

Nigerian Gas Transportation Network Code



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**SECTION A:
SYSTEM CLASSIFICATION**

SECTION A: SYSTEM CLASSIFICATION

1. INTRODUCTION

1.1 For the purposes of the Code:

- a) **"System"** means the pipeline systems known as the Escravos-Lagos Pipeline System, the Oben–Ajaokuta pipeline system, the Obiafu/Obrikom-Oben pipeline system owned by the Operator and used to provide services for the conveyance of gas by Shippers in accordance with the terms of the Network Code and all other pipeline systems that may be in existence or constructed in future and used to transport Gas to Shippers in line with the Network Code.
- b) **"System Point"** is a point on the System which is designed to permit gas to flow into or out of the System.

2. SYSTEM ENTRY POINTS AND SYSTEM EXIT POINTS

2.1 The classes of System Point comprise:

- a) System Entry Points; and
- b) System Exit Points.

2.2 A **"System Entry Point"** is a System Point at which gas can flow into the System.

2.3 A **"System Exit Point"** is a System Point at which gas can flow out of the System.

2.4 The Operator shall publish and from time to time (at least annually) update a list of the System Points, specifying the class to which such System Points belong.

**SECTION B:
SYSTEM USE AND CAPACITY**

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1. INTRODUCTION

1.1 Use of System

Shippers may use the System by delivering gas to any System Entry Point and offtaking gas from any System Exit Point.

1.2 System Capacity

1.2.1 Shippers may apply for and hold capacity in the system ("System Capacity") at system points.

1.2.2 The classes of system capacity are:

- a) System Entry Capacity; and
- b) System Exit Capacity.

1.2.3 For the purposes of the code:

- a) **"System Entry Capacity"** is capacity in the System which a Shipper is treated as utilising in delivering gas to the System at a System Entry Point; and
- b) **"System Exit Capacity"** is capacity in the System which a Shipper is treated as utilising in offtaking gas from the System at a System Exit Point.

1.2.4 System Capacity is expressed in MMscf/Day, except that where (for the purposes of any provision of the Code) it is to be determined what quantity of gas delivered to or offtaken from the System on a Day is equal to an amount of System Capacity held by a Shipper, or whether such a quantity of gas exceeds or is less than such an amount of capacity, such amount of System Capacity shall be treated as expressed in MMscf.

1.3 Registered Capacity and Available Capacity

1.3.1 For the purposes of the code:

- a) a Shipper's **"Registered"** System Capacity in relation to a System Point is the System Capacity which the Shipper is registered (in accordance with this Section B) as holding at that System Point on the Day; and

- b) the Shipper's **"Available"** System Capacity in relation to a System Point is the Registered System Capacity adjusted to take account of any System Capacity Transfer, in accordance with paragraph 6.

1.3.2 A Shipper may not use the System at a System Point on a Day unless it holds Available System Capacity at that System Point on that Day.

1.4 Transportation Charges

1.4.1 For the purposes of the Code:

- a) **"Transportation Charges"** are charges (other than Balancing Charges) payable by a Shipper in respect of a transportation arrangement under the Code, and (subject to paragraph 1.4.2) comprise Capacity Charges, Commodity Charges and Overrun Charges.
- b) A **"Capacity Charge"** is a charge in respect of, and determined by reference to the amount of, a Shipper's Registered System Entry Capacity, or Registered System Exit Capacity at a System Exit Point.
- c) A **"Commodity Charge"** is a charge in respect of use of the System, determined by reference to the quantity of the gas flow (or the part thereof attributable to a Shipper) at a System Point.

1.4.2 The further provisions of the Code set out the basis on which Transportation Charges are payable by Shippers; provided that where:

- (i) the prevailing Transportation Charge Statement provides for any charge which is not provided for in the Code, and
- (ii) the amount payable by way of such charge in any case is capable of being determined by reference to the provisions of the Code prevailing at the time, such charge shall be a Transportation Charge and shall be payable by Shippers in accordance with the relevant provisions of the Transportation Charge Statement.

1.5 Rates and Amounts of Transportation Charges

1.5.1 Subject to paragraph 1.5.2, the amount or rate of any Transportation Charge payable at any time by a Shipper shall be determined in accordance with the Transportation Charge Statement in force at the time such Transportation Charge accrues (irrespective of when it is due for payment); and accordingly, the rate of the Transportation Charges payable by a Shipper may vary during the period for which the Shipper holds any System Capacity.

1.5.2 In respect of any Transportation Charge in respect of any System Point:

- (i) in the case of a Capacity Charge, the "**Applicable Daily Rate**" is the daily rate of such charge, in US\$ per Mscf/Day of System Capacity; and the "**Applicable Annual Rate**" is total number of days in a Year times the Applicable Daily Rate;
- (ii) in the case of a Commodity Charge, the "**Applicable Commodity Rate**" is the rate of such charge, in US\$ per Mscf of gas flow;

In each case in accordance with paragraph 1.5.1, and (where any such rate varies according to the time of year) as applicable from time to time.

1.5.3 Where the prevailing Transportation Charge Statement does not provide for the determination of any particular Transportation Charge in any particular case, the rate of such Transportation Charge shall be deemed to be the rate in the preceding Transportation Charge Statement.

1.6 Non-Code Arrangements

Where the Operator has, prior to the date at which the Code becomes effective, entered into an agreement (a "Legacy Agreement") with any person to provide transportation services on terms and conditions that may differ from those of the Code, the Operator may, with the assent of the Department of Petroleum Resources, continue to provide such services on such terms and conditions until the expiry, termination of such agreement or migration to and adoption of this Code. Provided that all Non-Code Arrangements shall be migrated to the Code no later than six (6) months from the date the Code becomes effective.

2. REGISTRATION OF EXISTING SYSTEM CAPACITY

Application

- 2.1 A Shipper may at any time apply for System Capacity at a System Point, subject to and in accordance with this paragraph 2.
- 2.2 A Shipper may not apply for or be registered as holding System Capacity at a System Point in an amount less than 1MMscf/Day (the "**minimum eligible amount**"), or as may be waived by the Operator.
- 2.3 An application for System Capacity:
 - a) shall specify:
 - (i) the identity of the Shipper;
 - (ii) whether the application is for System Entry Capacity and/or System Exit Capacity;

- (iii) the System Point(s);
 - (iv) the amount (being not less than the minimum eligible amount) of System Capacity applied for (the **“Application Amount”**);
 - (v) Gas Source;
 - (vi) the proposed date of registration;
 - (vii) the **“capacity period”**, which shall be a period expiring one or more complete years (up to a maximum of 20 years) after the date of the registration.
- b) shall be submitted not later than 6 months before the proposed date of registration, unless the Operator agrees to submission at a later date (being no later than the proposed date of registration).
 - c) may not be withdrawn by the Shipper without giving notice.

Application Rejection

2.4 The Operator may reject an application for System Capacity:

- a) where the requirements of paragraph 2.3 are not complied with;
- b) in accordance with the credit management arrangements set out in Section M3;
- c) where the Shipper has not become party to an Allocation Agreement in respect of the relevant System Point in accordance with Section D6; and
- d) where in respect of an application for System Capacity, having regard to the Relevant Considerations, the Operator determines that it will not approve such application.

2.5 The **“Relevant Considerations”** for the purposes of paragraph 2.4(d) are:

- a) the operational capabilities of the System, in particular in the immediate vicinity of the relevant System Point;
- b) Shippers' Registered System Capacity in respect of the relevant System Point, pursuant to any application for System Capacity, at the time of the proposed date of registration, or at any time thereafter;
- c) any obligations of the Operator under any Legacy Agreement between the Operator and any person pursuant to paragraph 1.6;
- d) whether the Operator would be able to fulfill its obligations to the Shipper and all its other obligations to allow use of the System by other persons if the application was accepted; and
- e) Due diligence review.

Application Approval

- 2.6 The application will be approved unless rejected in accordance with paragraph 2.4 within 2 Months after the application was made, or earlier if the Operator confirms acceptance.

Effect of Approval – Registration of System Capacity

- 2.7 The Shipper (if its application is approved) will be registered as holding the Application Amount of System Capacity specified in its application in respect of the relevant System Point with effect from the date of registration for the capacity period specified in its application.
- 2.8 During the capacity period the Shipper's Registered System Capacity at the System Point shall include the Application Amount, which shall not be reduced, and (subject to the credit limit arrangements set out in Section M3) the registration shall not be terminated.
- 2.9 On expiry of the capacity period the Shipper shall cease to be registered as holding the Application Amount of System Capacity at the relevant System Point, but without prejudice to any registration of additional System Capacity pursuant to a further application under paragraph 2.1.
- 2.10 A Shipper may at any time apply (in accordance with paragraph 2.1) for additional System Capacity at a System Point, in which case (if its application is approved) paragraphs 2.7, 2.8 and 2.9 shall apply in respect of the additional System Capacity.

Publication of Capacity Information

- 2.11 The Operator shall publish at least annually details of:
- a) The physical capability of the System at each System Point to accept gas for delivery or to make gas available for offtake; and
 - b) The aggregate level of System Capacity that all Shippers are then registered as holding at each System Point.

3. PROVISION OF INCREMENTAL PHYSICAL SYSTEM CAPACITY

3.1 The Operator shall initiate an Incremental System Capacity Review where:

- a) pursuant to paragraph 2.4(d) has determined that it will not approve an application for System Capacity; or
- b) the Operator has been requested by any Shipper to specify the conditions under which it would make available System Capacity at one or more new System Points; or
- c) the Operator reasonably believes, if it expanded the physical capacity of the System to provide incremental System Capacity at one or more existing System Points or at one or more new System Points, that Shippers would utilise such incremental System Capacity.

3.2 As part of any Incremental System Capacity Review the Operator shall:

- a) invite Shippers and other interested parties to indicate potential requirements for incremental System Capacity.
- b) estimate the costs and timescales for provision of incremental System Capacity.
- c) establish the Proposed Conditions under which it would make such additional System Capacity available, specifying:
 - (i) the amount of incremental System Capacity and the System Point at which it is to be made available, and the minimum amount to be registered.
 - (ii) the date from which such incremental System Capacity would be first registered.
 - (iii) the minimum capacity period associated with any registration of such incremental System Capacity.
 - (iv) any amendment to the Transportation Charge Statement specifying the Transportation Charges applicable in respect of such incremental System Capacity.
 - (v) the amount of any capital payment to be made in advance of registration of such incremental System Capacity.
- d) Seek approval from the Department of Petroleum Resources for its Proposed Conditions.

- e) Where the Proposed Conditions are so approved, inform Shippers and other interested parties of the Proposed Conditions and invite applications for such incremental System Capacity in accordance with the provisions of paragraph 2.
- f) where the application(s) for such incremental System Capacity satisfies the Proposed Conditions, the Operator shall approve the application(s).

3.3 The Operator shall use reasonable endeavours to:

- a) complete any Incremental System Capacity Review within a period of 12 months from initiation or within a period reasonably practicable; and
- b) where the application(s) for incremental System Capacity is approved, undertake the works necessary to physically provide such incremental System Capacity within a period of five years from the date of such approval or within a period reasonably practicable.

3.4 For the avoidance of doubt in respect of any new System Point:

- a) the Proposed Conditions relate solely to the costs of providing incremental System Capacity at that System Point; and
- b) the costs of connecting the System to any Shipper Facilities and the costs of providing the necessary metering and other equipment at or near the System Point shall be dealt with under a separate agreement in accordance with the Operator's published Connections Policy.

4. TRANSPORTATION CHARGES

4.1 A Shipper shall pay Transportation Charges comprising:

- (i) Capacity Charges in respect of its Registered System Capacity at System Points on any Day.
- (ii) Commodity Charges in respect of its delivery or offtake of gas at System Points on any Day.

4.2 The Capacity Charge payable by a Shipper in respect of each Day will be determined for each System Point as the amount of its Registered System Capacity in respect of such System Point multiplied by the Applicable Daily Rate.

4.3 The Commodity Charge payable (for any Day) by a Shipper will be determined (for each System Point) as the amount of its SDQI or SDQO (as defined in the daily quantity provisions set out in Section E1) as appropriate at that System Point multiplied by the Applicable Commodity Rate.

4.4 Transportation Charges will be invoiced and payable in accordance with Section K.

5. OVERRUN CHARGES

5.1 For the purposes of the Code "Overrun Charges" are charges payable by a Shipper and calculated in accordance with paragraph 5.3.

5.2 Overrun Charges shall be invoiced and payable in accordance with Section K.

5.3 Overrun Charge Calculation

5.3.1 If for any reason in any calendar month (an "Overrun Month") at any System Point the quantity of gas delivered to the System or offtaken from the System by a Shipper on any Day or Days (each an "Overrun Day") exceeds the Shipper's Available System Capacity in respect of such System Point, the Shipper shall pay a charge (an "**Overrun Charge**") in respect of System Capacity at that System Point in that month.

5.3.2 For the purposes of this paragraph 5.3, the "**Overrun Quantity**" in respect of a Shipper at a System Point on an Overrun Day is (as the case may be):

a) the amount by which the Shipper's SDQI on that Day in respect of a System Entry Point exceeds the Shipper's Available System Entry Capacity in respect of such System Point; or

b) the amount by which the Shipper's SDQO on that Day in respect of a System Exit Point exceeds the Shipper's Available System Exit Capacity in respect of such System Point.

5.3.3 In respect of any Overrun Month the Overrun Charge shall be calculated as the aggregate Overrun Quantity for that Month multiplied by one hundred and thirty per cent (130%) of the sum of Applicable Commodity Charge and Capacity Charge.

6. CAPACITY TRANSFER

6.1 Basis of Transfer

6.1.1 A Shipper (the "**Transferor Shipper**") may transfer all or part of its Available System Capacity, in respect of a System Point to another Shipper (the "Transferee Shipper") subject to and in accordance with this paragraph 6.

6.1.2 For the purposes of the Code a "**System Capacity Transfer**" is a transfer of System Capacity in accordance with paragraph 6.1.1.

- 6.1.3 A System Capacity Transfer may be for any Day or consecutive Days within the period for which the Transferor Shipper holds (by virtue of registration or any System Capacity Transfer) such capacity.
- 6.1.4 The Operator may, but shall not be required to, reject a System Capacity Transfer where the Transferred System Capacity exceeds the Transferor Shipper's Available System Capacity at the Transfer System Point on any Day in the Transfer Period.
- 6.1.5 In respect of a System Capacity Transfer or proposed System Capacity Transfer:
 - a) the "**Transferred System Capacity**" is the System Capacity which is (or is to be) transferred;
 - b) the "**Transfer Period**" is the Day or Days (in accordance with paragraph 6.1.3) for which the Transferred System Capacity is (or is to be) transferred; and
 - c) the "**Transfer System Point**" is the System Point at which System Capacity is (or is to be) transferred.

6.2 Procedure

- 6.2.1 Where a Shipper proposes to make a System Capacity Transfer, each of the Transferor Shipper and the Transferee Shipper must notify the System Capacity Transfer to the Operator specifying:
 - a) the identity of the Transferor Shipper and Transferee Shipper;
 - b) the Transfer System Point;
 - c) the amount of the Transferred System Capacity; and
 - d) the Transfer Period.
- 6.2.2 A proposed System Capacity Transfer may not be notified later than 3 Business Days before the first Day of the Transfer Period. However, the notification period may be less than 3 days subject to the Operator/ Shippers agreement.

