

UNIFIED CODE OF OPERATIONS

PART E

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BALANCING

SHRINKAGE

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VERSION 1.01

POST CONSULTATION DRAFT 1.01

18 FEBRUARY, 2005

### **IMPORTANT NOTE**

The Commission has directed Bord Gáis Éireann to develop legal drafting of the Unified Code of Operation (“UCOP”) to reflect the Business Rules published by the Commission on 23 July 2004 and the underlying principles of the GMOWG Business Models, and to publish the legal drafting so developed for consultation with industry.

The consultation legal drafting in respect of Part E (*Balancing and Shrinkage*) was published on the 8 October 2004. The attached represents the legal drafting of Part E (*Balancing and Shrinkage*) of the UCOP redrafted by Bord Gáis Éireann in accordance with the directions of the Commission following consultation with industry participants including the Commission, Shippers and the Transporter.

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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 Inputs 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.

### 1.4 **Disbursements Account**

- 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 and Scheduling Charges 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 and Non-Compliant Gas, together with any 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 and Final Exit Allocations bears to the aggregate of all Shippers' Final Entry Allocations and Final Exit 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 Miscellaneous*) Section 11 (*Invoicing and Payment*).
- 1.4.7 The Transporter shall, after the end of each Gas Year, 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 any other person in respect of Balancing Charges, Shrinkage Costs not included in the Tariff and Scheduling Charges 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), 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 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 Entry Allocations and aggregate Final Exit Allocations for a Gas Year;
- B = the sum of the aggregate of all Shippers' Final Entry Allocations and the aggregate of all Shippers' Final Exit 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.

## 1.5 Daily Imbalance Quantity Calculation

- 1.5.1 Each Shipper shall have attributed to it a quantity ("**Initial Daily Imbalance Quantity**" or "**IMB<sub>Initial</sub>**") 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:

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

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

where:

$$All_{InInitial} = \text{the sum of a Shipper's Initial Entry Allocations in respect of Day D;}$$

$$IBP_{Buy} = \text{the sum of a Shipper's IBP Buy Allocations in respect of Day D;}$$

$$All_{OutInitial} = \text{the sum of a Shipper's Initial Exit Allocations in respect of Day D; and}$$

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

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.

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 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<sub>Final</sub>**") 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:

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

where:

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

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

where:

$All_{InFinal}$  = the sum of a Shipper's Final Entry Allocations in respect of Day D;

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

$All_{OutFinal}$  = the sum of a Shipper's Final Exit 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.



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:

- (a) 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;
- (b) 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;
- (c) 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.

## 1.6 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 Transco in respect of that Day together with the Imbalance Gas Transportation Costs; and
- (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 First Tier Imbalance Price multiplied by 0.95; or
    - (2) a price being the Euro equivalent of the UK OCM System Marginal Sell Price published by Transco in respect of that Day ("**System Marginal Sell Price**"); and
  - (ii) where the Final Daily Imbalance Quantity is negative, the higher of:
    - (1) the First Tier Imbalance Price multiplied by 1.05; or

- (2) a price comprising the euro equivalent of the UK OCM System Marginal Price Buy published by Transco in respect of that Day together with the Imbalance Gas Transportation Costs ("**System Marginal Buy Price**").

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 Miscellaneous*) 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);

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 Entry Allocation at each respective Entry Point for a Day as follows:

Entry Point	Entry Tolerance %
Moffat	1.5
Inch	1.5

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.

- 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 for a Day as follows:
- 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
  - to the Final DM Exit Allocation in respect of the DM Offtakes at which the Shipper is the Registered Shipper; and/or
  - to the Final NDM Exit Allocation in respect of the NDM Supply Points at which the Shipper is the Registered Shipper.

Sector/Size(Annual Quantity)	Exit Tolerance %
LDM >1,500,000,000 kWh (LDM 1)	4.5
LDM >260,000,000 to 1,500,000,000 kWh (LDM 2)	12
LDM >57,500,000 to 260,000,000 kWh (LDM 3)	25

DM	40 of DM Exit Allocations
NDM	2.5 of NDM Exit 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:

$$\text{SPT} = \sum(\mathbf{4.5 \% \text{ of LDM1}_{All}}) + \sum(\mathbf{12 \% \text{ of LDM2}_{All}}) + \sum(\mathbf{25 \% \text{ of LDM3}_{All}}) + (\mathbf{40 \% \text{ of DM}_{All}}) + (\mathbf{2.5 \% \text{ of NDM}_{All}}) + \text{MT} + \text{IT}$$

where:

