.6.3 Where a Shipper:
- (a) has a negative Final Daily Imbalance Quantity, it shall be liable to pay Daily Imbalance Charges calculated in accordance with Section 1.6.5;
 - (b) has a positive Final Daily Imbalance Quantity, it shall be entitled to a credit in respect of Daily Imbalance Charges calculated in accordance with Section 1.6.5.
- 1.6.4 Where a Shipper has:
- (a) a First Tier Imbalance Quantity, the First Tier Imbalance Price shall be payable by or credited to that Shipper in respect of such First Tier Imbalance Quantity;
 - (b) a Second Tier Imbalance Quantity:

- (i) the First Tier Imbalance Price shall be payable by or credited to the Shipper in respect of the portion of the Final Daily Imbalance Quantity that is equal to the Shipper Portfolio Tolerance; and
- (ii) the Second Tier Imbalance Price shall be payable by or credited to the Shipper in respect of the portion of the Final Daily Imbalance Quantity that is the Second Tier Imbalance Quantity.

1.6.5 The Daily Imbalance Charge shall be calculated by the Transporter for each Shipper for each Day in accordance with the following formula:

$$\text{DIC} = (\text{FTQ} * \text{FTIP}) + (\text{STQ} * \text{STIP})$$

where:

DIC = the Shipper's Daily Imbalance Charge for the Day;

FTQ = the Shipper's First Tier Imbalance Quantity for the Day;

FTIP = the First Tier Imbalance Price for the Day determined in accordance with Section 1.6.1(c)~~(i)~~ where the Shipper's Final Daily Imbalance Quantity for the Day is positive; and in accordance with Section 1.6.1(c)(ii) where the Shipper's Final Daily Imbalance Quantity is negative.

STQ = the Shipper's Second Tier Imbalance Quantity for the Day; and

STIP = the Second Tier Imbalance Price for the Day calculated in accordance with Section 1.6.1(d)(i) where the Shipper's Final Daily Imbalance Quantity for the Day is positive and in accordance with Section 1.6.1(d)(ii) where the Shipper's Final Daily Imbalance Quantity is negative.

1.7 Shipper Portfolio Tolerance

1.7.1 The Shipper Portfolio Tolerance shall be a single absolute tolerance quantity of Natural Gas calculated in accordance with this Section 1.7.

1.7.2 In order to calculate the Shipper Portfolio Tolerance for each Shipper at each Entry Point at which it is a Registered Shipper, a percentage tolerance ("**Entry Tolerance**") shall be applied in respect of a

Shipper's Final [IP Entry Allocation](#) or [Final Entry Allocation](#) at each respective Entry Point or [IP Entry Point](#) for a Day as follows:

Entry Point IP Entry Point	Entry Tolerance %
Moffat IP	1.50
Inch	1.5
Bellanaboy	1.5

~~A Shipper shall not have any tolerance with respect to a [IP VEntryP](#).~~

Where the Entry Point is configured within a Bi Directional CSP the Entry Tolerance shall only be applied where there is a Net Metered Quantity (Entry) at the relevant Entry Point in respect of the Day, and with respect to that proportion of the Shipper's Final Entry Allocation which is derived from the Net Metered Quantity (Entry).

For the purpose of this Section 1.7.2 the proportion of the Shipper's Final Entry Allocation which is derived from the Net Metered Quantity (Entry) shall be the same as the proportion which the Net Metered Quantity (Entry) bears to the EODQ in respect of that Day.

[A Shipper shall have a tolerance quantity calculated in accordance with Section 1.8.4 at an IP Entry Point for a Non-OBA Day.](#)

The percentage tolerance to be applied in relation to any New Entry Points shall be notified by the Transporter to the Shippers following consultation by the Transporter with the Commission.

~~A Shipper shall not have any tolerance with respect to a [IP VEntry](#).~~

1.7.3 In order to calculate the Shipper Portfolio Tolerance for each Shipper, a percentage tolerance as specified in the table below ("**Exit Tolerance**") shall be applied to each such Shipper's Final Exit Allocations and such Shipper's Final CSEP Exit Allocations [and Final IP CSEP Offtake Allocations](#) for a Day as follows:

- (a) to the Final LDM Exit Allocation in respect of such Shipper at each individual LDM Offtake at which the Shipper is a Registered Shipper; and/or
- (b) to the Final DM Exit Allocation in respect of the DM Offtakes at which the Shipper is the Registered Shipper; and/or

- (c) to the Final NDM Exit Allocation in respect of the NDM Supply Points at which the Shipper is the Registered Shipper; and/or
- (d) to the Shipper's Final CSEP Exit Allocations at the Inch Storage Exit Point and at the South-North CSEP where there is a Net Metered Quantity (Exit) in respect of the Day and to that proportion of the Shipper's Final CSEP Exit Allocation which is derived from the Net Metered Quantity (Exit) and/or the quantity physically metered as offtaken on that Day; and/or
- (e) to the Shipper's Final Sub-Sea I/C Offtake Allocations at the Sub-Sea I/C Offtake; and/or
- ~~(f)~~ to the Shipper's Final IP CSEP Offtake Allocations at the IP CSEP

For the purpose of this Section 1.7.3 the proportion of the Shipper's Final CSEP Exit Allocation which is derived from the Net Metered Quantity (Exit) shall be the same as the proportion which the Net Metered Quantity (Exit) bears to the aggregate CSEP Exit Allocations at the CSEP in respect of the Day.

A Shipper shall not have any Exit Tolerance with respect to a IPVExitP.

Sector/Size(Annual Quantity)	Exit Tolerance %
LDM >1,500,000,000 kWh (LDM 1)	3.54.5
LDM > 260,000,000 to 1,500,000,000 kWh (LDM 2)	9+2
LDM >57,500,000 to 260,000,000 kWh (LDM 3)	1925
DM	3040 of DM Exit Allocations
NDM	2.5 of NDM Exit Allocations
Inch Storage Exit Point	1.5
South-North-IP CSEP Non OBA Day	1.5
IP CSEP OBA Day	0
Sub-Sea I/C > 1,500,000,000 kWh	3.54.5
Sub-Sea I/C > 260,000,000 to 1,500,000,000 kWh	9+2
Sub-Sea I/C < 260,000,000 kWh	1925

For the avoidance of doubt the Annual Quantity at the ~~IP~~~~South-North~~ CSEP shall be by reference to the aggregate quantity deemed to have been offtaken at the ~~South-North-IP~~ CSEP by reference to the aggregate ~~South-North-IP~~ CSEP Allocations.