- 6.2.3 The Operator may reject a System Capacity Transfer:
- a) in accordance with paragraph 6.1.4;
 - b) where either the Transferor Shipper or the Transferee Shipper does not notify the System Capacity Transfer in accordance with paragraph 6.2.1 or 6.2.2; or
 - c) in accordance with the credit limit provisions of Section M3.
- 6.2.4 A System Capacity Transfer shall be effective if it is approved or is not rejected by the Operator within 2 Business Days after it was notified in accordance with paragraph 6.2.1.

6.3 Effect of Transfer

- 6.3.1 Except for the purposes of paragraph 6.3.3, and subject to paragraph 6.4, the Transferee Shipper will be treated during the Transfer Period as the holder of the Transferred System Capacity.
- 6.3.2 The adjustments to a Shipper's Registered System Capacity to determine its Available System Capacity for a System Point on a Day as referred to in paragraph 1.3.1(b) are adjustments in respect of any System Capacity Transfer(s) (for which that System Point is the Transfer System Point and the Transfer Period includes that Day) made by adding the Transferred System Capacity where the Shipper was the Transferee Shipper, and deducting the Transferred System Capacity where the Shipper was the Transferor Shipper, subject to paragraph 6.4. For the avoidance of doubt a Shipper's Available System Capacity determined in accordance with this paragraph 6.3.2 may be a negative quantity.
- 6.3.3 A Shipper will remain liable for Capacity Charges in respect of its Registered System Capacity irrespective of any System Capacity Transfer.

6.4 Effect of Termination

- 6.4.1 Where during the Transfer Period in respect of a System Capacity Transfer the Transferor Shipper ceases to be a Shipper in accordance with Section M4.3:
- (i) the System Capacity Transfer shall lapse forthwith;
 - (ii) the Transferee Shipper will cease to be treated as holding the Transferred System Capacity; and
 - (iii) the Transferee Shipper's Available System Capacity shall be adjusted accordingly.

6.4.2 Where during the Transfer Period in respect of a System Capacity Transfer the Transferee Shipper ceases to be a Shipper in accordance with Section M4.3:

- (i) the System Capacity Transfer shall lapse forthwith;
- (ii) the Transferred System Capacity will revert to (and be treated as held by) the Transferor Shipper; and
- (iii) the Transferor Shipper's Available System Capacity shall be adjusted accordingly.

6.5 Negative Capacity

Where and for so long as a Shipper's Available System Capacity determined in accordance with paragraph 6.3.2 is negative the Shipper will be liable to pay Overrun Charge(s) in accordance with paragraph 5.1 on the basis of an Overrun Quantity on each Day calculated as the sum of:

- a) the magnitude of the Shipper's negative Available System Capacity; and
- b) the amount (if any) determined to be the Overrun Quantity in accordance with paragraph 5.3 if the Shipper's Available System Capacity at the Transfer System Point were zero.

SECTION C: NOMINATIONS

SECTION C: NOMINATIONS

1. INTRODUCTION

1.1 Nominations

1.1.1 Shippers will nominate quantities of gas for delivery to and offtake from the System on each Gas Flow Day in accordance with this Section C for the purposes of enabling the Operator to plan and carry out the operation of the System and to balance deliveries to and offtakes from the System.

1.1.2 For the purposes of the Code in respect of any Gas Flow Day, and any Shipper:

- a) a **"Nomination"** is a nomination by a Shipper in respect of a quantity of gas to be delivered to or offtaken from a System Point;
- b) an **"Output Nomination"** is a Nomination in respect of a quantity to be offtaken from a System Exit Point;
- c) an **"Input Nomination"** is a Nomination in respect of a quantity to be delivered to a System Entry Point;
- d) a **"Nomination Quantity"** is the quantity nominated for delivery or offtake in a Shipper's prevailing Nomination;
- e) the **"Nominated Quantity"** is the Nomination Quantity in a User's Nomination prevailing as at the end of the Gas Flow Day.

1.1.3 References in the Code to a Nomination prevailing at any time before or during the Day are to a Nomination as amended up to that time.

1.1.4 For the purposes of the Code a Nomination is made by a Shipper where the Shipper has submitted a Nomination which has been approved or deemed to be approved by the Operator in accordance with this Section C.

1.1.5 A Shipper may not make a Nomination of a quantity less than zero.

1.2 Implied Nomination Flow Rate

1.2.1 The **"Implied Nomination Flow Rate"** is the rate (in MMscf/hour) determined as the Nomination Quantity divided by 24.

1.3 Nomination Approval

1.3.1 Where under this Section C a nomination is approved or deemed to be approved by the Operator such approval or deemed approval shall not amount to a waiver by the Operator of any requirement of this Section C, irrespective of the failure of such Nomination to comply with such requirement.

1.4 Rolling Annual Estimates

1.4.1 Prior to the first Day on which the Shipper is entitled to utilize the System in accordance with the Code and no later than the 10th day in each month thereafter, the Shipper shall provide to the Operator a written estimate of the quantities of gas in MMscf to be delivered to or offtaken from the System by the Shipper at each System Point during each of the subsequent twelve months.

1.4.2 The above estimate shall include an estimate of the composition and quality (including Calorific Value) of the gas to be delivered by the Shipper at each System Entry Point.

1.5 Weekly Estimates

1.5.1 Not earlier than 1600 hours on Tuesday and not later than 1600 hours on Thursday of each week, the Shipper shall provide to the Operator the **“Weekly Estimates”**, specifying for each Gas Flow Day of the following week commencing on the Monday:

- a) Estimates of the quantities of gas in MMscf to be delivered to or offtaken from the System by the Shipper at each System Point; and
- b) Estimates of the composition and quality (including Calorific Value) of the gas to be delivered by the Shipper at each System Entry Point.

1.5.2 The Operator shall use the Weekly Estimates data to plan the scheduling of gas for the following week.

2. DAILY NOMINATIONS

2.1 Basis of Nominations

A Shipper nominating quantity of gas for delivery to and/or offtake from the System on the Day shall make Nominations subject to and in accordance with this paragraph 2.

2.2 Nomination Timing Requirements

2.2.1 Nominations in respect of a Gas Flow Day may be submitted:

- a) no earlier than 7 Business Days prior to the Gas Flow Day; and
- b) no later than 1500 hours on the Day preceding the Gas flow Day (the “Nomination Time”).

2.2.2 Where no Nomination is submitted in accordance with paragraph 2.2.1 a Nomination for a quantity equivalent to the last submitted Nomination will be deemed to have been submitted.

2.2.3 No amendment to a Nomination in respect of a Gas Flow Day may be submitted at any time in the period after 1500 hours on the Day preceding the Gas Flow Day up to the end of the Gas Flow Day.

2.3 Nomination Quantities Requirements

2.3.1 Subject to the other provisions of this Section C each Shipper shall secure that:

- a) It makes Nominations for each Gas Flow Day in accordance with this Section C for the quantities in which, and rates and times at which, it expects to deliver gas to or offtake gas from each System Point.
- b) Subject to paragraphs (c) and (d) below, the sum of its Output Nomination Quantities is equal to:

$$\sum \text{INQ} \times (1 - \text{SF})$$

Where:

- $\sum \text{INQ}$ is the sum of its Input Nomination Quantities
 - SF is the Shrinkage Factor applicable on the Day, established in accordance with Section G
- c) Subject to paragraph (d) below, where the Shipper reasonably believes its Cumulative Imbalance at the start of the Gas Flow Day will be greater than 2% of the aggregate of the Shipper’s Available System Capacities for all System Points on that Day then the Shipper shall submit Input Nomination Quantities such that the Cumulative Imbalance at the end of the Gas Flow Day is reduced to the maximum extent possible.

Provided that the sum of the Input Nomination Quantities submitted shall be:

- (i) where the Shipper's Cumulative Imbalance is a negative quantity, no greater than 105% of the sum of the Output Nominations; and
- (ii) where the Shipper's Cumulative Imbalance is a positive quantity, no less than 95% of the sum of the Output Nominations.

In each case unless otherwise authorised by the Operator.

- d) The Input Nomination Quantities submitted are consistent with the nominations made and/or the quantities it expects to receive under its Gas Purchase Arrangements.

Provided that where the Input Nomination Quantities specified in paragraphs (b) and (c) above would not reflect the aggregate quantities the Shipper reasonably expects to receive at all System Entry Points under its Gas Purchase Arrangements, the Shipper will so notify the Operator and submit Input Nomination Quantities reflecting what it does so reasonably expect to receive.

2.4 Nomination Limitations

2.4.1 A Shipper shall not submit a Nomination:

- a) where the Nomination Quantity exceeds the Shipper's Available System Capacity in respect of the System Point; or
- b) where the Implied Nomination Rate exceeds the 1/24th of the Shipper's Available System Capacity in respect of the System Point.
- c) in respect of a System Point at which, under the prevailing Maintenance Programme, gas is not to be delivered to or offtaken from the System on the Day, or if the Implied Nomination Flow rate exceeds any limit specified in the prevailing Maintenance Programme in respect of such System Point for such Day.

2.5 Other Nomination Requirements

- 2.5.1 The Shipper shall submit separate Nominations in respect of each System Point.

2.5.2 Each Nomination shall specify:

- (i) the Day;
- (ii) the identity of the Shipper;
- (iii) the System Point;
- (iv) the quantity of gas nominated for delivery or offtake; and
- (v) in the case of an Input Nomination, the calorific value of the gas to be delivered.

2.6 Approval and Rejection

2.6.1 The Operator may reject or (at its discretion) approve a Nomination or Nominations:

- (i) which is not submitted in accordance with, or does not comply with, the nomination timing requirements in paragraph 2.2;
- (ii) which does not comply with the Nomination Quantities requirements in paragraph 2.3;
- (iii) which does not comply with the Nomination limitations in paragraph 2.4;
- (iv) which does not comply with the other Nomination requirements in paragraph 2.5; or
- (v) in the case of an Input Nomination, which specifies a calorific value which is not in compliance with the applicable Gas Entry Conditions in accordance with Section H2.4.
- (vi) which exceeds any limit specified or calculated in accordance with the relevant Network Entry Agreement or Network Exit Agreement in respect of the nominating Shipper (a "**Shipper Nomination Limit**");
- (vii) which in aggregate with the Nominations of other Shippers at the relevant System Point in respect of the Day, exceeds any limit specified in the relevant Network Entry Agreement or Network Exit Agreement (a "**Nomination Limit**");

2.6.2 The Operator will not approve or reject a Nomination before the Nomination Time.

2.6.3 If in respect of any System Point the Operator has rejected a Nomination submitted by a Shipper the Shipper shall be deemed to have made a Nomination of zero.

- 2.6.4 A Nomination submitted to the Operator which has not been rejected within 6 hours after the Nomination Time shall be deemed to have been approved.

2.7 Changes to Expected Flows

- 2.7.1 Where at any time following the submission of a Nomination in accordance with paragraph 2.2 a Shipper reasonably believes that the Nomination no longer reflects its reasonable expectation of the gas to be delivered to or offtaken from the System at the relevant System Point:
 - (i) The Shipper will use reasonable endeavours to inform the Operator of the quantities of gas it then expects to be delivered to or offtaken from the System at the relevant System Point; and
 - (ii) The Operator will use reasonable endeavours to inform the Shipper whether such quantities can be accepted for delivery or made available for offtake.

3. TRADE NOMINATIONS

3.1 Basis of Trade Nominations

- 3.1.1 Where two Shippers agree to do so, they may make in respect of any Gas Flow Day corresponding nominations (respectively a "Disposing Trade Nomination" and an "Acquiring Trade Nomination") for the purposes of paragraph 3.1.3, subject to and in accordance with this paragraph 3.
- 3.1.2 The quantities subject to a Disposing Trade Nomination and an Acquiring Trade Nomination (each a "Trade Nomination") must be equal.
- 3.1.3 The quantity ("Trade Nomination Quantity") subject to corresponding Trade Nominations will (in accordance with Section E4.1) be:
 - a) deducted in determining the Daily Imbalance of the Shipper making the Disposing Trade Nomination; and
 - b) added in determining the Daily Imbalance of the Shipper making the Acquiring Trade Nomination.
- 3.1.4 For the purposes of the Code (and without prejudice to any terms as between Shippers, with which the Operator shall not be concerned) a Trade Nomination shall have no other effect than under paragraph 3.1.3.

3.1.5 A Shipper may make a Trade Nomination irrespective of whether the Shipper makes any Input Nomination or Output Nomination for the Gas Flow Day in respect of which the Trade Nomination is made.

3.1.6 For the purposes of the Code a Trade Nomination is made by a Shipper where the Shipper has submitted a Trade Nomination which has not been rejected by the Operator in accordance with this Section C.

3.2 Content, Timing and Procedure

3.2.1 A Trade Nomination shall specify:

- a) the Gas Flow Day;
- b) the identity of the Shipper;
- c) whether it is a Disposing Trade Nomination or an Acquiring Trade Nomination;
- d) the identity of the Shipper making the corresponding Trade Nomination; and
- e) the Trade Nomination Quantity.

3.2.2 A Trade Nomination may not be made:

- a) earlier than 7 Business Days prior to the Gas Flow Day; and
- b) later than 5 Business Days prior to the Gas Flow Day or subject to Operator's approval.

3.2.3 A Trade Nomination shall not be effective and shall be rejected by the Operator:

- a) if it does not comply with paragraph 3.2.1;
- b) if the corresponding Trade Nomination is not submitted, in compliance with paragraph 3.2.1, on the same Day that the first Trade Nomination was made;
- c) if the Trade Nomination Quantity and the quantity subject to the corresponding Trade Nomination are not equal; and
- d) in accordance with the Code credit limit provisions of Section M3.

3.2.4 A Trade Nomination may be withdrawn by the Shipper who submitted it at any time before the Day 5 Business Days prior to the Gas Flow Day or subject to Operator's approval.

SECTION D: OPERATIONAL BALANCING

SECTION D: OPERATIONAL BALANCING

1. INTRODUCTION

1.1 Operational Balancing

1.1.1 For the purposes of the Code, "**Operational Balancing**" means maintaining:

- a) both during and at the end of each Gas Flow Day;
- b) within such operational tolerance as the Operator may determine;
- c) after taking account of estimated shrinkage and intended changes in Linepack; and
- d) having regard to all other factors relevant to the operation of the System.

The balance between the quantities of gas respectively delivered to and offtaken from the System; and references to an "**Operational Balance**" shall be construed accordingly.

1.1.2 For the purposes of Operational Balancing the Operator may take Balancing Actions in accordance with this Section D.

1.1.3 For the purposes of the Code:

- a) an "**Operational Balancing Requirement**" is any requirement for a Balancing Action to be taken;
- b) "**Balancing Actions**" are actions taken by the Operator pursuant to the Code for the purposes of Operational Balancing, as further defined in paragraph 1.4; and
- c) "**Line pack**" is, for a Day, the amount of gas within the System
- d) A "**Connected Facility Operator**" or "**CFO**" is either the Delivery Facility Operator at a System Entry Point or the Offtake Facility Operator at a System Exit Point

1.2 Operational Balancing Requirements

1.2.1 Without prejudice to the generality of paragraph 1.1.1, an Operational Balancing Requirement may arise:

- a) where the quantities of gas expected to be delivered to the System over the whole of the Gas Flow Day are more or less (after taking account of shrinkage and any intended changes in Line- pack) than those expected to be offtaken from the System over the whole of that Day; and
- b) irrespective of whether the circumstances in paragraph (a) apply, where at any time within the Gas Flow Day (by reason of differences in the times and/or rates at which gas is delivered to and offtaken from the System) pressures in the System and/or Line pack are or are expected to be more or less than the operationally acceptable limit determined by the Operator.