- SPT = the Shipper Portfolio Tolerance applicable to a Shipper for the Day;
- $\text{LDM1}_{All}$  = the Final LDM Exit Allocation for a Shipper at individual LDM Offtakes (>1,500,000,000kWh) in respect of the Day;
- $\text{LDM2}_{All}$  = the Final LDM Exit Allocation for a Shipper at individual LDM Offtakes (>260,000,000 to 1,500,000kWh) in respect of the Day;
- $\text{LDM3}_{All}$  = the Final LDM Exit Allocation for a Shipper at individual LDM Offtakes (>57,500,000 to 260,000,000kWh) in respect of the Day;
- $\text{DM}_{All}$  = the Final DM Exit Allocation for a Shipper in respect of DM Offtakes in respect of the Day;
- $\text{NDM}_{All}$  = 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 1.7.2; and
- IT = 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.

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 the Metered Daily Quantity (MeDQ) at an Entry Point on a Day differs from the End of Day Quantity (EODQ) at the Entry Point.

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 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 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.

## 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:

$$\mathbf{EPVT} = \mathbf{EPVP * EnA}$$

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 following formulae:

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.

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 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.

## 1.9 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<sub>sell</sub>"** 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<sub>buy</sub>"** 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 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 or Valid Entry Renomination at an individual Entry Point and a Shipper's Final Entry Allocation for that Entry Point 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 or Valid Entry Renomination at each Entry Point 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 for a Day at an Entry Point is greater than the Shipper's Valid Entry Nomination or Valid Entry Renomination at the Entry Point for the Day:

$$\text{ESCQ}_{\text{Entry}} = (\text{ALL}_{\text{Entry}} - (\text{NOM}_{\text{Entry}} + \text{TOL}_{\text{Entry}})); \text{ or}$$

- (2) where a Shipper's Valid Entry Nomination or Valid Entry Renomination for a Day at an Entry Point is greater than the Shipper's Final Entry Allocation for the Day:

$$\text{ESCQ}_{\text{Entry}} = (\text{NOM}_{\text{Entry}} - (\text{ALL}_{\text{Entry}} + \text{TOL}_{\text{Entry}}))$$

where:

$\text{ESCQ}_{\text{Entry}}$  = the Shipper's Entry Scheduling Charge Quantity for the Day at the Entry Point;

$\text{ALL}_{\text{Entry}}$  = the Shipper's Final Entry Allocation for the Day at the Entry Point;

$\text{NOM}_{\text{Entry}}$  = the Shipper's Valid Entry Nomination or Valid Entry Renomination for the Day at the Entry Point; and

$\text{TOL}_{\text{Entry}}$  = the Entry Scheduling Tolerance applicable to the Shipper on the Day at the Entry Point.

- 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:

$$\text{ESC}_{\text{Entry}} = \text{ESCQ}_{\text{Entry}} * (5\% * \text{FTIP})$$

where:

$\text{ESC}_{\text{Entry}}$  = the Entry Scheduling Charge;

$\text{ESCQ}_{\text{Entry}}$  = a Shipper's Entry Scheduling Charge Quantity for the Day at an Entry Point; and

$\text{FTIP}$  = the 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 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 made on 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

(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 is greater than its Valid Exit Nomination or Valid Exit 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:

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

or

- (2) where on a Day a Shipper's Final Exit Allocation is less than its Valid Exit Nomination or Valid Exit 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:

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

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) or in respect of the onward delivery of Natural Gas to the Shipper's NDM Supply Points (as the case may be);

$\text{ALL}_{\text{Exit}}$  = 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) or in respect of the onward delivery of Natural Gas to the Shipper's NDM Supply Points (as

the case may be);

$NOM_{Exit}$  = the Shipper's Valid Exit Nomination or Valid Exit Renomination for a Day in respect of the Shipper's LDM Offtake(s) or in respect of the Shipper's DM Offtake(s) or in respect of the onward delivery of Natural Gas to the Shipper's NDM Supply Points (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:

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

where:

$ESC_{Exit}$  = the Exit Scheduling Charge;

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

$FTIP$  = the First Tier Imbalance Price for the Day.

## 1.11 Publication of information

- 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.

- 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.

### 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.
- 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.

## 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) shall be recoverable from Shippers pro-rata to their relevant Final Entry Allocations and Final Exit Allocations 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 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.
- (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:

$$TS = SA - DS$$

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.

- 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, 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.

## 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 Miscellaneous*) 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.