- 1.7.4 The Transporter shall calculate the Shipper Portfolio Tolerance in respect of each Day for each Registered Shipper in accordance with the following formula:

$$\text{SPT} = \sum(\del{3.54.5} \% \text{ of LDM1}_{All}) + \sum(\del{9.12} \% \text{ of LDM2}_{All}) + \sum(\del{19.25} \% \text{ of LDM3}_{All}) + (\del{40.30} \% \text{ of DM}_{All}) + (2.5 \% \text{ of NDM}_{All}) + (\del{1.5} \% \text{ of IT}_{All}) + (\del{1.5} \% \text{ of CSEP}_{INCHAll}) + (\del{1.5} \% \text{ of BeI}_{All}) + \sum(\del{3.5} \% \text{ of I/C1}_{OffAll}) + \del{9} \% \text{ of IC2}_{OffAll}) + \sum(\del{19} \% \text{ of IC}_{Off3All}) + (\del{*} \% \text{ of S/N IP}_{All}) - \del{I/C}_{Off} - \del{S/N} \text{ CSEP}$$

where:

- SPT = the Shipper Portfolio Tolerance applicable to a Shipper for the Day;
- LDM1_{All} = the Final LDM Exit Allocation for a Shipper at individual LDM Offtakes (>1,500,000,000kWh) in respect of the Day;
- LDM2_{All} = the Final LDM Exit Allocation for a Shipper at individual LDM Offtakes (>260,000,000 to 1,500,000kWh) in respect of the Day;
- LDM3_{All} = the Final LDM Exit Allocation for a Shipper at individual LDM Offtakes (>57,500,000 to 260,000,000kWh) in respect of the Day;
- DM_{All} = the Final DM Exit Allocation for a Shipper in respect of DM Offtakes in respect of the Day;
- NDM_{All} = the Final NDM Exit Allocation for a Shipper in respect of NDM Supply Points in respect of the Day;
- ~~MT~~ = ~~the Entry Tolerance for a Shipper in respect of such Shipper's Final Entry Allocation at the Moffat Entry Point calculated in accordance with Section 1.7.21-7.2; and~~

<u>IT_{All}</u>	=	<u>the Final Entry Allocation for a Shipper at the Inch Entry Point; the Entry Tolerance for a Shipper in respect of such Shipper's Final Entry Allocation at the Inch Entry Point calculated in accordance with Section 1.7.2.</u>
<u>BEL_{All}</u>	≡	<u>the Final Entry Allocation for a Shipper at Bellanaboy Entry Point;</u>
<u>CSEP_{INCHAll}</u>	=	<u>the Final CSEP Exit Allocation for a Shipper at the Inch Storage Exit Point; the Exit Tolerance for a Shipper in respect of such Shipper's Final CSEP Exit Allocations at the Inch Storage Exit Point calculated in accordance with Section 1.7.3(d).</u>
<u>I/C_{1offAll}</u>	=	<u>the Final Sub-Sea I/C Offtake Allocation for a Shipper at the individual Sub-Sea I/C Offtake (>1,500,000,000kWh); the applicable Exit Tolerance for a Shipper in respect of such Shipper's Final Sub-Sea I/C Offtake Allocation at the Sub-Sea I/C Offtake calculated in accordance with Section 1.7.3(e).</u>
<u>I/C_{2offAll}</u>	≡	<u>the Final Sub-Sea I/C Offtake Allocation for a Shipper at the Sub-Sea I/C Offtake (> 260,000,000 to 1,500,000kWh);</u>
<u>I/C_{3offAll}</u>	≡	<u>the Final Sub-Sea I/C Offtake Allocation for a Shipper at the Sub-Sea I/C Offtake (> 47,500,000 to 260,000,000kWh);</u>
<u>S/N CSEP_{All}</u>	=	<u>the Final Exit Allocation for a Shipper in respect of the South North IP CSEP; the applicable Exit Tolerance for a Shipper in respect of such Shipper's Final South North CSEP Offtake Allocations at the South North CSEP in accordance with Section 1.7.3.</u>
<u>*%</u>	≡	<u>0% in respect of an OBA Day and 1.5% in respect of a NON OBA Day at the South North IP CSEP.</u>

For the avoidance of doubt, IBP Allocations and Allocations in respect of Shrinkage Gas under a Shrinkage Gas Contract and/or Balancing

Gas under a Balancing Gas Contract shall not be included in the calculation of the Shipper Portfolio Tolerance.

- 1.7.5 A tolerance quantity ("**NDM Forecast Tolerance**") shall be substituted for the tolerance permitted for Final NDM Exit Allocations (as set out in Section 1.7.3.) in the event that a Shipper's Final NDM Exit Allocation varies from the final NDM Nomination Advice provided by the Transporter to such Shipper in respect of the Day and:
- (a) the absolute difference in the quantity of Natural Gas (in kWh) between the Final NDM Exit Allocation and the final NDM Nomination Advice for a Shipper in respect of the Day is in excess of 2.5 per cent of the Final NDM Exit Allocation calculated in accordance with Section 1.7.3; and
 - (b) the Shipper has a Valid Nomination(s) in accordance with the initial and all subsequent NDM Nomination Advices issued by the Transporter in respect of that Day; and
 - (c) either:
 - (i) the Shipper's Final Daily Imbalance Quantity for the Day is positive and the Final NDM Exit Allocation for the Day is less than the last prevailing final NDM Nomination Advice on the Day; or
 - (ii) the Shipper's Final Daily Imbalance Quantity for the Day is negative and the Final NDM Exit Allocation for the Day is greater than the last prevailing final NDM Nomination Advice on the Day.
- 1.7.6 The amount of the NDM Forecast Tolerance for a Shipper for a Day shall be a quantity which shall be equal to the difference between the prevailing NDM Nomination Advice for the Day and the Shipper's Final NDM Exit Allocation for the Day.
- 1.7.7 In addition to the Entry Tolerance set out in Section 1.7.2, an additional Entry Point tolerance quantity ("**Entry Point Variance Tolerance**") calculated in accordance with Section 1.8, shall be applied in accordance with Section 1.7.8 where:
- (a) the Entry Point is not configured within a Bi-Directional CSP or, the Entry Point is so configured but the Aggregate CSEP Exit Allocations ~~or VExitP Allocations~~ at the Connected System Exit Point ~~or VExitP (as the case may be)~~ configured within the Bi-Directional CSP on the Day are zero and the Metered Daily Quantity (MeDQ) at an Entry Point on a Day differs from the End of Day Quantity (EODQ) at the Entry Point; or