1.2.2 Balancing Actions taken for any Day in the circumstances in paragraph 1.2.1(b) may of themselves give rise to an Operational Balancing Requirement (for the same Day) under paragraph 1.2.1(a).

1.3 Operational Balancing Decisions

1.3.1 In making decisions as to the taking of Balancing Actions, the Operator will and shall be entitled to take into account such information as it shall judge appropriate, including:

- a) its own estimates of supply and demand and profiles of supply and demand within the Day;
- b) Nominations submitted by Shippers; and
- c) Local Operating Information provided under the terms of Network Entry Agreements and Network Exit Agreements.

1.4 Balancing Actions

1.4.1 For the purposes of the Code, Balancing Actions shall include:

- a) An Accepted Shipper Offer agreed between the Operator and any Shipper in accordance with paragraph 3;
- b) An Accepted CFO Offer agreed between the Operator and any CFO in accordance with paragraph 4;
- c) Entry Curtailment and Exit Curtailment in accordance with paragraph 5; and
- d) Any other action taken by the Operator for the purposes of Operational Balancing.

2. INVITATION FOR OPERATIONAL BALANCING ASSISTANCE

2.1 Notification of Operational Balancing Requirement

2.1.1 Where on or before any Gas Flow Day in the reasonable judgement of the Operator an Operational Balancing Requirement in respect of the Gas Flow Day is likely to arise or has arisen then the Operator may inform Shippers and/or CFOs of such circumstances, and may specify the nature of the flow rate changes at System Points that may assist in addressing the Operational Balancing Requirement, including:

- a) the System Points at which a change of flow rate may so assist; and for each such System Point;
- b) the scale of such flow rate change and whether it is an increase or decrease;
- c) the quantity that the Operator currently expects to be delivered or offtaken during the Gas Flow Day;
- d) the quantity that the Operator believes would need to be delivered or offtaken during the Gas Flow Day to address or assist in addressing the Operational Balancing Requirement; and
- e) any other relevant information.

2.2 Invitation for Balancing Assistance

2.2.1 The Operator may issue at any time an “Invitation for Balancing Assistance” to any Shipper or CFO, seeking assistance in addressing the Operational Balancing Requirement.

2.2.2 For the purpose of the Code:

- a) An Invitation for Shipper Balancing Assistance is an Invitation for Balancing Assistance issued to any Shipper and the provisions of paragraph 3 shall apply to such Invitation; and
- b) An Invitation for CFO Balancing Assistance is an Invitation for Balancing Assistance issued to any CFO and the provisions of paragraph 4 shall apply to such Invitation.

2.2.3 The Operator may determine the Shipper (or Shippers) and/or the CFO (or CFOs) to whom an Invitation for Balancing Assistance is issued based on its reasonable judgement as to whether the recipient will be able to provide the Operator with assistance in addressing the Operational Balancing Requirement.

3. SHIPPER BALANCING ASSISTANCE

3.1 Invitation for Shipper Balancing Assistance

3.1.1 An Invitation for Shipper Balancing Assistance shall invite Shippers to specify for the Gas Flow Day in respect of which invitation is issued and for each System Point at which assistance is offered:

- a) the System Point;
- b) the quantity that the Shipper intended to deliver or offtake during the Gas Flow Day prior to offering assistance;
- c) the quantity that the Shipper expects to deliver or offtake during the Gas Flow Day if its offer of assistance is taken up;
- d) the rate or rates at which it expects to deliver or offtake during the Gas Flow Day (or the remainder thereof) if its offer of assistance is taken up; and
- e) the time or times during the Gas Flow Day when it expects the rate of delivery or offtake will change if its offer of assistance is taken up.

3.2 Shipper Response to Invitation

3.2.1 A Shipper on receipt of an Invitation for Shipper Balancing Assistance shall as soon as reasonably practicable either:

- a) Decline the invitation; or
- b) Specify its offer of assistance in accordance with the requirements of the Invitation

3.3 Accepted Shipper Offer

3.3.1 The Operator may agree with any Shipper to accept any offer of Balancing Assistance in respect of a System Point (an “Accepted Shipper Offer”) where it reasonably believes such acceptance will assist in addressing the Operational Balancing Requirements.

3.3.2 An Accepted Shipper Offer shall specify:

- a) The System Point in respect of which the offer is accepted.
- b) The Gas Flow Day in respect of which the offer is accepted.

- c) Whether the Shipper's SDQ at the System Point for the Gas Flow Day should be greater than or less than the Original Shipper Quantity in order to assist in addressing the Operational Balancing Requirements.
- d) The Original Shipper Quantity, being a figure agreed between the Shipper and the Operator to be a reasonable estimate of what the Shipper's SDQ at the System Point for the Gas Flow Day would have been if there had been no Accepted Shipper Offer.

3.3.3 For the purposes of this paragraph 3, SDQ shall mean the Shipper Daily Quantity Input (SDQI) or the Shipper Daily Quantity Output (SDQO) at the System Point as established in accordance with Section E.

3.4 Effect of Accepted Shipper Offer

3.4.1 Where there has been an Accepted Shipper Offer it shall be established after the Gas Flow Day in accordance with the principles of paragraph 3.3.2 (c) whether the Shipper's SDQ at the System Point for the Gas Flow Day was greater than or less than the Original Shipper Quantity and hence whether the Shipper assisted in addressing the Operational Balancing Requirements.

3.4.2 Where the Shipper did so assist, the Shipper's Overdelivery Threshold or the Shipper's Underdelivery Threshold established in accordance with Section F2 shall be subject to an adjustment for the Gas Flow Day to which the Accepted Shipper Offer relates, and may be subject to further adjustment for a number of consecutive subsequent Gas Flow Days, in accordance with the further provisions of this paragraph 3.4, and any such adjustment or further adjustment shall be an "Offer Threshold Adjustment".

3.4.3 The Offer Threshold Adjustment on the Gas Flow Day to which the Accepted Shipper Offer relates shall be the difference between the SDQ and the Original Shipper Quantity.

3.4.4 The Offer Threshold Adjustment (if any) on each subsequent Gas Flow Day D shall be calculated as follows:

$$TAD = TAD_{-1} - DR$$

Where:

- TAD is the Offer Threshold Adjustment on the Gas Flow Day D
- TAD-1 is the Offer Threshold Adjustment on the preceding Gas Flow Day, D-1

- DR is the Daily Reduction, being 1% of the aggregate of the Shipper's Available System Capacities for all System Points on that Day

Provided that where the result of the calculation results in a negative quantity for TAD, then TAD shall be set equal to TAD-1 and no further Offer Threshold Adjustments shall be made in respect of the Accepted Shipper Offer on subsequent Gas Flow Days.

- 3.4.5 The Offer Threshold Adjustment established in accordance with paragraph 3.4.3 or 3.4.4 shall be added to:
- a) the Over-delivery Threshold:
 - (i) where the Shipper's SDQ was greater than the Original Shipper Quantity at a System Entry Point; or
 - (ii) where the Shipper's SDQ was less than the Original Shipper Quantity at a System Exit Point.
 - b) the Under-delivery Threshold:
 - (i) where the Shipper's SDQ was less than the Original Shipper Quantity at a System Entry Point;
 - (ii) where the Shipper's SDQ was greater than the Original; or
 - (iii) Shipper Quantity at a System Exit Point.
- 3.4.6 Where the Shipper did not so assist, the Accepted Shipper Offer shall not affect any provisions of the Code.

4. CONNECTED FACILITY OPERATOR (CFO) BALANCING ASSISTANCE

4.1 Invitation for CFO Balancing Assistance

- 4.1.1 For the purposes of this paragraph 4 "System Point Quantities" shall mean (as the case may be):
- a) The Aggregate Entry Point Daily Quantities Delivered for the relevant Gas Flow Day at a System Entry Point (as defined in Section E1); or
 - b) The Aggregate Exit Point Daily Quantities Offtaken for the relevant Gas Flow Day at a System Exit Point (as defined in Section E1).
- 4.1.2 An Invitation for CFO Balancing Assistance shall invite CFOs to specify for the Gas Flow Day in respect of which invitation is issued and for each System Point at which assistance is offered:

- a) the System Point.
- b) the System Point Quantities it expects to be recorded if its offer of assistance is not taken up.
- c) the System Point Quantities it expects to be recorded if its offer of assistance is taken up.
- d) the rate or rates which it expects gas to flow during the Gas Flow Day (or the remainder thereof) if its offer of assistance is taken up.
- e) the time or times during the Gas Flow Day when it expects the rate flow to change if its offer of assistance is taken up.

4.2 CFO Response to Invitation

- 4.2.1 The Operator shall endeavour to elicit a response to an Invitation for CFO Balancing Assistance as soon as reasonably practicable.

4.3 Accepted CFO Offer

- 4.3.1 The Operator may agree with any CFO to accept any offer of Balancing Assistance in respect of a System Point (an “Accepted CFO Offer”):

- a) where there is an Operational Balancing Agreement in place between the Operator and the CFO; and
- b) where it reasonably believes such acceptance will assist in addressing the Operational Balancing Requirements.

- 4.3.2 An Accepted CFO Offer shall specify:

- a) The System Point in respect of which the offer is accepted
- b) The Gas Flow Day in respect of which the offer is accepted
- c) Whether the System Point Quantities on the Gas Flow Day should be greater than or less than the Original CFO Quantity in order to assist in addressing the Operational Balancing Requirement
- d) The Original CFO Quantity, being a figure agreed between the CFO and the Operator to be a reasonable estimate of what the System Point Quantities on the Gas Flow Day would have been if there had been no Accepted CFO Offer

- e) The OBA Allocation Limit being the maximum quantity that may be allocated in respect of the Gas Flow Day to the Operational Balancing Agreement in place at the System Point in accordance with paragraph 4.4, and whether the OBA Inventory may be increased or decreased by this quantity.

4.4 Effect of Accepted CFO Offer

4.4.1 Where there has been an Accepted CFO Offer it shall be established after the Gas Flow Day in accordance with the principles of paragraph 4.3.2 (c) whether System Point Quantities on the Gas Flow Day were greater than or less than the Original CFO Quantity and hence whether the CFO assisted in addressing the Operational Balancing Requirement.

4.4.2 Where the CFO did so assist:

- a) The Allocation Statement in respect of the System Point and Gas Flow Day may include an OBA Allocation of magnitude no greater than the lesser of:
 - (i) the OBA Allocation Limit specified in the Accepted CFO offer; and
 - (ii) the difference between the System Point Quantity and the Original CFO Quantity.
- b) the OBA Inventory will be either increased or decreased (as specified in the Accepted CFO offer) by an amount equal to the OBA Allocation.

4.4.3 Where the CFO did not so assist, there shall be no OBA Allocation or OBA Inventory adjustment in respect of the Accepted CFO Offer, and the Accepted OBA offer shall not affect any provisions of the Code.

4.5 Payback of OBA Inventory Quantities

The parties acknowledge that the terms of an Operational Balancing Agreement make provision for OBA Inventory quantities to be repaid and that the Allocation Statement in respect of the System Point where an Operational Balancing Agreement exists may include an OBA Allocation in respect of such quantities on any Gas Flow Day.

5. CURTAILMENT

5.1 Introduction

5.1.1 Where necessary for the purposes of Operational Balancing the Operator may curtail deliveries at System Entry Points and offtakes at System Exit Points in accordance with this paragraph 5.

5.1.2 For the purposes of the Code:

- a) Priority System Entry Point shall mean a System Entry Point in respect of which the curtailment priority applies in line with the directive of the Department;
- b) Priority Exit Point shall mean a System Exit Point in respect of which the curtailment priority applies in line with the directive of the Department;
- c) For the avoidance of doubt a Priority System Entry Point or a Priority System Exit Point may in accordance with the curtailment priority directive of the Department, include a System Point at which gas is accepted for delivery or made available for offtake under a Legacy Agreement.

5.2 System Entry Curtailment

5.2.1 Where for any reason at any time in respect of any System Entry Point and in relation to a Day the amount of (or rate at which) gas is or will be delivered exceeds the maximum (as determined by the Operator at such time) amount of gas (or maximum rate at which) it will be feasible to take delivery of on that Day or in the remaining part of that Day at that System Entry Point, the Operator shall:

- a) notify Shippers and the relevant CFO of those circumstances (the “Entry Curtailment Circumstances”); and
- b) specify the maximum amount of gas (or maximum rate at which) it will be feasible to take delivery of on that Day or in the remaining part of that Day.

5.2.2 Where more than one System Entry Point is affected by the same Entry Curtailment Circumstances the Operator shall also specify the maximum amount of gas to be delivered (or maximum rate at which is to be delivered) at each such System Entry Point determined in accordance with the Entry Curtailment Hierarchy.

- 5.2.3 Subject to any directive of the Department in respect of Curtailment Priority, the “Entry Curtailment Hierarchy” to be used by the Operator in determining the maximum amount of gas to be delivered (or maximum rate at which gas is to be delivered) at each affected System Entry Point is as follows:
- a) firstly, to the extent reasonably practicable account will be taken of the requirement to maintain flows at any Priority System Entry Point which is an affected System Entry Point;
 - b) secondly, where in the Operator’s reasonable judgement a Shipper is continuing to deliver gas at an affected System Entry Point in excess of the gas it is offtaking at System Exit Points, the Operator may assume that the maximum amount of gas to be delivered (or maximum rate at which gas is to be delivered) at that System Entry Point may be reduced by the amount of such excess; and
 - c) thirdly, the Operator shall apportion any further required reductions in the amount of (or rate at which) gas is or will be delivered as far as is reasonably practicable evenly across all affected System Entry Points and in any event in a not unduly discriminatory manner.
- 5.2.4 To the extent the Operator is able to control the amount of (or rate at which) gas is or will be delivered at affected System Entry Points it shall use reasonable endeavours to exercise such control so that the amount of (or rate at which) gas is delivered at each affected System Entry Point is in accordance with its determination using Entry Curtailment Hierarchy.
- 5.2.5 Where the Entry Curtailment Circumstances continue and pressures within the System rise to levels such that in the Operator’s reasonable judgement there is a risk that the safe operating pressures will be exceeded, the Operator will inform each relevant CFO with a view to ensuring that safe operating pressures are not so exceeded.

5.3 System Exit Curtailment

- 5.3.1 Where for any reason at any time in respect of any System Exit Point and in relation to a Day the amount of (or rate at which) gas is or will be offtaken exceeds the maximum (as determined by the Operator at such time) amount of gas (or maximum rate at which) it will be feasible to offtake on that Day or in the remaining part of that Day at that System Exit Point, the Operator shall:
- a) notify Shippers (the relevant CFO) of those circumstances (the “Exit Curtailment Circumstances”); and

- b) specify the maximum amount of gas (or maximum rate at which) it will be feasible to offtake on that Day or in the remaining part of that Day.

5.3.2 Where more than one System Exit Point is affected by the same Exit Curtailment Circumstances the Operator shall also specify the maximum amount of gas to be offtaken (or maximum rate at which is to be offtaken) at each such System Exit Point determined in accordance with the Exit Curtailment Hierarchy.

5.3.3 Subject to any directive of the Department in request of Curtailment Priority, the “Exit Curtailment Hierarchy” to be used by the Operator in determining the maximum amount of gas to be offtaken (or maximum rate at which gas is to be offtaken) at each affected System Exit Point is as follows:

- a) firstly, to the extent reasonably practicable account will be taken of the requirement to maintain flows at any Priority System Exit Point which is an affected System Exit Point;
- b) secondly, where in the Operator’s reasonable judgement a Shipper is continuing to offtake gas at an affected System Exit Point in excess of the gas it is delivering at System Entry Points, the Operator may assume that the maximum amount of gas to be off- taken (or maximum rate at which gas is to be offtaken) at that System Exit Point may be reduced by the amount of such excess; and
- c) thirdly, the Operator shall apportion any further required reductions in the amount of (or rate at which) gas is or will be offtaken as far as is reasonably practicable evenly across all affected System Exit Points and in any event in a not unduly discriminatory manner.

5.3.4 To the extent the Operator is able to control the amount of (or rate at which) gas is or will be offtaken at affected System Exit Points it shall use reasonable endeavours to exercise such control so that the amount of (or rate at which) gas is offtaken at each affected System Exit Point is in accordance with its determination using Exit Curtailment Hierarchy.

6. EMERGENCY CIRCUMSTANCES

Where Entry Curtailment Circumstances or Exit Curtailment Circumstances or any other circumstances concerning operation of the System arise, and the Operator reasonably believes that as a result of those circumstances there is a danger to life or property, the Operator may declare and notify the Shippers of the existence of Emergency Circumstances and may take any actions it deems necessary to alleviate the Emergency Circumstances, acting in accordance with any relevant legislation.

**SECTION E:
DAILY QUANTITIES AND IMBALANCES**

SECTION E: DAILY QUANTITIES AND IMBALANCES

1. INTRODUCTION

1.1 Shipper Daily Quantities

1.1.1 For the purposes required by the Code, including determining:

- a) Daily imbalances and cumulative imbalances; and
- b) Scheduling charges

The quantities of gas treated as delivered to the System and offtaken from the System by each Shipper each Day shall be determined in accordance with paragraphs 2 and 3.

1.1.2 For the purposes of the Code, in respect of any Day:

- a) the "**Shipper Daily Quantity Input**" or "**SDQI**" is the quantity of gas treated as delivered by a Shipper to the System on that Day at a System Entry Point;
- b) the "**Shipper Daily Quantity Output**" or "**SDQO**" is the quantity of gas treated as offtaken by a Shipper from the System on that Day at a System Exit Point;
- c) in relation to a System Entry Point, a "**Delivering Shipper**" is a Shipper treated as delivering gas to the System at that point on that Day;
- d) in relation to a System Exit Point, an "**Offtaking Shipper**" is a Shipper treated as offtaking gas from the System at that point on that Day.

1.1.3 Unless the context otherwise requires, references in the Code to quantities delivered to or offtaken from the System by a Shipper are to the quantities treated in accordance with this E as being so delivered or offtaken.

1.1.4 For the purposes of the Code a reference to a positive or to a negative quantity shall include a quantity of zero.

1.2 Daily Imbalance

1.2.1 For the purposes of the Code a Daily Imbalance shall be determined for each Shipper in respect of each Day.

1.2.2 For each Shipper each Day the "Daily Imbalance" is the difference between the quantities (adjusted to take account of Trade Nominations) treated as delivered to and offtaken from the System by the Shipper on such Day as determined in accordance with paragraph 4.

1.3 Cumulative Imbalance

1.3.1 For the purposes of the Code a Cumulative Imbalance shall be determined for each Shipper in respect of each Day in accordance with paragraph 4.

1.4 Aggregate Entry Point Daily Quantities Delivered

1.4.1 In respect of each System Entry Point the "Entry Point Daily Quantity Delivered" is the aggregate quantity of gas delivered to the System on a Day at that System Entry Point under the Code and any Legacy Agreements and any Operational Balancing Agreement, ascertained as in accordance with the relevant Network Entry Agreement, in accordance with Section H2.

1.5 Aggregate Exit Point Daily Quantities Offtaken

1.5.1 In respect of each System Exit Point the "Exit Point Daily Quantity Offtaken" is the aggregate quantity of gas offtaken from the System on a Day under the Code and any Legacy Agreements and any Operational Balancing Agreement, ascertained in accordance with the relevant Network Exit Agreement in accordance with Section I4.8.

2. INPUT QUANTITIES

2.1 Shipper Daily Quantity Inputs

2.1.1 For each Shipper the SDQI in respect of each System Entry Point for the Gas Flow Day shall be determined in accordance with this paragraph 2.1.

2.1.2 Each Shipper in respect of each System Entry Point for which it holds System Capacity on a Gas Flow Day, shall procure that the relevant Shipper Agent shall submit to the Operator:

- a) not later than 16:30 hours on the first Day following the Gas Flow Day, an estimate (the "Entry Allocation Estimate"); and
- b) not later than 16:30 hours on the third Day following the Gas Flow Day, a statement (the "Entry Allocation Statement").

- 2.1.3 The Entry Allocation Estimate and Entry Allocation Statement will each specify:
- a) the System Entry Point;
 - b) the Gas Flow Day;
 - c) the Entry Point Daily Quantity Delivered at the System Entry Point on such Day which shall be a positive quantity;
 - d) the aggregate quantity of gas delivered to the System on the Gas Flow Day at the System Entry Point under the Code (the “Code Quantity Delivered”) which shall be a positive quantity;
 - e) the aggregate quantity of gas delivered to the System on the Gas Flow Day at the System Entry Point under any Legacy Agreements (the “Non-Code Quantity Delivered”) which shall be a positive quantity;
 - f) the quantity of gas to be allocated in respect of the Gas Flow Day to any Operational Balancing Agreement in place at the System Entry Point (the “OBA Allocation”) which shall be specified as:
 - (i) A negative quantity where the OBA Inventory is to be decreased; or
 - (ii) A positive quantity whose absolute value is no greater than the Entry Point Daily Quantity Delivered where the OBA Inventory is to be increased.
 - g) the quantity of gas delivered by each Shipper to the System on the Gas Flow Day at the System Entry Point (being in each case a positive quantity) and the identity of each Shipper.
- 2.1.4 For the avoidance of doubt, but without prejudice to paragraph 6, no person who is not a Shipper Agent may submit an Entry Allocation Estimate or an Entry Allocation Statement or otherwise claim to have delivered gas to the System, and the Operator will disregard any such purported submission or claim.
- 2.1.5 If for the Gas Flow Day in respect of a System Entry Point all of the conditions in paragraph 2.1.7 are satisfied:
- a) each Shipper specified in the relevant Entry Allocation Statement shall be a Delivering Shipper; and
 - b) the SDQI for each Shipper shall be the quantity stated in respect of such Shipper in the Entry Allocation Statement.

2.1.6 If for the Gas Flow Day in respect of a System Entry Point any one or more of the conditions in paragraph 2.1.7 is not satisfied:

a) The Code Quantity Delivered and the Non-Code Quantity Delivered shall be established as follows:

$$CQDD = EPDQDD \times CQDD-1 / (CQDD-1 + NCQDD-1)$$

$$NCQDD = EPDQDD \times NCQDD-1 / (CQDD-1 + NCQDD-1)$$

Where:

- CQDD is the Code Quantity Delivered for the Gas Flow Day
- NCQDD is the Non-Code Quantity Delivered for the Gas Flow Day
- EPDQDD is the Entry Point Daily Quantity Delivered for the Gas Flow Day as established in accordance with the relevant Network Entry Agreement, in accordance with Section H2
- CQDD-1 is the Code Quantity Delivered for the preceding Gas Flow Day
- NCQDD-1 is the Non-Code Quantity Delivered for the preceding Gas Flow Day

b) each Shipper who was a Delivering Shipper on the Preceding Gas Flow Day shall be a Delivering Shipper and the SDQI for each Shipper shall be determined by allocating the Code Quantity Delivered for the Gas Flow Day between the Delivering Shippers in the same proportions used for allocating the Code Quantity Delivered on the Preceding Gas Flow Day.

2.1.7 The conditions referred to in paragraphs 2.1.5 and 2.1.6 are that:

- a) an Entry Allocation Statement is provided in accordance with paragraph 2.1.2 (b).
- b) the figures specified in the Entry Allocation Statement are in accordance with the following equation:

$$EPDQD = CQD + NCQD + OBAA$$

Where:

- EPDQD is the Entry Point Daily Quantity Delivered as specified in the Entry Allocation Statement
 - CQD is Code Quantity Delivered as specified in the Entry Allocation Statement
 - NCQD is the Non-Code Quantity Delivered as specified in the Entry Allocation Statement
 - OBAA is the OBA Allocation (either positive or negative) as specified in the Entry Allocation Statement
- c) the Entry Point Daily Quantity Delivered as specified in the Entry Allocation Statement is the same as the figure for the Gas Flow Day as established in accordance with the relevant Network Entry Agreement, in accordance with Section H2.
- d) the aggregate of the quantities stated in the Entry Allocation Statement (in respect of each Shipper) in respect of such Day is equal to the Code Quantity Delivered on such Day.
- e) the OBA Allocation is consistent with the amount by which the OBA Inventory is to be increased or decreased on such Day in accordance with the terms of the relevant Operational Balancing Agreement.

3. OUTPUT QUANTITIES

3.1 Shipper Daily Quantity Outputs

3.1.1 For each Shipper the SDQO in respect of each System Exit Point for the Gas Flow Day shall be determined in accordance with this paragraph 3.1.

3.1.2 Each Shipper in respect of each System Exit Point for which it holds System Capacity, shall procure that the relevant Shipper Agent shall submit to the Operator:

- a) not later than 16:30 hours on the first Day following the Gas Flow Day, an estimate (the "Exit Allocation Estimate"); and
- b) not later than 16:30 hours on the third Day following the Gas Flow Day, a statement (the "Exit Allocation Statement").

- 3.1.3 The Exit Allocation Estimate and Exit Allocation Statement will each specify:
- a) the System Exit Point;
 - b) the Gas Flow Day;
 - c) the Exit Point Daily Quantity Offtaken at the System Exit Point on such Day which shall be a positive quantity;
 - d) the aggregate quantity of gas offtaken from the System on the Gas Flow Day at the System Exit Point under the Code (the “Code Quantity Offtaken”) which shall be a positive quantity;
 - e) the aggregate quantity of gas offtaken from the System on the Gas Flow Day at the System Exit Point under any Legacy Agreements (the “Non-Code Quantity Offtaken”) which shall be a positive quantity;
 - f) the quantity of gas to be allocated in respect of the Gas Flow Day to any Operational Balancing Agreement in place at the System Exit Point (the “OBA Allocation”) which shall be specified as:
 - (i) A positive quantity where the OBA Inventory is to be decreased; or
 - (ii) A negative quantity whose absolute value is no greater than the Exit Point Daily Quantity Offtaken where the OBA Inventory is to be increased;
 - g) the quantity of gas offtaken by each Shipper from the System on the Gas Flow Day at the System Exit Point (being in each case a positive quantity) and the identity of each Shipper.
- 3.1.4 For the avoidance of doubt, but without prejudice to paragraph 6, no person who is not a Shipper Agent may submit an Exit Allocation Estimate or an Exit Allocation Statement or otherwise claim to have off taken gas from the System and the Operator will disregard any such purported submission or claim.
- 3.1.5 If for the Gas Flow Day all of the conditions in paragraph 3.1.7 are satisfied:
- a) each Shipper specified in the relevant Exit Allocation Statement shall be an Offtaking Shipper; and
 - b) the SDQO for each Shipper shall be the quantity stated in respect of such Shipper in the Exit Allocation Statement.

3.1.6 If for the Gas Flow Day in respect of a System Entry Point any one or more of the conditions in paragraph 3.1.7 is not satisfied:

a) The Code Quantity Offtaken and the Non-Code Quantity Offtaken shall be established as follows:

$$CQOD = EPDQOD \times CQOD-1 / (CQO D-1 + NCQO D-1)$$

$$NCQOD = EPDQOD \times NCQOD-1 / (CQO D-1 + NCQO D-1)$$

Where:

- CQOD is the Code Quantity Offtaken for the Gas Flow Day
 - NCQOD is the Non-Code Quantity Offtaken for the Gas Flow Day
 - EPDQOD is the Exit Point Daily Quantity Offtaken for the Gas Flow Day as established in accordance with the relevant Network Exit Agreement in accordance with Section 14.8.
 - CQOD-1 is the Code Quantity Offtaken for the preceding Gas Flow Day
 - NCQO D-1 is the Non-Code Quantity Offtaken for the preceding Gas Flow Day
- b) each Shipper who was an Offtaking Shipper on the Preceding Gas Flow Day shall be an Offtaking Shipper and the SDQO for each Shipper shall be determined by allocating the Code Quantity Offtaken for the Gas Flow Day between the Offtaking Shippers in the same proportions used for allocating the Code Quantity Offtaken on the Preceding Gas Flow Day.

3.1.7 The conditions referred to in paragraphs 3.1.5 and 3.1.6 are that:

- a) an Exit Allocation Statement is provided in accordance with paragraph 3.1.2 (b).
- b) the figures specified in the Exit Allocation Statement are in accordance with the following equation:

$$EPDQO = CQO + NCQO + OBAA$$

Where:

- EPDQO is the Exit Point Daily Quantity Offtaken as specified in the Exit Allocation Statement

- CQO is Code Quantity Offtaken as specified in the Exit Allocation Statement
 - NCQO is the Non-Code Quantity Offtaken as specified in the Exit Allocation Statement
 - OBAA is the OBA Allocation (either positive or negative) as specified in the Exit Allocation Statement
- c) the Exit Point Daily Quantity Offtaken as specified in the Exit Allocation Statement is the same as the figure for the Gas Flow Day as established in accordance with the relevant Network Exit Agreement in accordance with Section I 4.8.
- d) the aggregate of the quantities stated in the Exit Allocation Statement (in respect of each Shipper) in respect of such Day is equal to the Code Quantity Offtaken on such Day.
- e) the OBA Allocation is consistent with the amount by which the OBA Inventory is to be increased or decreased on such Day in accordance with the terms of the relevant Operational Balancing Agreement.

4. IMBALANCES

4.1 Daily Imbalance

4.1.1 The Daily Imbalance each Day for each Shipper shall be the difference between the quantities calculated under (a) and (b) below:

a) the sum of:

(i) $\sum \text{SDQI} \times (1 - \text{SF})$

Where:

- $\sum \text{SDQI}$ is the aggregate of the Shipper's SDQIs in respect of such Day
- SF is the Shrinkage Factor applicable in respect of such Day in accordance with Section G

and

(ii) the aggregate of the Trade Nomination Quantities under any Acquiring Trade Nominations made by the Shipper

- b) the sum of:
 - (i) the aggregate of the Shipper's SDQOs in respect of such Day;
and
 - (ii) the aggregate of the Trade Nomination Quantities under any
Disposing Trade Nominations made by the Shipper.