(b) the Entry Point is configured within the Bi Directional CSP and the Net Metered Quantity (Entry) differs from the amount by which the EODQ exceeds the Aggregate CSEP Nominations Quantity or VExitP EODQ in respect of the Day.

1.7.8 The Entry Point Variance Tolerance shall be applied as follows to each Shipper that has received a Final Entry Allocation at the relevant Entry Point:

(a) where 1.7.7(a) applies and the MeDQ is greater than the EODQ, the Entry Point Variance Tolerance shall be added to the Shipper Portfolio Tolerance of each Shipper that has a Final Daily Imbalance Quantity that is positive; and

(b) where 1.7.7(a) applies and the MeDQ is less than the EODQ, the Entry Point Variance Tolerance shall be added to the Shipper Portfolio Tolerance of each Shipper that has a Final Daily Imbalance Quantity that is negative; and

(c) where 1.7.7(b) applies and the Net Metered Quantity (Entry) is greater than the excess of the EODQ over the Aggregate CSEP Nominations Quantity ~~or VExitP EODQ (as the case may be)~~ at the Bi Directional CSP in respect of the Day, the Entry Point Variance Tolerance shall be added to the Shipper Portfolio Tolerance of each Shipper that has a Final Daily Imbalance Quantity that is positive; and

(d) where 1.7.7(b) applies and the Net Metered Quantity (Entry) is less than the excess of the EODQ over the Aggregate CSEP Exit Nomination Quantity ~~(or VExitP EODQ)~~ at the Bi Directional CSP in respect of the Day, the Entry Point Variance Tolerance shall be added to the Shipper Portfolio Tolerance of each Shipper that has a Final Daily Imbalance Quantity that is negative; and

1.8 Calculation of Entry Point Variance Tolerance

1.8.1 The Entry Point Variance Tolerance will be calculated by the Transporter in accordance with the following formula:

$$EPVT = EPVP * EnA$$

where:

EPVT = the Entry Point Variance Tolerance;

EPVP = the Entry Point Variance Percentage as calculated in accordance with Section 1.8.2 below; and

EnA = the Final Entry Allocation at the Entry Point.

1.8.2 The Entry Point Variance Percentage shall be the lesser of 1.5 per cent or a percentage calculated by the Transporter in accordance with the formula at (a) below where 1.7.7(a) applies, and in accordance with the formula at (b) below if 1.7.7(b) applies:

(a) if: MeDQ > EODQ:

$$\text{EPVP} = ((\text{MeDQ} - \text{EODQ}) / (\text{EODQ})) * 100;$$

if: MeDQ < EODQ:

$$\text{EPVP} = ((\text{EODQ} - \text{MeDQ}) / (\text{EODQ})) * 100,$$

where:

EPVT = the Entry Point Variance Tolerance;

EPVP = the Entry Point Variance Percentage;

EnA = the Final Entry Allocation at the Entry Point; and

MeDQ = the quantity of Natural Gas metered as delivered on a Day at the Entry Point.

(b) if: NMDQ > NOM_{DIFF}

$$\text{EPVP} = ((\text{NMDQ} - \text{NOM}_{\text{DIFF}}) / (\text{NOM}_{\text{DIFF}})) * 100;$$

if NMDQ < NOM_{DIFF}:

$$\text{EPVP} = ((\text{NOM}_{\text{DIFF}} - \text{NMDQ}) / (\text{NOM}_{\text{DIFF}})) * 100;$$

where:

EPVP = the Entry Point Variance Percentage;

NMDQ = the Net Metered Quantity (Entry) at the Entry Point in respect of the Day; and

NOM_{DIFF} = the difference between the EODQ at the Entry Point and the Aggregate CSEP Nominations Quantity at the Connected System Exit Point (configured within the Bi Directional CSP) in respect of a Day.

[1.8.3](#) Where the Metered Delivered Quantity at an Entry Point on a Day differs from the End of Day Quantity at the Entry Point in respect of that Day by in excess of 1.5 per cent of the EODQ and/or where the Net Metered Quantity Entry exceeds the difference between the EODQ and the Aggregate CSEP Nominations Quantity or VExitP EODQ in

respect of that Day by in excess of 1.5% the Transporter shall use reasonable endeavours to ascertain the reasons for such variation. If the Transporter determines that such variation was not attributable, in whole or in part to any act, default or omission of the Shippers registered at the Entry Point (or any of them) then no limit of 1.5 per cent on the Entry Point Variance Percentage as specified in Section 1.8.2 shall apply to the extent that such excess was not so attributable to the Shippers (or any of them) at such Entry Point.

1.8.4 IP Entry Tolerance on a Non-OBA Day

A Shipper at an IP Entry Point shall be entitled to a tolerance quantity a ("IP Non-OBA Tolerance Quantity") for a Non OBA Day at the IP Entry Point which shall be equal to the difference between the sum of the Shipper's IP Nomination Confirmed Quantities at the IP Entry Point for the Day and the Shipper's Final IP Entry Allocation(s) at that IP Entry Point for that same Day; and

- (i) where the aggregate of all Shipper's Final IP Entry Allocations at the affected IP Entry Point exceeds the Aggregate IP Entry Confirmed Quantity for the Non-OBA Day, the IP Non-OBA Tolerance Quantity shall be added to the Shipper Portfolio Tolerance of each Shipper that has a Final Daily Imbalance Quantity that is positive;
- (ii) where the aggregate of all Shipper's Final IP Entry Allocation(s) is less than the Aggregate IP Entry Confirmed Quantity for that OBA Day the IP Non-OBA Tolerance Quantity shall be added to the Shipper Portfolio Tolerance of each Shipper that has a Final Daily Imbalance Quantity that is negative.

1.9 After Day Trades

- 1.9.1 A Shipper ("**Transferor Shipper**") may after a Day trade all or part of its Daily Imbalance Quantity in respect of such Day with another Shipper ("**Transferee Shipper**") which has an opposing Daily Imbalance Quantity for the same Day ("**After Day Trade**" or "**ADT**") in accordance with this Section 1.9.

For the avoidance of doubt, a Shipper with a Daily Imbalance Quantity shall only be permitted to trade any of its Daily Imbalance Quantity in respect of a Day with another Shipper that has an opposing Daily Imbalance Quantity with respect to the same Day.

- 1.9.2 "After Day Trade Sell" or "ADT_{sell}" means an After Day Trade resulting in a reduction in a positive Initial Daily Imbalance Quantity (or, if relevant, a Revised Daily Imbalance Quantity) for a Shipper.
- 1.9.3 "After Day Trade Buy" or "ADT_{buy}" means an After Day Trade resulting in a reduction in a negative Initial Daily Imbalance Quantity (or, if relevant, a Revised Daily Imbalance Quantity) for a Shipper.
- 1.9.4 In order to transact an ADT the Transferor Shipper shall submit a request ("**ADT Request**") to the Transporter which shall specify the information required by the Transporter to process the ADT Request as set out in Schedule 3 Part 1 including:
- (a) the identity (including Shipper ID) of each of the Transferor Shipper and the Transferee Shipper;
 - (b) the Day for which the ADT is to be transacted; and
 - (c) the quantity (in kWh) of the Transferor Shipper's Daily Imbalance Quantity in respect of such Day to be traded.
- 1.9.5 The Transferor Shipper may submit an ADT Request to the Transporter at any time after 17:30 hours on D+1 and before 17:00 hours on M+7.
- 1.9.6 In order for the Transporter to process an ADT Request, the Transferee Shipper shall first notify the Transporter that it accepts the terms of the ADT request submitted by the Transferor Shipper.
- 1.9.7 The Transporter will reject an ADT Request for any of the following reasons:
- (a) the information required pursuant to this Section 1.9 is not specified by the Transferor Shipper;
 - (b) the time of the submission of the ADT Request is before 17:30 hours on D+1 or after 17:00 hours on M+7;
 - (c) the Transferee Shipper has not notified the Transporter of its acceptance of the ADT Request by 17:00 hours on M+7;
 - (d) the ADT specifies a Daily Imbalance Quantity which is in excess of the Transferor's Daily Imbalance Quantity or the Transferee's Daily Imbalance Quantity in respect of the Day;
 - (e) the effect of the ADT would be to increase the Daily Imbalance Quantity of either the Transferor Shipper or the Transferee Shipper in respect of a Day; or

- (f) if the effect of the ADT would be to convert the Daily Imbalance Quantity of either the Transferor Shipper or the Transferee Shipper from a positive imbalance to a negative imbalance, or vice versa.
- 1.9.8 If the Initial Daily Imbalance Quantity (or, if relevant, the Revised Daily Imbalance Quantity) of the Transferor Shipper or of the Transferee Shipper changes as a result of a change to either Shipper's Entry Allocation or Exit Allocation between 16:00 hours on D+1 and 16:00 hours on D+5, then any ADT(s) transacted by the affected Shippers prior to any such change shall be cancelled by the Transporter without prejudice to such Shipper's right to re-submit such ADT(s). For the avoidance of doubt, the affected Shippers may resubmit an ADT Request up until 17:00 hours on M+7 in accordance with this Section 1.9.
- 1.9.9 The Transporter shall not be obliged in any way to assist Shippers in identifying any potential counterparties to ADTs.
- 1.9.10 The Transporter shall calculate and make available to Shippers the sum of the aggregate Final Daily Imbalance Quantities for all Shippers in respect of a Day. This sum shall be in the form of a single number representing the net imbalance for all Shippers on the Day together with an indication of whether the net imbalance is positive (long) or negative (short).
- 1.9.11 Where a Shipper has completed an ADT, such ADT shall not change any of the Shipper's Exit Allocations for the Day.
- 1.10 **Scheduling Charges**
- 1.10.1 Entry Scheduling Charges
- (a) For the purposes of this Code:
 - (i) "**Entry Scheduling Charge**" means a charge calculated in accordance with Section 1.10.2 payable by each Shipper in respect of each such Shipper's Entry Scheduling Charge Quantities;
 - (ii) "**Entry Scheduling Quantity**" means a quantity equal to the absolute difference (in kWh) between a Shipper's Valid Entry Nomination, Valid VEntryP Nomination or Valid Entry Renomination or Valid VEntryP Renomination at an individual Entry Point or VEntryP and a Shipper's Final Entry Allocation for that Entry Point or Final VEntryP Allocation at a VEntryP in respect of a Day;

- (iii) **"Entry Scheduling Tolerance"** means a quantity of Natural Gas equal to three (3) per cent of the Valid Entry Nomination, Valid VEntryP Nomination or Valid Entry Renomination or Valid VEntryP Renomination at each Entry Point or VEntryP made on a Day by a Shipper plus where applicable the quantity of Natural Gas equal to the applicable Entry Point Variance Tolerance in respect of such Shipper at the relevant Entry Point on the Day; and
- (iv) **"Entry Scheduling Charge Quantity"** means a quantity of Natural Gas calculated by the Transporter for each Registered Shipper at each Entry Point for a Day in accordance with the following formulae:

- (1) where a Shipper's Final Entry Allocation, Final Entry Allocation or Final IP VEntryP Allocation for a Day at an IP Entry Point or at a an Entry Point or at an IP VEntryP is greater than the Shipper's IP Nomination Confirmed Quantity Valid Entry Nomination or Valid IP VEntryP Nomination or Valid Entry Renomination or the IP VEntryP or Valid IP VEntryP Renomination at the Entry Point for the Day (as the case may be):

$$ESCQ_{Entry} = (ALL_{Entry} - (NOM_{Entry} + TOL_{Entry})); \text{ or}$$

- (2) where a Shipper's IP Nomination Confirmed Quantity Valid Entry Nomination or IP VEntryP Nomination Confirmed Quantity or Valid Entry Renomination or IP VEntryP Renomination for a Day at an IP Entry Point or at an Entry Point or at an IP VEntryP is greater than the Shipper's Final IP Entry Allocation, Final Entry Allocation or Final IP VEntryP Allocation (as the case may be) for the Day:

$$ESCQ_{Entry} = (NOM_{Entry} - (ALL_{Entry} + TOL_{Entry}))$$

where:

$ESCQ_{Entry}$ = the Shipper's Entry Scheduling Charge Quantity for the Day at the IP Entry Point, the Entry Point or IP VEntryP;

ALL_{Entry} = the Shipper's Final IP Entry Allocation or Final IP VEntry^P Allocation for the Day at the IP Entry Point, or the IP VEntry^P (as applicable);

NOM_{Entry} = the Shipper's IP Entry Nomination Confirmed Quantity, ~~Valid~~ Entry Nomination, ~~Valid~~ IP VEntry^P Nomination Confirmed Quantity or Valid Entry Renomination or Valid IP VEntry^P Renomination for the Day at the Entry Point; and

TOL_{Entry} = the Entry Scheduling Tolerance applicable to the Shipper on the Day at the IP Entry Point or the IP VEntry^P.

1.10.2 The Entry Scheduling Charge payable by each Shipper at each Entry Point in respect of a Day shall be calculated by the Transporter in accordance with the following formula:

$$ESC_{Entry} = ESCQ_{Entry} * (5\% * \underline{SAPFTIP})$$

where:

ESC_{Entry} = the Entry Scheduling Charge;

ESCQ_{Entry} = a Shipper's Entry Scheduling Charge Quantity for the Day at an Entry Point; and

SAPFTIP = the System Average Price~~First Tier Imbalance Price for the Day~~.

1.10.3 Exit Scheduling Charges

(a) For the purposes of this Code:

(i) "**Exit Scheduling Charges**" means charges payable by each ~~Registered~~ Shipper in respect of each Exit Allocation, Sub-Sea I/C Offtake Allocation, CSEP Exit Allocation and ~~South-North~~ IP CSEP Offtake Allocation or IP VExit^P Allocation in respect of which such Shipper has an Exit Scheduling Charge Quantity, such charges to be calculated in accordance with Section 1.10.4;

(ii) "**Exit Scheduling Tolerance**" means a quantity of Natural Gas equal to the applicable percentage of the Valid Exit Nominations or the Valid Exit

Renominations, the Valid Sub-Sea I/C Offtake Nominations or the Valid Sub-Sea I/C Offtake Renominations or the Valid CSEP Exit Nomination or Valid CSEP Exit Renomination or ~~Valid-IP CSEPSouth-North-CSEP-Offtake Nomination Confirmed Quantity-Nomination or Valid South-North CSEP-Offtake Renomination~~ or ~~IP VExitP~~ Nomination ~~Confirmed Quantity~~ or ~~Valid-IP VExitP~~ Renomination made in respect of a Day by a Shipper. The applicable percentage shall be as set out in the following table:

Sector	%
LDM (including Multiple Shipper LDM)	10
DM	20
NDM	20
CSEP Exit	3
*IPSouth-North-CSEP	3
Sub-Sea I/C Offtake	10

(iii) "**Exit Scheduling Charge Quantity**" means a quantity of Natural Gas calculated by the Transporter for each Shipper in accordance with the following formulae:

- (1) where on a Day a Shipper's Final Exit Allocation or Final CSEP Exit Allocation, or Final ~~IP South-North CSEP-Offtake~~ Allocation or Sub-Sea I/C Offtake Allocation or ~~IP VExitP~~ Allocation is greater than its Valid Exit Nomination, Valid Exit Renomination, Valid CSEP Exit Nomination, Valid CSEP Exit Renomination or Valid ~~South-North-IP~~CSEP Offtake Nomination ~~Confirmed Quantity~~ or ~~Valid-South-North-CSEP-Offtake Renomination~~ or Valid Sub-Sea I/C Offtake Nomination or Valid Sub-Sea I/C Offtake Renomination; ~~IP-Valid-VExitP~~ Nomination or ~~Valid-IP VExitP~~ Renomination (a) for each LDM Offtake; or (b) in respect of such Shipper's DM Offtakes; or (c) in respect of the onward delivery of Natural Gas to such Shipper's NDM Supply Points; or (d) in respect of a Connected System Exit Point; or (e) in respect of the ~~IPSouth-North-CSEP~~ or (f) in respect of the Sub-Sea I/C Offtake or (g) in respect of a ~~IP VExitP~~:

* Should this be 1.5%?

$$\text{ESCQ}_{\text{EXIT}} = (\text{ALL}_{\text{Exit}} - \text{NOM}_{\text{Exit}}) - (Y\% * \text{NOM}_{\text{Exit}}); \text{ or}$$

- (2) where on a Day a Shipper's Final Exit Allocation, Final CSEP Exit Allocation or Final ~~IP~~~~South-North~~ CSEP Offtake Allocation or Final Sub-Sea I/C Offtake Allocation or Final ~~IP~~ VExit~~P~~ Allocation is less than its Valid Exit Nomination, Valid Exit Renomination, Valid CSEP Exit Nomination, Valid CSEP Exit Renomination, ~~Valid-South-North-IP~~ CSEP Offtake Nomination ~~Confirmed Quantity~~, ~~Valid-South-North-CSEP-Offtake-Renomination~~ or Valid Sub-Sea I/C Offtake Nomination or Valid Sub-Sea I/C Offtake Renomination or ~~Valid-IP~~ VExit~~P~~ Nomination ~~or Valid-VExitP-Renomination~~ (a) for each LDM Offtake; or (b) in respect of such Shipper's DM Offtakes; or (c) in respect of the onward delivery of Natural Gas to such Shipper's NDM Supply Points; or (d) in respect of a Connected System Exit Point; or (e) in respect of the ~~South-North-IP~~ CSEP; or (f) in respect of the Sub-Sea I/C Offtake, or (g) in respect of ~~IP~~ VExit~~P~~:

$$\text{ESCQ}_{\text{Exit}} = (\text{NOM}_{\text{Exit}} - \text{ALL}_{\text{Exit}}) - (Y \% * \text{NOM}_{\text{Exit}})$$

where:

$\text{ESCQ}_{\text{Exit}}$ = the Shipper's Exit Scheduling Charge Quantity for the Day in respect of the Shipper's LDM Offtake or in respect of the Shipper's DM Offtake(s), in respect of the onward delivery of Natural Gas to the Shipper's NDM Supply Points, Connected System Exit Point, ~~South-North-IP~~ CSEP, at the Sub-Sea I/C Offtake or at the ~~IP~~ VExit~~P~~ (as the case may be);

ALL_{Exit} = the Shipper's Final Exit Allocation for a Day in respect of the Shipper's LDM Offtake(s) or in respect of the Shipper's DM Offtake(s), in respect of the onward delivery of Natural Gas to the Shipper's NDM Supply Points, at a Connected System Exit Point at the ~~South-~~

~~North-IP~~ CSEP, at the Sub-Sea I/C Offtake or at the ~~IP~~ VExitP (as the case may be);

NOM_{Exit} = the Shipper's Valid Exit Nomination Valid Exit Renomination Valid CSEP Exit Nomination, Valid CSEP Exit Renomination, ~~Valid South-North-IP~~ CSEP Offtake Nomination Confirmed Quantity or Valid South-North CSEP Offtake Renomination or Valid Sub-Sea I/C Offtake Nomination or Valid Sub-Sea I/C Offtake Renomination or ~~Valid-IP~~ VExitP Nomination Confirmed Quantity or Valid VExitP Renomination for a Day in respect of the Shipper's LDM Offtake(s) or in respect of the Shipper's DM Offtake(s), in respect of the onward delivery of Natural Gas to the Shipper's NDM Supply Points, at the Connected System Exit Point, at the ~~South-North-IP~~ CSEP, at the Sub-Sea I/C Offtake or at the ~~IP~~ VExitP (as the case may be); and

Y% = the applicable Exit Scheduling Tolerance as set out in Section 1.10.3(a)(ii),

provided always that if a NDM Shipper has consistently achieved a Valid Exit Nominations and Valid Exit Renominations in accordance with the NDM Nomination Advice and NDM Renomination Advice(s) issued by the Transporter the Exit Scheduling Charge Quantity in respect of the relevant NDM Exit Allocation shall be zero.

1.10.4 The Exit Scheduling Charge payable by each Shipper in respect of a Day will be calculated by the Transporter in accordance with the following formula:

$$ESC_{Exit} = ESCQ_{Exit} * (5\% * \underline{SAPFTIP})$$

where:

ESC_{Exit} = the Exit Scheduling Charge;

ESCQ_{Exit} = a Shipper's Exit Scheduling Charge Quantity for a Day at an Exit Point; and

SAPFTIP = the System Average Price for the Daily First Tier Imbalance Price for the Day.

1.11 Publication of Information⁴

- 1.11.1 The Transporter shall, in respect of each month, publish the following information:
- (a) the date, location and volume of Balancing Actions taken;
 - (b) the First Tier Imbalance Price and the Second Tier Imbalance Price; ~~and~~
 - ~~(c) the Entry Scheduling Charge and Exit Scheduling Charge;~~
 - ~~(d) the aggregate Daily Imbalance Charges applied; and~~
 - ~~(e) the aggregate Balancing Charges incurred.~~
- 1.11.2 The information specified in Section 1.11.1 shall be published by the Transporter monthly in arrears.
- 1.11.3 Generalised balancing criteria shall be published by the Transporter from time to time.

2. SHRINKAGE

2.1 Definitions

For the purposes of this Code:

- 2.1.1 "**Distribution System Shrinkage Gas**" means that Shrinkage Gas attributed to the Distribution System in accordance with this Section 2;
- 2.1.2 "**Own Use Gas**" means Natural Gas which is used by the Transporter for the operation of the Transportation System or any localised part thereof including at compressor stations and/or for pre-heating and venting purposes;
- 2.1.3 "**Shrinkage Gas**" means Own Use Gas and/or Natural Gas required to replace Unaccounted For Gas;
- 2.1.4 "**Transmission System Shrinkage Gas**" means that Shrinkage Gas attributed to the Transmission System in accordance with this Section 2; and
- 2.1.5 "**Unaccounted For Gas**" means Natural Gas which is lost or otherwise unaccounted for from the Transportation System or any localised part thereof.

⁴~~Business rules suggest that the Transporter will publish aggregate daily imbalance charges and aggregate balancing action charges; are these to replace or supplement this publication of information?~~

2.2 Shrinkage Gas Contracts

- 2.2.1 The Transporter shall enter into one or more contracts for the provision of Shrinkage Gas (each a "**Shrinkage Gas Contract**") in accordance with the provisions of this Section 2 to provide for the delivery to the Transportation System of Natural Gas in respect of Shrinkage Gas. The Transporter shall retain and make available Entry Capacity at an Entry Point (which Entry Point shall be specified in the Shrinkage Gas Contract) to facilitate Nominations, Renominations and deliveries of Shrinkage Gas to the Transportation System pursuant to the Shrinkage Gas Contract. For the avoidance of doubt Entry Capacity⁵ which the Transporter makes available to facilitate Nominations, Renominations and deliveries of Shrinkage Gas shall not form part of a Shipper's Active Entry Capacity but shall at all times be available only for the purpose of Nominations, Renominations and deliveries of Shrinkage Gas.
- 2.2.2 The Transporter shall use reasonable endeavours to avoid unnecessary costs associated with obtaining Shrinkage Gas and shall award the Shrinkage Gas Contract(s) following a competitive tender.
- 2.2.3 A Shrinkage Gas Contract may either:
- (a) form a discrete, clearly identifiable part of a Balancing Gas Contract; or
 - (b) be a stand alone contract distinct from a Balancing Gas Contract.
- For the avoidance of doubt nothing in this Section 2.2.3 shall be construed as preventing a party from participating in a tender process (in accordance with its terms) solely in respect of a Shrinkage Gas Contract or a Balancing Gas Contract.
- 2.2.4 Following award of a Shrinkage Gas Contract, the Transporter shall use reasonable endeavours to provide Shippers with the unit cost of Shrinkage Gas or the basis of calculation of the unit cost of such Shrinkage Gas to be purchased for the following Gas Year.
- 2.2.5 Before the start of each Gas Year, the Transporter shall provide Shippers with the Transporters good faith best estimate of the quantity and cost of Shrinkage Gas to be purchased for the following Gas Year.