4.1.2 The Daily Imbalance is:

- a) a positive number where the quantity under paragraph 4.1.1(a) is
greater than the quantity under paragraph 4.1.1(b); and
- b) a negative number where the quantity under paragraph 4.1.1(b) is
greater than the quantity under paragraph 4.1.1(a).

4.2 Cumulative Imbalance

4.2.1 Subject to paragraph 4.2.2 the Cumulative Imbalance for each Day and for
each Shipper shall be calculated in accordance with the following formula:

$$\text{CUMD} = \text{CUMD-1} + \text{DID}$$

where:

- CUMD is the Cumulative Imbalance for the Shipper on the Day (which
may be a positive or negative quantity);
- CUMD-1 is the Cumulative Imbalance for the Shipper on the previous
Day (which may be a positive or negative quantity).

Provided that the Cumulative Imbalance for a Shipper on the Day prior
to the first Day on which the Shipper is entitled to utilize the System
in accordance with the Code shall be deemed to be zero.

- DID is the Daily Imbalance for the Shipper on the Day (which may be a
positive or negative quantity)

4.2.2 The Cumulative Imbalance for each Day for each Shipper established in
accordance with paragraph 4.2.1 shall be subject to adjustment:

- a) in respect of any Shipper's Cumulative Imbalance Excess in
accordance with Section F3.4.
- b) in respect of a Reconciliation Quantity in accordance with paragraph
5.3.

4.3 Reduction of Cumulative Imbalances

Subject to the terms of the Code, and in particular the provisions concerning Nominations in Section C2.3, each Shipper shall use reasonable endeavours to reduce its Cumulative Imbalance for any Day as soon as reasonably practicable thereafter.

4.4 Limitation on Revisions

No revision shall be made for any purposes of the Code (including the determination of Shippers' Cumulative Imbalances, Balancing Charges and Overrun Charges) to the SDQIs determined in accordance with paragraph 2.1 on the basis of the Entry Allocation Statement, and SDQOs determined in accordance with paragraph 3.1 on the basis of the Exit Allocation Statement.

5. MEASUREMENT RECONCILIATION

5.1 Reconciliation Quantity and Period

5.1.1 Where, in accordance with the relevant Network Entry Provisions or Network Exit Provisions, in respect of any System Point the quantity determined (upon a periodic check reading or a reading following estimation of the reading, or a determination or estimation following testing, verification or calibration, of the meter installed at the System Point) to have been delivered to or offtaken from the System over a period (the "Determined Quantity") differs from the quantity previously determined or estimated to have been delivered to or offtaken from the System over that period (the "Previously Determined Quantity"):

- a) the difference between the quantity so determined and the quantity previously determined shall be a "Reconciliation Quantity"; and
- b) the period over which such difference arose shall be a "Reconciliation Period"

5.1.2 The Reconciliation Quantity shall be a "Gas Gain Reconciliation Quantity" where:

- a) At a System Entry Point the Determined Quantity is greater than the Previously Determined Quantity; or
- b) At a System Exit Point the Determined Quantity is less than the Previously Determined Quantity

5.1.3 The Reconciliation Quantity shall be a “Gas Loss Reconciliation Quantity” where:

- a) At a System Entry Point the Determined Quantity is less than the Previously Determined Quantity; or
- b) At a System Exit Point the Determined Quantity is greater than the Previously Determined Quantity

5.2 Reconciliation Statement

5.2.1 Any Shipper that was a Delivering Shipper or an Offtaking Shipper at the relevant System Point during the Reconciliation Period may procure that the relevant Shipper Agent shall within one month of the Reconciliation Quantity being established provide the Operator with a Reconciliation Statement specifying:

- a) the Reconciliation Quantity which shall be a positive quantity;
- b) the quantity of gas proposed to be subject to reconciliation in accordance with the terms of the Code (the “Proposed Code Reconciliation Quantity”) which shall be a positive quantity;
- c) the quantity of gas proposed to be subject to reconciliation under any Legacy Agreements (the “Proposed Non-Code Reconciliation Quantity”) which shall be a positive quantity;
- d) the quantity of gas proposed to be subject to reconciliation under any Operational Balancing Agreement in place at the System Point (the “Proposed OBA Reconciliation Quantity”) which may be a positive or a negative quantity; and
- e) for each Shipper, the quantity of gas proposed to be subject to reconciliation (the “Proposed Shipper Reconciliation Quantity”) being in each case a positive quantity, and the identity of each Shipper.

5.2.2 Where the conditions in paragraph 5.2.4 are all satisfied the Shipper Reconciliation Quantity for each Shipper shall be the Proposed Shipper Reconciliation Quantity specified for each Shipper in the Reconciliation Statement.

5.2.3 Where one or more of the conditions in paragraph 5.2.4 is not satisfied:

- a) the Code Reconciliation Quantity (CRQ) shall be established as follows:

$$CRQ = RQ \times CQ / (CQ + NCQ)$$

Where:

- RQ is the Reconciliation Quantity
- CQ is, in the case of a System Entry Point, the aggregate of the Code Quantities Delivered for each Day in the Reconciliation Period and, in the case of a System Exit Point the aggregate of the Code Quantities Offtaken for each Day in the Reconciliation period
- NCQ is in the case of a System Entry Point the aggregate of the Non-Code Quantities Delivered for each Day in the Reconciliation Period and in the case of a System Exit Point the aggregate of the Non-Code Quantities Offtaken for each Day in the Reconciliation period

- b) the Shipper Reconciliation Quantity for each Shipper shall be established as follows:

$$SRQ = CRQ \times (1 - ASF) \times SSDQ / ASSDQ$$

Where:

- SRQ is the Shipper Reconciliation Quantity
- CRQ is the Code Reconciliation Quantity established in accordance with paragraph 5.2.3(a)
- SSDQ is the sum of the Shipper's SDQIs or SDQOs at the System Point during the Reconciliation Period
- ASSDQ is the aggregate for all Shippers of the sum of their SDQIs or SDQOs at the System Point during the Reconciliation Period

ASF is:

- (i) In the case of a System Entry Point the Average Shrinkage Factor during the Reconciliation Period, calculated as the sum of the Shrinkage Factors applicable on each Day during the Reconciliation Period divided by the number of Days in the Reconciliation Period
- (ii) In the case of a System Exit Point, zero

5.2.4 The conditions referred to in paragraphs 5.2.2 and 5.2.3 are that:

- a) A Reconciliation Statement is provided in accordance with paragraph 5.2.1.
- b) the figures specified in the Reconciliation Statement are in accordance with the following equation:

$$RQ = PCRQ + PNCRQ + POBARQ$$

Where:

- RQ is the Reconciliation Quantity
 - PCRQ is the Proposed Code Reconciliation Quantity as specified in the Reconciliation Statement
 - PNCRQ is the Proposed Non-Code Reconciliation Quantity as specified in the Reconciliation Statement
 - POBARQ is the Proposed OBA Reconciliation Quantity as specified in the Reconciliation Statement
- c) The aggregate of the Proposed Shipper Reconciliation Quantities stated in the Reconciliation Statement (in respect of each Shipper) is equal to:

$$PCRQ \times (1 - ASF)$$

Where:

- PCRQ is the Proposed Code Reconciliation Quantity stated in the Reconciliation Statement

ASF is:

- (i) In the case of a System Entry Point the Average Shrinkage Factor during the Reconciliation Period, calculated as the sum of the Shrinkage Factors applicable on each Day during the Reconciliation Period divided by the number of Days in the Reconciliation Period
- (ii) In the case of a System Exit Point, zero

- d) the Proposed OBA Reconciliation Quantity (and whether it is a positive or negative quantity) is consistent with the quantity of gas to be subject to reconciliation under the terms of the Operational Balancing Agreement

5.3 Shipper Cumulative Imbalance Adjustments

5.3.1 For each Shipper having a Shipper Reconciliation Quantity in respect of any Reconciliation Quantity, the Shipper's Cumulative Imbalance calculated in accordance with paragraph 4.2 shall be subject to adjustment in accordance with this paragraph 5.3:

- a) In the case of a Gas Gain Reconciliation Quantity the Shipper Reconciliation Quantity shall be added to the Shipper's Cumulative Imbalance; and
- b) In the case of a Gas Loss Reconciliation Quantity the Shipper Reconciliation Quantity shall be subtracted from the Shipper's Cumulative Imbalance.

5.3.2 The adjustments shall be made on the first day of the month following that in which the Shipper Reconciliation Quantities are established.

5.4 Cumulative Shrinkage Imbalance Adjustments

5.4.1 In respect of any Reconciliation Quantity, the Cumulative Shrinkage Imbalance calculated in accordance with Section G3.2 shall be subject to adjustment in accordance with this paragraph 5.4:

- a) In the case of a Gas Gain Reconciliation Quantity the Reconciliation Quantity shall be subtracted from the Cumulative Shrinkage Imbalance;
- b) In the case of a Gas Loss Reconciliation Quantity the Reconciliation Quantity shall be added to the Cumulative Shrinkage Imbalance; and
- c) In respect of any Reconciliation Quantity at a System Entry Point a further adjustment quantity (the Adjustment Quantity, AQ) shall be calculated as follows:

$$AQ = CRQ \times ASF$$

Where:

- CRQ is, where the conditions in paragraph 5.2.4 are all satisfied, the Proposed Code Reconciliation Quantity specified in the Reconciliation Statement, or if the conditions are not satisfied, the Code Reconciliation Quantity established in accordance with paragraph 5.2.3(a)
- ASF is the Average Shrinkage Factor during the Reconciliation Period, calculated as the sum of the Shrinkage Factors applicable on each Day during the Reconciliation Period divided by the number of Days in the Reconciliation Period
 - (i) In the case of a Gas Gain Reconciliation Quantity the Adjustment Quantity shall be added to the Cumulative Shrinkage Imbalance; and
 - (ii) In the case of a Gas Loss Reconciliation Quantity the Reconciliation Quantity shall be subtracted from the Cumulative Shrinkage Imbalance.

5.4.2 The adjustments shall be made on the first day of the month following that in which the Reconciliation Quantity was established.

5.5 Threshold Adjustments

5.5.1 For each Shipper having a Shipper Reconciliation Quantity in respect of any Reconciliation Quantity, the Shipper's Over-delivery or Under-delivery Threshold calculated in accordance with Section F2 shall be subject to an adjustment (a "Reconciliation Threshold Adjustment") on one or more days in accordance with this paragraph 5.5.

5.5.2 A Reconciliation Threshold Adjustment equal to the Shipper Reconciliation Quantity shall be made on the first day of the month following that in which the Shipper Reconciliation Quantities are established.

5.5.3 The Reconciliation Threshold Adjustment (if any) on each subsequent Day D shall be calculated as follows:

$$TAD = TAD-1 - DR$$

Where:

- TAD is the Reconciliation Threshold Adjustment on the Day D
- TAD-1 is the Reconciliation Threshold Adjustment on the preceding Day D-1
- DR is the Daily Reduction, being 1% of the aggregate of the Shipper's Available System Capacities for all System Points on that Day

Provided that where the result of the calculation results in a negative quantity for TAD, then TAD shall be set equal to TAD-1 and no further Reconciliation Threshold Adjustments shall be made in respect of the Reconciliation Quantity on subsequent Days.

5.5.4 The Reconciliation Threshold Adjustment established for any Day in accordance with paragraph 5.5.2 or 5.5.3 shall be added to:

- a) the Shipper's Over-delivery Threshold in the case of a Gas Gain Reconciliation Quantity; and
- b) the Shipper's Under-delivery Threshold in the case of a Gas Loss Reconciliation Quantity,

5.6 Commodity Charge Adjustments

5.6.1 For each Shipper having a Shipper Reconciliation Quantity in respect of any Reconciliation Quantity, the Commodity Charges payable by the Shipper in accordance with Section B4.3 shall be subject to an adjustment (a "Commodity Charge Adjustment") in accordance with this paragraph 5.6.

5.6.2 Subject to paragraph 5.6.3 for each Shipper the Commodity Charge Adjustment in respect of the Reconciliation Quantity shall be the Shipper Reconciliation Quantity multiplied by the Applicable Commodity Rate for the System Point.

5.6.3 Where there was more than one Applicable Commodity Rate for the System Point during the Reconciliation Period:

- a) the Shipper Reconciliation Quantity shall be pro-rated according to the number of days each such Applicable Commodity Rate was in force; and

- b) the Commodity Charge Adjustment shall be the aggregate of each such pro-rated quantity multiplied by the relevant Applicable Commodity Rate.

5.6.4 The Commodity Charge Adjustment shall be paid:

- a) by the Shipper to the Operator in the case where the Reconciliation Quantity arises at a System Point where the Determined Quantity is greater than the Previously Determined Quantity; or
- b) by the Operator to the Shipper, in the form of a credit note, in the case where the Reconciliation Quantity arises at a System Point where the Determined Quantity is less than the Previously Determined Quantity.

5.6.5 The Commodity Charge Adjustment will be:

- a) deemed payable in respect of the first day of the month following that in which the Shipper Reconciliation Quantities are established; and
- b) invoiced and payable in accordance with Section K.

6. ALLOCATION AGENTS

6.1 In accordance with Section M6 a Shipper shall pursuant to an Allocation Agreement appoints a Shipper Agent in respect of:

- a) each System Entry Point for which it holds System Capacity on a Gas Flow Day; and
- b) each System Exit Point for which it holds System Capacity on a Gas Flow Day;

For the purposes of submitting Allocation Estimates and Allocation Statements in accordance with paragraph 2.1 and paragraph 3.1 (as appropriate).

6.2 A Shipper appointing a Shipper Agent in accordance with paragraph 6.1 shall procure that the same person is appointed by each Shipper holding Registered System Capacity at the relevant System Point and as the agent of any other person entitled to receive an allocation of gas at that System Point.

6.3 For the purposes of the Code:

- a) an “Allocation Estimate” may be an Entry Allocation Estimate or an Exit Allocation Estimate.
- b) an “Allocation Statement” may be an Entry Allocation Statement or an Exit Allocation Statement.

**SECTION F:
SYSTEM CLEARING AND BALANCING CHARGES**

SECTION F: SYSTEM CLEARING AND BALANCING CHARGES

1. INTRODUCTION

1.1 This Section F provides for:

- a) the sale and purchase of each Shipper's Cumulative Imbalance Excess; and
- b) the calculation and payment of Cumulative Imbalance Charges, and Scheduling Charges.

1.2 For the purposes of the Code:

- a) a "**Cumulative Imbalance Charge**" is an amount payable by or to a Shipper in respect of a Cumulative Imbalance Excess in accordance with paragraph 2;
- b) "**Scheduling Charges**" are amounts payable by a Shipper in respect of differences between quantities delivered and offtaken to or from the System each Day and the quantities Nominated for such delivery or offtake, in accordance with paragraph 3; and
- c) "**Balancing Charges**" are Cumulative Imbalance Charges and Scheduling Charges.

1.3 System prices

1.3.1 The Operator expects that the Department of Petroleum Resources will from time to time notify the Operator of the "System Sell Price" and the "System Buy Price" (together the "System Prices") that the Department has determined will be applicable for each Shipper.

1.3.2 On receipt of any such notification the Operator shall within 5 Business Days notify each Shipper of the System Prices applicable to it as determined by the Department of Petroleum Resources.