~~⁵Not extended to IP Entry Capacity because of auction rules.~~

2.3 Shrinkage Costs

- 2.3.1 Subject to the Transporter having acted as a Reasonable and Prudent Operator in respect of the acquisition of Shrinkage Gas, and taking into account Shippers within day flexibility requirements, the Transporter shall be Cash Neutral in respect of the provision of Shrinkage Gas and accordingly, all costs associated with purchasing Shrinkage Gas (other than Shrinkage Gas allocated to PTL pursuant to Section 2.4.5) together with the transportation (including Capacity Charges), administration and procurement costs of securing the same, any audit costs which may be incurred under Section 2.5.3 and any other costs arising in connection with any of the matters listed above (collectively "**Shrinkage Costs**") shall be recoverable by the Transporter in accordance with Section 2.3.2 and Section 1.4. (as applicable).
- 2.3.2 Shrinkage Costs shall be recoverable by the Transporter as follows:
- (a) each Shipper shall be liable to pay to the Transporter on a Monthly basis the cost in respect of any Shrinkage Gas apportioned to such Shipper pursuant to Section 2.4.3 together with the cost of transportation (including Capacity Charges) payable in respect of such quantity of Shrinkage Gas pursuant to Section 2.5.2);
 - (b) all other Shrinkage Costs (excluding the costs actually recovered by the Transporter pursuant to Section 2.5.2) **and excluding the costs actually recovered by the Transporter by way of I/C Inventory Space Charges attributable to Shrinkage Gas**) shall be recoverable from Shippers pro-rata to their relevant Final IP Entry, Final Entry Allocations and Final Exit Allocations (including Final South-North-IP CSEP Offtake Allocation), Final IP VEntry Allocation and Final IP VExit Allocation for the Gas Year in accordance with Section 1.4; and/or
 - (c) Shrinkage Costs in respect of Distribution System Shrinkage Gas shall, for so long as they are included in the Distribution Tariff, be recoverable through the Distribution Tariff. If such Shrinkage Costs are not included in the Distribution Tariff they shall be recoverable from Shippers pro rata to their relevant Supply Point Allocations for that Gas Year.
- 2.3.3 At the end of a Gas Year the Transporter shall, in respect of Shrinkage Costs which are not recoverable in any applicable Tariff, reconcile the estimated Shrinkage Gas and the estimated Shrinkage Costs with the actual Shrinkage Gas and actual Shrinkage Costs (as appropriate) for the Gas Year. The Transporter shall, based on such reconciliation, impose additional or lesser charges upon Shippers for such Gas Year

in proportion to their respective Final Entry Allocations, Final Exit Allocations, Final ~~South-North-IP~~ CSEP Offtake Allocations at the ~~South-North-IP~~ CSEP, Final ~~IP~~ VEntry~~P~~ Allocations and/or Final ~~IP~~ VExit~~P~~ Allocations and, where relevant, Final Supply Point Allocations for that Gas Year (as applicable) and such amounts shall be treated as an Annual Disbursements Account Payment.

2.4 Calculation of Shrinkage Gas

2.4.1 The Transporter shall determine the Shrinkage Gas required for the Day as follows:

- (a) the quantity of Shrinkage Gas estimated by the Transporter to be required for the Day in respect of the Distribution System which shall be based on the Transporter's best estimate of the Distribution System consumption of Natural Gas for the Day multiplied by the applicable Distribution System Shrinkage Factor ("**Estimated Distribution System Shrinkage Gas**");
- (b) the quantity of Shrinkage Gas estimated by the Transporter to be required for the Day in respect of the Transmission System which shall be based on the Transporter's best estimate of Own Use Gas and Unaccounted For Gas in respect of the Transmission System ("**Estimated Transmission System Shrinkage Gas**"); and
- (c) the quantity of Shrinkage Gas estimated by the Transporter to be required for the Day in respect of the Transportation System ("**Estimated Transportation System Shrinkage Gas**") shall be the aggregate of the Estimated Distribution System Shrinkage Gas and the Estimated Transmission System Shrinkage Gas for the Day.

2.4.2 The Transporter shall request delivery to the Transportation System of a quantity of Natural Gas equal to the Estimated Transportation System Shrinkage Gas in accordance with the provisions of the applicable Shrinkage Gas Contract.

2.4.3 Shrinkage Gas Apportionment and Attribution

- (a) Where Shrinkage Gas is provided by a Shipper, Nominations with respect to Shrinkage Gas in respect of a Day shall be made separately and independently from any other Nominations made by such Shipper in respect of a Day. Where the person providing Shrinkage Gas is not a Shipper, the Transporter shall for the purposes of the provision of Shrinkage Gas to the Transportation System in respect of a Day be entitled to make Nominations and

receive Allocations in respect of Shrinkage Gas. The Transporter shall, where the Shrinkage Gas Contract so provides be entitled to submit Nominations in respect of Shrinkage Gas for and on behalf of the Shipper.