1.3.3 Prior to the time when the Department of Petroleum Resources first notifies the Operator in accordance with paragraph 1.3.1 the System Prices to be used for the purposes of this Section F for any Shipper on any Day during any month shall be subject to paragraph 1.3.4 as follows:

- a) The System Sell Price shall be 110% highest GSAA price
- b) The System Buy Price shall be 90% lowest GSAA price

- 1.3.4 The prices specified in paragraph 1.3.3 may be updated by the Operator and any updated prices shall be as set out in the Transportation Charge Statement in force at the time.

2. OVERDELIVERY THRESHOLD AND UNDERDELIVERY THRESHOLD

- 2.1 For the purposes of the Code and subject to paragraph 2.2:
 - a) “Over-delivery Threshold” in respect of a Shipper and Day means a positive quantity equal to 20% of the aggregate of the Shipper’s Available System Capacities for all System Points on that Day; and
 - b) “Under-delivery Threshold” in respect of a Shipper and Day means a positive quantity equal to 20% of the aggregate of the Shipper’s Available System Capacities for all System Points on that Day.
- 2.2 The Over-delivery Threshold and Under-delivery Threshold established for each Shipper and Day in accordance with paragraph 2.1 shall be subject to adjustment:
 - a) in respect of an Accepted Shipper Offer in accordance with Section D3.4.5;
 - b) in respect of a Reconciliation Quantity in accordance with Section E5.4.4.

3. CLEARING OF THE CUMULATIVE IMBALANCE EXCESS

- 3.1 Introduction
 - 3.1.1 Where a Shipper's Cumulative Imbalance in respect of a Day is positive and exceeds the Over-delivery Threshold then the Shipper’s Cumulative Imbalance Excess shall be the difference between the Shipper's Cumulative Imbalance and the Over-delivery Threshold (an “Over-delivery Excess”).
 - 3.1.2 Where a Shipper's Cumulative Imbalance in respect of a Day is negative and the absolute value exceeds the Under-delivery Threshold then the Shipper’s Cumulative Imbalance Excess shall be the difference between the Shipper's Cumulative Imbalance and the Under-delivery Threshold (an “Under-delivery Excess”).
 - 3.1.3 The gas representing the amount of the Shipper's Cumulative Imbalance Excess in respect of any Day shall be deemed to be sold and purchased in accordance with this paragraph 3.

3.1.4 The Cumulative Imbalance Charge in respect of a Shipper's Cumulative Imbalance Excess shall be determined in accordance with paragraph 3.3.

3.2 System Clearing Contract

3.2.1 The quantity of gas comprising a Shipper's Cumulative Imbalance Excess shall be deemed to have been sold and purchased pursuant to a System Clearing Contract.

3.2.2 For the purposes of such a System Clearing Contract:

- a) where the Cumulative Imbalance Excess is an Over-delivery Excess, the seller is the Shipper and the buyer is the Operator;
- b) where the Cumulative Imbalance Excess is an Under-delivery Excess, the seller is the Operator and the buyer is the Shipper.

3.2.3 The System Clearing Contract shall be deemed to have been performed fully except as to payment.

3.3 Cumulative Imbalance Charge

3.3.1 The Cumulative Imbalance Charge shall be the Clearing Charge in respect of the System Clearing Contract under this paragraph 3 and shall be calculated by multiplying the Cumulative Imbalance Excess of the Shipper as follows:

- a) where the Cumulative Imbalance Excess is an Over-delivery Excess, the System Buy Price for the Shipper for the Day; and
- b) where the Cumulative Imbalance Excess is Under-delivery Excess, the System Sell Price for the Shipper for the Day.

3.3.2 The buyer shall pay the Cumulative Imbalance Charge in respect of the Cumulative Imbalance Excess to the seller.

3.3.3 The Cumulative Imbalance Charge shall be invoiced and payable in accordance with Section K.

3.4 Cumulative Imbalance Adjustment

3.4.1 On any Day that a Shipper's Cumulative Imbalance Excess arises and is deemed to have been sold and purchased pursuant to a System Clearing Contract in accordance with this paragraph 3, the Shipper's Cumulative Imbalance calculated in accordance with paragraph 4.2 shall be subject to adjustment on that Day in accordance with this paragraph 3.4:

- a) In the case where the seller is the Shipper and the buyer is the Operator, the Cumulative Imbalance Excess shall be subtracted from the Shipper's Cumulative Imbalance; and
- b) In the case where the seller is the Operator and the buyer is the Shipper, the Cumulative Imbalance Excess shall be added to the Shipper's Cumulative Imbalance.

4. SCHEDULING CHARGES

4.1 Introduction

- 4.1.1 Where on a Day the quantity of gas delivered to or offtaken from the System by a Shipper differs (by more than an allowed tolerance) from the quantities nominated by the Shipper in respect of the relevant System Point, the Shipper shall pay a Scheduling Charge in accordance with this paragraph 4.
- 4.1.2 Scheduling Charges incurred under this paragraph 4 will be invoiced and payable in accordance with Section K.
- 4.1.3 For the purposes of the Code the Scheduling Price shall be 5% of the System Sell Price.

4.2 Input Scheduling Charges

- 4.2.1 For the purposes of the Code, for each Shipper in respect of each System Entry Point on Each Day:
 - a) the **"Input Nominated Quantity"** is the Nominated Quantity under its Input Nomination for that System Entry Point;
 - b) the **"Input Scheduling Quantity:"** is the amount by which the SDQI for that System Entry Point was greater than or (as the case may be) less than the Input Nominated Quantity;
 - c) the **"Input Tolerance Quantity"** is 5% of the Input Nominated Quantity; and
 - d) the **"Chargeable Input Scheduling Quantity"** is the amount, if any, by which the magnitude of the Input Scheduling Quantity exceeds the Input Tolerance Quantity.

4.2.2 Where the magnitude of the Input Scheduling Quantity exceeds the Input Tolerance Quantity, the Shipper shall pay a Scheduling Charge determined as the sum of the amount of the Chargeable Input Scheduling Quantity multiplied by the Scheduling Price.

4.3 Output Scheduling Charges

4.3.1 For the purposes of the Code, for each Shipper in respect of each System Exit Point on each Day:

- a) the **"Output Nominated Quantity"** is the Nominated Quantity under its Output Nomination;
- b) the **"Output Scheduling Quantity"** is the amount by which the SDQO was greater than or (as the case may be) less than the Output Nominated Quantity;
- c) the **"Output Tolerance Quantity"** is 5% of the Output Nominated Quantity; and
- d) the **"Chargeable Output Scheduling Quantity"** is the amount (if any) by which the magnitude of the Output Scheduling Quantity exceeds the Output Tolerance Quantity.

4.3.2 Where the Output Scheduling Quantity exceeds the Output Tolerance Quantity, the Shipper shall pay a Scheduling Charge determined as the Chargeable Output Scheduling Quantity multiplied by the Scheduling Price.

**SECTION G:
SHRINKAGE GAS**

SECTION G: SHRINKAGE GAS

1. GENERAL

1.1 Introduction

1.1.1 For the purposes of the Code, "**shrinkage**" means gas in the System which is used by the Operator in connection with the operation of, or which is unaccounted for as offtaken from, the System; and, where the context admits, a reference to shrinkage includes the quantity of such gas.

1.1.2 Gas provided for shrinkage will be a proportion of the aggregate quantities delivered by all Shippers at all System Entry Points in accordance with this Section G.

1.1.3 Shrinkage comprises own use gas in accordance with paragraph 1.2 and unaccounted for gas in accordance with paragraph 1.3.

1.2 Own Use Gas

1.2.1 For the purposes of this Section G own use gas is gas used by the Operator in connection with the operation of the System, including gas used in running compressors and gas used for preheating.

1.3 Unaccounted for Gas

1.3.1 For the purposes of this Section G, unaccounted for gas is gas which is lost or otherwise not accounted for as offtaken from the System, including gas lost or unaccounted for by reason of unidentified theft, error in meter correction and leakage (including gas vented in System operation).

1.4 Determination of Shrinkage

1.4.1 For the purposes of the Code:

- a) The "**Daily Shrinkage Quantity**" in respect of any Day will be determined as the System Daily Quantity Delivered less the System Daily Quantity Offtaken adjusted by the amount of the change in Line pack for the Day.
- b) In respect of the System the "System Daily Quantity Delivered" is the aggregate quantity of gas delivered to the System on a Day, determined as the aggregate of the Entry Point Daily Quantities Delivered for all System Entry Points.

- c) In respect of the System the "System Daily Quantity Offtaken" is the aggregate quantity of gas offtaken from the System on a Day, determined as the aggregate of the Exit Point Daily Quantities Offtaken for all System Exit Points.

- 1.4.2 Notwithstanding the provisions of paragraph 1.4.1 there shall not be included in any Daily Shrinkage Quantity any amount of shrinkage arising as a result of failure by the Operator to act in accordance with the standard of a Reasonable and Prudent Operator

2. PROVISION OF GAS FOR SHRINKAGE

2.1 Shrinkage Factor

- 2.1.1 The Operator shall notify Shippers of the "Shrinkage Factor" to apply in respect of any Day not later than seven (7) Business Days prior to such Day
- 2.1.2 The Shrinkage Factor notified in accordance with paragraph 2.1.1 shall be determined by the Operator with a view to reducing any Cumulative Shrinkage Imbalance as soon as reasonably practicable taking account of the following:
- a) The amount of the Cumulative Shrinkage Imbalance at the time the Shrinkage Factor is determined.
 - b) The likely Daily Shrinkage Quantities in respect of the Days when the Shrinkage Factor will apply.
 - c) The Shrinkage Factor should not be set at a level that is likely to give rise to an Operational Balancing Requirement on any Day on which it applies.

2.2 Shrinkage Gas Provided

- 2.2.1 For the purposes of the Code the "Shrinkage Gas Provided" or "SGP" in respect of any Day will be determined as:

$$SGP = \sum SDQI \times SF$$

Where:

- $\sum SDQI$ is the aggregate of the SDQIs for all Shippers and for all System Entry Points in respect of such Day
- SF is the Shrinkage Factor applicable on that Day

3. SHRINKAGE IMBALANCES

3.1 Daily Shrinkage Imbalance

3.1.1 The Daily Shrinkage Imbalance for each Day shall be the difference between the quantities calculated under (a) and (b) below:

- a) The Shrinkage Gas Provided in respect of such Day; and
- b) The Daily Shrinkage Quantity in respect of such Day.

3.1.2 The Daily Shrinkage Imbalance is:

- a) a positive number where the quantity under paragraph 3.1.1(a) is greater than the quantity under paragraph 3.1.1(b); and
- b) a negative number where the quantity under paragraph 3.1.1(b) is greater than the quantity under paragraph 3.1.1(a).

3.2 Cumulative Shrinkage Imbalance

3.2.1 Subject to paragraph 3.2.2 the Cumulative Shrinkage Imbalance for each Day shall be calculated in accordance with the following formula:

$$CSID = CSID-1 + DSID$$

where:

- CSID is the Cumulative Shrinkage Imbalance on the Day (which may be a positive or negative quantity)
- CSID-1 is the Cumulative Shrinkage Imbalance on the previous Day (which may be a positive or negative quantity)

Provided that the Cumulative Shrinkage Imbalance on the Day prior to the first Day that the Code came into force shall be deemed to be zero

- DSID is the Daily Shrinkage Imbalance on the Day (which may be a positive or negative quantity)

3.2.2 The Cumulative Shrinkage Imbalance for each Day established in accordance with paragraph 3.2.1 shall be subject to adjustment in respect of a Reconciliation Quantity in accordance with Section E 5.4.

SECTION H: ENTRY REQUIREMENTS

SECTION H: ENTRY REQUIREMENTS

1. GENERAL

1.1 Introduction

- 1.1.1 The provisions of this Section H shall apply in respect of the delivery of gas to the System at System Entry Points.
- 1.1.2 Shippers delivering gas to the System at a System Entry Point shall comply with the relevant requirements of this Section H.
- 1.1.3 Nothing in the Code confers on any person any entitlement to have any pipeline, plant or other installation connected to the System for the purposes of delivering gas to the System.

1.2 Connected Delivery Facility

- 1.2.1 For the purposes of this Section H a **"Connected Delivery Facility"** is a single facility or system (comprising pipeline(s), plant and/or other installations), operated by one person (or jointly operated by several persons), and connected to the System at a System Entry Point.
- 1.2.2 A **"Delivery Facility Operator"** is the operator of a Connected Delivery Facility.

1.3 Network Entry Agreement

- 1.3.1 A Shipper may not deliver gas to the System at any System Point unless there is in force an Agreement (**"Network Entry Agreement"**) to which the parties include both the Operator and the Delivery Facility Operator, containing Network Entry Provisions and (if not incorporated into the Network Entry Provisions) Local Operating Procedures applicable in respect of the System Entry Point.
- 1.3.2 For the purposes of the Code **"Network Entry Provisions"** are terms and conditions or other provisions which specify requirements (for the purposes of the Code) in respect of the delivery of gas to the System.
- 1.3.3 A Network Entry Agreement may contain provisions other than Network Entry Provisions.

- 1.3.4 The existence of a Network Entry Agreement shall not relieve Shippers of any obligation under the Code, and the Operator shall not be required (for itself or for the benefit of any Shipper) to secure in a Network Entry Agreement any remedy against the Delivery Facility Operator nor to take steps to enforce any provision of a Network Entry Agreement.
- 1.3.5 There may be other persons (in addition to the Operator and the Delivery Facility Operator) party to a Network Entry Agreement; but a Shipper shall not (in its capacity as Shipper) be required to be a party to a Network Entry Agreement.

2. NETWORK ENTRY PROVISIONS

2.1 Availability of Network Entry Provisions

- 2.1.1 Subject to paragraph 2.1.3, the Operator will make available to any Shipper on request a copy of the Network Entry Agreement applicable to any System Entry Point, containing the Network Entry Provisions.
- 2.1.2 A Shipper who applies (in accordance with Section B) for System Entry Capacity at a System Entry Point, or delivers gas to the System at a System Entry Point, shall be responsible for obtaining and shall be deemed to have obtained and to be fully informed of the applicable Network Entry Provisions and Local Operating Procedures.
- 2.1.3 Paragraph 2.1.1 shall not apply in respect of Local Operating Procedures or where the disclosure of such provision would be materially prejudicial to the commercial interests of the Delivery Facility Operator or where such provision contains personal or confidential information relating to individuals or refers to any other agreement to which the Delivery Facility Operator is party of or any particular provision of the Network Entry Provisions applicable pursuant to paragraph 2.3.3.

2.2 Amendment of Network Entry Provisions

- 2.2.1 The Network Entry Provisions may be amended by agreement of the parties to the relevant Network Entry Agreement.
- 2.2.2 The Operator will notify to all Shippers any modification to the Network Entry Provisions applicable to any System Entry Point, not later than one week before the date upon which such modification becomes effective.

2.3 Network Entry Provisions

2.3.1 Network Entry Provisions will:

- a) identify the Connected Delivery Facility (by name, location or otherwise) and its co-ordinates, the owner of the Connected Delivery Facility, the connected pipeline system;
- b) specify the relevant System Entry Point;
- c) specify for such System Entry Point:
 - (i) Gas Entry Conditions in accordance with paragraph 2.4;
 - (ii) Measurement Provisions in accordance with paragraph 2.5;
 - (iii) the point of delivery in accordance with paragraph 3.5.1;
 - (iv) any Input Nomination Limits, or any Shipper Nomination limits.

2.3.2 Network Entry Provisions may specify Local Operating Procedures in accordance with paragraph 2.6.

2.3.3 Network Entry Provisions may include:

- (i) procedures by and standards to which the Connected Delivery Facility is to be maintained, repaired and operated;
- (ii) terms entitling the Operator and the Delivery Facility Operator to have access to each other's facilities, or information in respect of the Operation of each other's facilities, for the purposes of verification of compliance with the requirements of the Network Entry Provisions, or requiring them to procure and facilitate audit of such compliance;
- (iii) terms according to which, and circumstances in which, it is permitted to deviate or depart from any other Network Entry Provision;
- (iv) any other terms or conditions which may be appropriate for the purposes of the Code in respect of the delivery of gas to the System or (in relation to such delivery) the Connected Delivery Facility;
- (v) procedures applicable to gas flows in the event of any emergency circumstances affecting the Operator or the Delivery Facility Operator.

- 2.3.4 The Operator may agree pursuant to a Network Entry Agreement, that no Shipper shall hold System Entry Capacity in respect of a System Entry Point unless such Shipper has agreed together with any other person holding System Entry Capacity in respect of such System Entry Point:
- (i) to appoint the Delivery Facility Operator or any other person as Shipper Agent for such purposes as may be specified in the Network Entry Agreement with the Delivery Facility Operator and with each other Shipper holding System Entry Capacity in respect of such System Entry point;
 - (ii) to enter into or accede to any agreement with the Delivery Facility Operator and any other Shipper holding System Entry Capacity in respect of such System Entry Point for the purposes of paragraph 2.3.4(i) (to which Agreement the Operator may or may not be a party).
- 2.3.5 Where and for so long as any requirement (other than a requirement which is to be performed by the Operator, and save as regards Gas Entry Conditions where paragraph 3.3 shall apply) of the Network Entry Provisions is not for the time being complied with or is incapable of being complied with (other than as a result of a failure by the Operator to perform any requirement under the Network Entry Agreement), and such non-compliance or inability to comply materially and adversely affects the ability of the Operator to operate the System or to comply with any Legal Requirement or any provision (other than a provision the failure to comply with which has no significant consequences for the Operator or any Shipper) of the Code, the Operator shall be entitled to refuse (until such time as the Operator is reasonably satisfied that such non-compliance has been remedied) to accept delivery by Shippers to the System of gas at the relevant System Entry Point, in which case the Operator will notify all affected Shippers of such refusal and (subject to any duties of confidence) the relevant circumstances.
- 2.3.6 Any requirement of the Network Entry Provisions may be specified by reference to any published standard of a recognised body or other recognised standard, or standards or requirements from time to time published by the Operator, and/or may be specified in terms of an objective or requirement to be achieved without specifying the manner by means of which such objective or requirement is to be achieved.
- 2.3.7 Nothing contained in a Network Entry Agreement shall be taken to constrain the basis upon which the Transportation Charge Statement may provide for the determination of any Transportation Charges.

2.3.8 Network Entry Provisions may differ as between different System Entry Points.

2.4 Gas Entry Conditions

2.4.1 The "Gas Entry Conditions" in respect of a System Entry Point are limits or other requirements as to the composition, pressure, temperature and other characteristics of gas delivered or tendered for delivery to the System at the point of delivery (in accordance with paragraph 2.3.1(c)(i)).

2.4.2 Gas Entry Conditions may include limits, prohibitions or requirements in respect of the following:

- a) composition:
 - Gross calorific value (maximum and minimum, MJ/m³)
 - Wobbe number (maximum and minimum, MJ/m³)
 - Hydrogen Sulphide (maximum, ppm)
 - Hydrocarbon Dewpoint (maximum oC for specified maximum pressure)
 - Water Dewpoint (maximum oC for specified maximum pressure)
 - Total Sulphur (maximum volume, ppm expressed as H₂S)
 - Oxygen (maximum volume, ppm)
 - Inert gases (maximum mol%), including
 - Carbon Dioxide (maximum mol%) and
 - Nitrogen (maximum mol%)
- b) delivery temperature (minimum and maximum °C);
- c) contaminants - materials, dust or other solid or liquid or radioactive matter;
- d) odour;
- e) the pressure (maximum and minimum, barg) at which and against which gas may be required to be delivered to the System.

2.4.3 Network Entry Provisions will include any tolerances within which (for any person or in any circumstances) deviations from any of the Gas Entry Conditions are permitted.

2.4.4 For the purposes of this Section H "delivery characteristics" are the characteristics of gas delivered or tendered for delivery to the System in respect of which Gas Entry Conditions apply in respect of any System Entry Point.

- 2.4.5 Where under any new or changed Legal Requirement there is any requirement, applicable to the characteristics of gas conveyed by means of or tendered for delivery to the System, which either does not apply or is more stringent than any which does apply under the prevailing Gas Entry Conditions, such requirement shall at the time at which it comes into force be deemed to be incorporated in the Gas Entry Conditions (which will be amended accordingly as soon as reasonably practicable thereafter).
- 2.4.6 The Gas Entry Conditions for each System Entry Point shall conform to the requirements of Annex H-1.

2.5 Measurement Provisions

- 2.5.1 The "Measurement Provisions" in respect of a System Entry Point are the procedures, methods and standards by which:
- (i) gas delivered or tendered for delivery to the System at that point may be measured, sampled and analysed;
 - (ii) the volume, calorific value, quantity, and delivery characteristics of such gas will be determined, estimated or agreed between the Operator and the Delivery Facility Operator; and
 - (iii) the Operator and the Delivery Facility Operator will inform each other of the determinations made under paragraph (ii).
- 2.5.2 **"Measurement Equipment"** is the metering, sampling, analysis and other equipment required by the Measurement Provisions to be installed (whether at the Connected Delivery Facility or on the System).
- 2.5.3 The Measurement Provisions will provide for the Entry Point Daily Quantity Delivered to be determined or agreed between the Operator and the Delivery Facility Operator, and (if not determined or agreed by the Operator) communicated to the Operator.
- 2.5.4 Measurement Provisions may include:
- (i) standards of accuracy and procedures for testing and calibration of Measurement Equipment;
 - (ii) terms by which volume, calorific value, quantity, or any delivery characteristic of gas delivered or tendered for delivery may be estimated or agreed in the case of failure or defect of any Measurement Equipment, non-compliance with any of the Measurement Provisions, or otherwise;

(iii) terms upon which any difference or dispute between the Delivery Facility Operator and the Operator as to the volume, calorific value, quantity or delivery characteristic of gas delivered or tendered for delivery will be resolved (which may include resolution by agreement between them).

2.5.5 Each Shipper acknowledges that the volume, calorific value, quantity and delivery characteristics of gas delivered or tendered for delivery (by Shippers in aggregate) to the System at a System Entry Point, and the compliance or non-compliance with the applicable Gas Entry Conditions in respect thereof, will be established (by the Operator and the Delivery Facility Operator pursuant to the Network Entry Provisions) in accordance with the applicable Measurement Provisions, and agrees to be bound (for the purposes of the Code) by what is so established.

2.6 Local Operating Procedures

2.6.1 The “**Local Operating Procedures**” in respect of a System Entry Point or System Entry Points are procedures for co-ordination between the Operator and the Delivery Facility Operator in connection with the operation of the Connected Delivery Facility and the part of the System at which it is connected, including the exchange of information between the Operator and the Delivery Facility Operator.

2.6.2 Local Operating Procedures may provide for the Delivery Facility Operator to provide information (“**Local Operating Information**”) to the Operator as to the rates at and quantities in which gas is expected to be delivered to the System at the System Entry Point in respect of any time.

2.6.3 The Operator will not be required to provide to any Shipper any information provided by the Delivery Facility Operator under the Local Operating Procedures.

2.6.4 Local Operating Procedures may provide for the Operator to provide information to the Delivery Facility Operator as to the rates and quantities in which gas is expected to be delivered into the System from the Connected Delivery Facility in respect of any time.

2.6.5 Local Operating Procedures may provide for the Delivery Facility Operator and the Operator to agree at any time:

(i) for the purposes of enabling any inspection, repair or maintenance to be carried out in respect of the Connected Delivery Facility or any related part of the System, or

- (ii) for the purposes of avoiding a transportation constraint, or enabling the delivery of gas notwithstanding a transportation constraint, or
- (iii) in any other circumstances (affecting facilities upstream of the System Entry Point) provided for in such procedures, that the Delivery Facility Operator will arrange for the quantity of gas to be delivered to the System to be delivered at a rate which will vary during the Day, and/or during a part only of the Day.

2.6.6 Local Operating Procedures may contain procedures pursuant to which the Operator may permit the delivery of gas which does not comply with the applicable Gas Entry Conditions.

2.6.7 The Operator will be entitled to act in accordance with any such provision as is referred to in paragraph 2.6.5 or 2.6.6 or any agreement made with the Delivery Facility Operator pursuant thereto, and to assume that the terms on which any Shipper may have purchased gas for delivery to the System or otherwise procured such delivery take account thereof; and will not be in breach of its obligation under paragraph 3.6.1 by reason of its so acting.

3. DELIVERY OF GAS TO THE SYSTEM

3.1 Delivering Shippers

3.1.1 All gas delivered or tendered for delivery to the System under this Code at a System Entry Point on a Day shall be deemed to be delivered or tendered for delivery by the Delivering Shipper(s), irrespective of any act or omission of the Delivery Facility Operator or any other person.

3.1.2 For the purposes of this Section H the "**Delivery Proportion**" for a Delivering Shipper on a Day in respect of a System Entry Point is that Shipper's SDQI for that Day divided by the Entry Point Daily Quantity Delivered in accordance with Section E.

3.2 Delivered Gas

3.2.1 The gas delivered or tendered for delivery to the System at a System Entry Point shall for all purposes of the Code be assumed to be a single homogenous gas stream.

3.2.2 Where on a Day a Shipper delivers gas or tenders gas for delivery to the System at a System Entry Point each such Shipper shall be treated as delivering or tendering for delivery at such System Entry Point gas of the same delivery characteristics as that delivered or tendered for delivery at such System Entry Point by each other such Shipper.

3.3 Compliance with Gas Entry Conditions

3.3.1 Subject to paragraph 2.6.6, a Shipper shall not deliver gas or tender gas for delivery to the System at a System Entry Point unless the applicable Gas Entry Conditions are complied with in respect of such gas.

3.3.2 Where non-compliant gas is tendered for delivery to the System at a System Entry Point (whether or not resulting from any procedures referred to in paragraph 2.6.6) the Operator may, from time to time until such time as the relevant Gas Entry Conditions are complied with in respect of gas tendered for delivery at such point, in its discretion either:

- (i) refuse to accept delivery or continued delivery of such gas, or
- (ii) accept such delivery or accept such delivery as part only of what is tendered for delivery.

3.3.3 The Operator's rights under paragraph 3.3.2 shall not be prejudiced by its election to accept delivery of non-compliant gas (whether or not it is aware that the gas is non-compliant).

3.3.4 The Operator shall be entitled pursuant to paragraph 3.3.2 to take any steps available to it (including any steps pursuant to Local Operating Procedures) to limit the rate at which non-compliant gas is delivered to the System or to secure that such gas is not so delivered.

3.3.5 Subject to paragraph 3.4.6, where non-compliant gas has been delivered on any Day to the System, each Delivering Shipper shall be liable to pay to the Operator an amount determined in accordance with paragraph 3.4.

3.3.6 Where the Operator becomes aware (pursuant to the applicable Measurement Provisions or otherwise) that non-compliant gas is being or has been delivered to the System at a System Entry Point on any Day, the delivery of which is likely in the Operator's opinion to entitle the Operator to claim any material sum under paragraph 3.4, the Operator will inform Shippers of that fact; provided that no failure by the Operator so to inform any Shipper shall affect the Operator's rights under paragraphs 3.3.5 and 3.4.

3.3.7 For the purposes of this paragraph 3, subject to paragraph 3.4.6, "**non-compliant gas**" is gas delivered or tendered for delivery at a System Entry Point, in respect of which or the delivery or tendered delivery of which (after taking account of any tolerance referred to in paragraph 2.4.3) any of the relevant Gas Entry Conditions is not or was not complied with.

3.4 Payment in Respect of Non-Compliant Gas

3.4.1 Subject to paragraphs 3.4.2 and 3.4.3, the amount payable by a Delivering Shipper to the Operator under paragraph 3.3.5 shall be the Delivery Proportion of all costs and expenses reasonably incurred by the Operator in consequence of the delivery of the non-compliant gas, including (without limitation):

- (i) costs and expenses incurred by the Transporter in connection with any physical damage to the System including the cost of clearing and cleaning the System to secure that the System can be operated in accordance with applicable Legal Requirements; and
- (ii) any reasonable loss incurred by the Transporter due to commingling of non-compliant Gas delivered by the Shipper with other compliant Gas being transported by the Transporter on behalf of other Shippers where such damage is a direct consequence of such non-compliant Gas.

3.4.2 The amount payable by a Delivering Shipper pursuant to paragraph 3.4.1 shall not exceed its Delivery Proportion of the amount calculated as the total quantity of non-compliant gas delivered to the System at the relevant System Entry Point on the relevant Day under the Code, as determined in accordance with the relevant Network Entry Agreement, multiplied by 50% of the gas transportation tariff in US\$ per Mscf.

Where the Transporter has accepted to take delivery of Entry Point Non-Compliant Gas at the Entry Point, then, the Shipper shall pay to Transporter one hundred and ten per cent (110%) of the sum of Applicable Commodity Rate and Applicable Capacity Charge Daily Rate as Transportation Charges ("Entry Point Non-Compliant Gas Transportation Charges") for transporting such Non-Compliant Gas. For the avoidance of doubt, the Shipper shall be liable to pay Transporter the Entry Point Non-Compliant Gas Transportation Charges whenever Transporter takes delivery of Non-Compliant Gas at the Entry Point whether the Gas delivered to the Shipper at the Exit Point is Compliant Gas or not.

3.4.3 Where costs and expenses referred to in paragraph 3.4.1 are incurred in consequence of the delivery of non-compliant gas to the System at a System Entry Point on more than one Day:

- (i) references in paragraphs 3.4.1 and 3.4.2 to a Shipper's Delivery Proportion shall be deemed to be references to a weighted average Delivery Proportion determined for each Delivering Shipper as the sum, for all such Days, of the Shipper's Delivery Proportion for each Day multiplied by the Entry Point Daily Quantity Delivered, divided by the sum of the Entry Point Daily Quantities Delivered for all such Days;
- (ii) the reference in paragraph 3.4.2 to the total quantity of non-compliant gas delivered by Shippers on the relevant Day shall be to the total quantity of non-compliant gas delivered on all such Days.

3.4.4 Where any amount has become payable to the Operator pursuant to paragraph 3.3.5:

- a) the Operator shall as soon as reasonably practicable after receipt of the Entry Allocation Statement so notify each Delivering Shipper specifying:
 - (i) the relevant System Entry Point and the Day or Days on which non-compliant gas was delivered to the System;
 - (ii) the total quantity of non-compliant gas referred to in paragraph 3.4.2, and reasonable details of the respect(s) in which the non-compliant gas did not comply with the applicable Gas Entry Conditions;
 - (iii) reasonable details of the costs and expenses referred to in paragraph 3.4.1 and the purposes for which they were incurred;
 - (iv) each Delivering Shipper's Delivery Proportion;
- b) the amount payable by each Delivering Shipper shall be invoiced and paid in accordance with Section K.