- (b) The quantity of Natural Gas allocated with respect to a Nomination of Shrinkage Gas referred to in Section 2.4.3(a) shall be attributed to the Distribution System and the Transmission System in accordance with the remaining provisions of this Section 2.4.
- (c) The quantity of Shrinkage Gas attributable to the Distribution System for a Day ("**Initial Distribution System Shrinkage Gas Attribution**") shall be calculated on D+1 by multiplying the actual quantity of Natural Gas consumed by the Distribution System for the Day (calculated in accordance with Part D (*Nominations, Allocations and NDM Supply Point Reconciliation*) Section 2.7.3(b)) by the Distribution System Shrinkage Factor.
- (d) The quantity of Shrinkage Gas attributed to the Distribution System in respect of a Day shall be calculated by the Transporter on D+5 ("**Final Distribution System Shrinkage Gas Attribution**") by multiplying the actual quantity of Natural Gas consumed by the Distribution System for the Day by the Distribution System Shrinkage Factor.
- (e) The quantity of Shrinkage Gas attributable to the Transmission System for a Day shall be calculated by the Transporter on D+1 ("**Initial Transmission System Shrinkage Gas Attribution**") and again on D+5 ("**Final Transmission System Shrinkage Gas Attribution**"), in each case in accordance with the following formula:

$$TS = SA - (DS + VIPS)$$

where:

TS = the Initial Transmission System Shrinkage Gas Attribution or the Final Transmission System Shrinkage Gas Attribution, as appropriate;

SA = the Allocation in respect of Shrinkage Gas on D+1 or D+5, as appropriate; and

DS = the Initial Distribution System Shrinkage Gas Attribution or the Final Distribution Shrinkage Gas Attribution, as appropriate and;

VIPS = the quantity of Shrinkage Gas which the Transporter determines to have been utilised at or respect of the VIP.

2.4.4 Where there is a difference between the Estimated Distribution System Shrinkage Gas and the Initial Distribution System Shrinkage Gas Attribution resulting in there being a difference between the Estimated Transmission System Shrinkage Gas and the Initial Transmission System Shrinkage Gas Attribution then the difference will be deemed to have been provided through increasing or decreasing System Stock. The Transporter shall correct this difference by recalculating the Estimated Transmission System Shrinkage Gas on D+2. Any residual differences that emerge after D+2 shall be corrected in accordance with Section 2.3.3.

2.4.5 Transmission System Shrinkage Gas Apportionment

For the purpose of apportioning Transmission System Shrinkage Gas among Shippers:

- (a) the Transmission System shall be deemed to be divided into the following two (2) components:
 - (i) that part of the Transmission System onshore in Scotland between the meters measuring the flow of Natural Gas into the Transmission System at the Moffat Entry Point and the meters measuring the flow of Natural Gas out of the Transmission System at Brighthouse Bay and Twynholm ("**Onshore Scotland Transmission System**"); and
 - (ii) that part of the remainder of the Transmission System from and including the meter located at Brighthouse Bay, including the whole of the Transmission System onshore in Ireland and any other Entry Points thereto ("**Sub-Sea and Ireland Transmission System**");
- (b) the quantity of Transmission System Shrinkage Gas utilised for the Onshore Scotland Transmission System shall be apportioned pro rata, on a Monthly throughput basis, between PTL and Shippers utilising the Onshore Scotland Transmission System for:
 - (i) onward transmission of Natural Gas to Northern Ireland ; and
 - (ii) for onward transmission utilising the Sub-Sea and Ireland Transmission System; and

- (c) save in respect of the proportion of Transmission System Shrinkage Gas attributed to PTL **or to the operation of the VIP**, the quantity of Transmission System Shrinkage Gas utilised for the Sub-Sea and Ireland Transmission System, together with that quantity of Transmission System Shrinkage Gas utilised in respect of the Onshore Scotland Transmission System allocable to Shippers also utilising the Sub-Sea and Ireland Transmission System, shall be apportioned pro rata, on a Monthly throughput basis, among the Shippers on the Sub-Sea and Ireland Transmission System.

Quantities of Natural Gas allocated to the Shipper(s) at the Sub-Sea I/C Offtake shall be disregarded in calculating such Shipper's monthly throughput (provided that such Shipper's throughput at the Moffat Entry Point is at least equal to the monthly throughput at the Sub-Sea I/C Offtake for that month).

2.5 Accounting for Shrinkage Gas

- 2.5.1 The Transporter shall keep full and accurate records in respect of the quantity of Natural Gas used each Month as Transmission System Shrinkage Gas and Distribution System Shrinkage Gas.
- 2.5.2 The Transporter shall include in the Monthly Invoice issued to a Shipper in accordance with Part I (*Legal and General*) Section 11 (*Invoicing and Payment*) the cost of the quantity of Transmission System Shrinkage Gas apportioned to such Shipper in accordance with Section 2.4.5(c) along with the cost of transportation (including Capacity Charges) payable in respect of such quantity of Transmission System Shrinkage Gas.
- 2.5.3 The Transporter shall appoint an appropriate, internationally recognised professional entity as approved by the Commission and provide to such entity all reasonable information such as to allow such entity to audit:
- (a) the quantities of Transmission System Shrinkage Gas and Distribution System Shrinkage Gas;
 - (b) where relevant, the apportionment of Transmission System Shrinkage Costs and Distribution System Shrinkage Costs among the Shippers in accordance with this Code; and
 - (c) the cost to the Transporter of securing (but not the price of) the Shrinkage Gas Contracts, recognising that such contracts will be awarded in accordance with Section 2.2.2.
- 2.5.4 A summary of the audit report shall be made available to Shippers.

2.6 **Distribution System Shrinkage Factor**

- 2.6.1 The Transporter may recalculate the Distribution System Shrinkage Factor on an annual basis.
- 2.6.2 Where the Distribution System Shrinkage Factor is recalculated then it shall, with the approval of the Commission, apply from the start of the subsequent Gas Year.
- 2.6.3 The recalculation of the Distribution System Shrinkage Factor shall utilise data for the twelve (12) Month period to the end of July in the then current Gas Year.
- 2.6.4 The Distribution System Shrinkage Factor shall be calculated in accordance with a methodology approved by the Commission.

2.7 **Publication of Shrinkage Information**

The Transporter shall publish aggregate monthly volumes of Shrinkage Gas monthly in arrears.

SCHEDULE 3

Part 1

ADT Request

- (a) the identity of the Transferor Shipper and the Transferee Shipper;
- (b) the Day for which the ADT is to be transacted; and
- (c) the quantity (in kWh) of the Transferor Shipper's Daily Imbalance Quantity in respect of such Day to be traded.