3.4.5 Any dispute (other than one resolved pursuant to Network Entry Provisions under paragraph 2.5.4) as to anything specified by the Operator under paragraph 3.4.4(a) shall be referred to Expert Determination.

3.4.6 Paragraph 3.3.5 and this paragraph 3.4 do not apply and Delivering Shippers shall not be liable thereunder to the extent that the failure (of gas delivered or tendered for delivery) to comply with Gas Entry Conditions was a failure to comply with a requirement as to pressure; and references in those paragraphs to non-compliant gas shall be construed accordingly.

3.4.7 Where for the purposes of clearing non-compliant gas from the System it is necessary for the Operator to vent gas from the System, each Delivering Shipper's Delivery Proportion of the quantity of gas so vented shall for the purposes of Sections E4 and F3 (but not otherwise) be treated as having been offtaken from the System by and accordingly deemed to be an SDQO of the Delivering Shipper; and in such circumstances the Operator will inform all Shippers as soon as reasonably practicable after such venting.

3.5 Delivery of Gas

3.5.1 The applicable Network Entry Provisions will identify (by description or diagram or both) the point of delivery at a System Entry Point.

3.5.2 Risk (without prejudice to any other provision of this Section H) in gas delivered to the System at a System Entry Point shall pass to the Operator at the System Entry Point.

3.5.3 Each Shipper warrants to the Operator:

- a) that such Shipper will have title (at the point of delivery) to all gas delivered or tendered for delivery to the System at any System Entry Point by that Shipper, and
- b) that all such gas will (at such point) be free of any lien, charge, encumbrance or adverse claim (as to title or otherwise), including any claim for any tax, royalty or other charge in respect of the production, gathering, transportation, processing and tendering of gas arising on or before delivery thereof to the System.

3.5.4 Each Shipper shall indemnify the Operator and hold it harmless against any loss, liability, damage, claim, action, proceeding, cost and expense suffered or incurred by or made or brought against the Operator in consequence of any breach of the warranties in paragraph 3.5.3.

3.5.5 The warranty in paragraph 3.5.3(a) shall be treated as satisfied where the Shipper has arranged for delivery or tender for delivery of gas to the System by a person or persons who has or jointly have title (at the point of delivery) to such gas and such person passes or persons jointly pass risk of handling such gas to the Operator.

3.6 Acceptance of Gas delivered to System

3.6.1 Subject to the provisions of the Code and to the Shipper offtaking an equivalent quantity at System Exit Points, the Operator will accept into the System gas tendered for delivery by a Shipper at a System Entry Point where the requirements of this Section H (applicable in respect of such delivery or tendered delivery) are complied with.

3.6.2 Except under circumstances excused under the Code or any Ancillary Agreements, where the Operator is or has been in breach of its obligation in paragraph 3.6.1 at a System Entry Point on any Day, the Operator will pay to any Shipper holding Registered System Entry Capacity at that point, an amount determined as:

$$C * (1 - X/Y) * 0.30$$

where:

- C is the amount of the Capacity Charges payable by the Shipper in respect of the Registered System Entry Capacity held by the Shipper at the System Entry Point on the relevant Day
- X is the SDQI for the Shipper at that Entry point on that Day, or the amount Y, whichever is the smaller
- Y is the Nominated Quantity under the Shipper's Input Nomination in respect of the System Entry Point and Day, provided that Y shall not be greater than Shipper's Registered System Entry Capacity at the relevant System Entry Point for that Day.

3.6.3 Where by reason of Force Majeure affecting the Operator, the Operator is relieved from liability in respect of its obligation under paragraph 3.6.1 at a System Entry Point, for each Day the Operator, where applicable, will refund to each Shipper holding Registered System Capacity at that point an amount determined as:

$$C * (1 - X/Y)$$

where C, X and Y are as defined in paragraph 3.6.2

3.6.4 Where the circumstances described in paragraphs 3.6.2 or 3.6.3 continue for a period of six (6) or more months either the Operator or any Shipper holding an amount of Registered System Capacity at that System Entry Point may give ten (10) Business Days' notice to the other (a Capacity Cancellation Notice) and, notwithstanding the provisions of Section B2.8, on expiry of such notice such Shipper shall cease to be registered as holding any Registered System Capacity at that System Entry Point.

3.7 Rates of Delivery

3.7.1 Each Shipper shall use all reasonable endeavours to secure that the requirements of paragraph 3.7.2 are complied with; provided that nothing in the Code shall require the Operator to verify whether such requirements have been complied with nor to take any action in respect of any failure to comply with such requirements.

3.7.2 The requirements referred to in paragraph 3.7.1 are that (after allowing for the time required to implement an increase or decrease in the rate of delivery at the beginning and end of each Day) for each Shipper gas is delivered to the System at the prevailing Implied Nomination Flow Rate.

3.7.3 A Shipper shall not be in breach of paragraph 3.7.1 by reason of anything done pursuant to Local Operating Procedures in accordance with paragraph 2.6.5.

ANNEX H-1

GAS ENTRY CONDITIONS

All quantities of gas tendered for delivery shall at the point of delivery at any System Entry Point conform to the following Gas Entry Conditions:

| 1. Composition | | | |
|---|---|----------------|---------------|
| Components, Units | Minimum | Maximum | Method |
| a. Hydrocarbon Dew Point, °C | | 10°C (50°F) | Note 1 |
| b. Water Content Max, lbs/MMscf | | 7 | Note 2 |
| c. Methane, percent by volume | 85% | 95% | Note 3 |
| d. Ethane, percent by volume | - | 10% | |
| e. Propane, percent by volume | - | 8% | |
| f. Butanes and higher hydrocarbons (C4+), percent by volume | - | 5% | |
| g. N ₂ , percent by volume | | 3% | |
| h. CO ₂ , percent by volume | | 4% | |
| i. H ₂ S, ppm by volume | | 4 | |
| j. Total sulphur, ppm by volume | | 28 | |
| k. O ₂ , ppm by volume | | 10 | |
| 2. Heating Value and Wobbe | | | |
| a. Higher Heating Value Btu per scf | 1000 | 1150 | Note 5 |
| b. Wobbe index (GHV basis), MJ/ m ³ | 47 | 52 | |
| 3. Delivery Temperatures & Pressures | | | |
| Delivery Temperature, °C and °F | 10°C 50°F | 49°C 120°F | Note 6 |
| Delivery Pressure, Bar Gauge | The pressure shall be that required to deliver gas into the System taking account of the back pressure as the same shall vary from time to time. The delivery pressure shall not exceed a maximum of 85 barg. | | |

Solids or Liquids

Gas tendered for delivery shall be:

- a) Free by normal commercial standards of objectionable odours, dusts, solid or liquid matter, waxes, gums and gum forming constituents, or aromatic hydrocarbons which might cause injury to or interfere with proper operation of all equipment through which it flows.
- b) Free of water and hydrocarbons in liquid form upon receipt into the System, and at the normal operating temperature and pressure in the System. In addition, the gas shall not contain any hydrocarbons which might condense to free liquids under normal System operating conditions.

Note 1 – A standard gas analysis of C6+ is not acceptable for dew point calculation unless it is known that heavier hydrocarbons (C7, C8, etc) are not present. Hydrocarbon dew point is for all pressures up to the maximum pressure for the System Entry Point. Hydrocarbon dew point as used herein refers to the cricondenthem temperature of the stream as measured at the System Entry Point. The cricondenthem temperature is the highest dew point temperature seen on a liquid-vapor curve for a specific gas composition over the full range of possible line pressures. Manual spot/composite samples will be analyzed in accordance with Gas Processors Association Standard 2286, Tentative Method of Extended Analysis of Natural Gas (GPA 2286).

Note 2 – The water content of the gas delivered shall be determined in lbs per MMscf on a daily basis. If an in-line electronic moisture analyzer is utilized the testing must conform with ASTM International standard D5454 Standard Test Method for Water Vapor Content of Gaseous Fuels Using Electronic Moisture Analyzers. If manual samples are utilized the testing must conform to the latest versions of ASTM International standard D1142, Standard Test Method for Water Vapor Content of Gaseous Fuels by Measurement of Dew-Point Temperature, and ASTM International standard D4888, Standard Test Method for Water Vapor in Natural Gas Using Length-of-Stain Detector Tubes. All measurements standards referred to in this Annex H-1 shall be the version in existence as at the date the Code is first used for the transportation of gas in the System.

Note 3 – Analysis with gas chromatographs shall be carried out in accordance with the standards set forth in ASTM International standard D-1945, Standard Test Method for Analysis of Natural Gas by Gas Chromatography. Collecting and handling of gas samples shall be carried out in accordance with ISO 10715, Natural Gas - Sampling Guidelines.

Note 4 – The sulphur and oxygen content to be determined from monthly composite sample.

Note 5 – The Gross Heating Value, Density, Relative Density, and Wobbe Index of Gas shall be calculated in accordance with ISO 6976, Natural Gas - Calculation of Calorific Values, Density, Relative Density and Wobbe Index from Composition (ISO 6976).

Note 6 – As measured and recorded by temperature and pressure compensated electronic transmitters that are calibrated against a traceable internationally recognized standard.

SECTION I: EXIT REQUIREMENTS

SECTION I: EXIT REQUIREMENTS

1. GENERAL

1.1 Introduction

- 1.1.1 The provisions of this Section I shall apply in respect of the offtake of gas from the System at System Exit Points.
- 1.1.2 Nothing in the Code confers on any person any entitlement to have any premises, pipeline, plant or other installation connected to the System for the purposes of offtaking gas from the System.

1.2 Network Exit Agreements

- 1.2.1 For the purposes of the Code a **"Network Exit Agreement"** is an agreement, containing provisions relating to the offtake of gas from the System at a System Exit Point, made between the Operator and the Offtake Facility Operator.
- 1.2.2 A Shipper will not be entitled to offtake gas from the System at the relevant System Exit Point unless there is a Network Exit Agreement in force.
- 1.2.3 A Shipper shall not (in its capacity as Shipper) be required or entitled to be a party to a Network Exit Agreement in respect of a System Exit Point where the Offtake Facility Operator is already party to a Network Exit Agreement.

2. OFFTAKE REQUIREMENTS

2.1 Applicable Offtake Requirements

- 2.1.1 For the purposes of the Code, the **"Applicable Offtake Requirements"** are:
 - a) the requirements as to gas composition and pressure applicable in respect of gas made available for offtake by the Operator at any System Exit Point set out in Annex I-1
 - b) to the extent inconsistent with paragraph 2.1.1(a), but subject to paragraph 2.1.4, any provision contained in a Network Exit Agreement as to the pressure of gas made available for offtake at a System Exit Point.

- 2.1.2 A Network Exit Agreement may include any tolerances within which (for any periods or in any circumstances) deviation from any of the Applicable Offtake Requirements are permitted.
- 2.1.3 The "**Applicable Offtake Pressure**" is the requirement as to pressure of gas made available for offtake from the System at a System Exit Point for the time being applicable in accordance with this paragraph 2.1.
- 2.1.4 Where at any time, by reason of any building, mining or engineering developments (other than a development planned by the Operator), or changes in population density, in the vicinity of any part of the System, it is not or ceases or will cease to be feasible safely or in accordance with any recognized standard to maintain at any System Exit Point a pressure of at least the Applicable Offtake Pressure (applicable at the time in accordance with paragraph 2.1.1 or this paragraph 2.1.4):
- (i) the Operator will, as soon as reasonably practicable after becoming aware that (by reason of such circumstances) such pressure cannot be maintained, so inform Shippers specifying the date with effect from which it will be necessary to reduce such pressure and the reduced pressure which can (after such date) be so maintained; and
 - (ii) with effect from the date specified by the Operator the reduced pressure so specified shall be the Applicable Offtake Pressure.
- 2.1.5 The Operator will not be in breach of its obligation to make gas available for offtake from the System Exit Point if for any reason the pressure of the gas immediately downstream of the point of offtake (determined in accordance with paragraph 3.6) impedes the offtake of gas at that point or in any event exceeds the Applicable Offtake Pressure.

3. OFFTAKE OF GAS FROM THE SYSTEM

3.1 Offtake Proportions

- 3.1.1 The "**Offtake Proportion**" of an Offtaking Shipper for a Day in respect of a System Exit Point is that Shipper's SDQO for that Day divided by the Exit Point Daily Quantity Offtake.

3.2 Obligation to make Gas available for Offtake

- 3.2.1 Subject to the provisions of the Code and to the Shipper delivering an equivalent quantity at System Entry Points, the Operator will make gas available for offtake by Shipper(s) from the System at the point of offtake (in accordance with paragraph 3.6) in accordance with the requirements of paragraph 3.3.1 at each System Exit Point where the requirements (other than requirements to be complied with by the Operator) of this Section I are complied with.
- 3.2.2 For the purposes of the Code, "**Excluded Offtake Circumstances**" are circumstances in which, in accordance with the Code, the Operator is not obliged or not in breach of its obligation to make gas available for offtake at a System Exit Point or is not liable in respect of any failure to do so.
- 3.2.3 For the avoidance of doubt, a Shipper's obligations to pay Capacity Charges shall not be affected by the existence of any Excluded Offtake Circumstances.

3.3 Compliance with Offtake Requirements

- 3.3.1 Gas made available by the Operator for offtake at any System Exit Point will comply with the Applicable Offtake Requirements, subject to paragraph 3.3.6.
- 3.3.2 Where non-compliant gas is made available for offtake from the System at a System Exit Point, the Offtaking Shipper(s) may, from time to time until such time as the Applicable Offtake Requirements are complied with in respect of gas made available for offtake at such point, in its or their discretion, either:
 - (i) offtake or continue to offtake such gas, in which case paragraph 3.4 shall apply, or
 - (ii) decline to offtake or to continue to offtake such gas, in which case paragraph 3.5 shall apply.
- 3.3.3 A Shipper's rights under paragraph 3.3.2 shall not be prejudiced by its election to offtake non-compliant gas (whether or not it is aware that the gas is non-compliant).
- 3.3.4 Subject to paragraph 3.4.6, where non-compliant gas has been offtaken on any Day from the System at a System Exit Point, the Operator shall be liable to pay to each Offtaking Shipper an amount determined in accordance with paragraph 3.4.

- 3.3.5 Where the Operator becomes aware that non-compliant gas is being made available for offtake at any System Exit Point (other than where the failure to comply is not material), the Operator will endeavour to inform the relevant Shippers of that fact as soon as reasonably practicable.
- 3.3.6 Subject to paragraph 3.4.6, for the purposes of this paragraph 3 "**non-compliant gas**" is gas made available for offtake from the System at a System Exit Point in respect of which (after taking account of any tolerance referred to in paragraph 2.1.2) any of the Applicable Offtake Requirements is not or was not complied with.

3.4 Payment in respect of Non-Compliant Gas

- 3.4.1 Subject to paragraph 3.4.2 and 3.4.3, the amount payable by the Operator to an Offtaking Shipper under paragraph 3.3.4 shall be all reasonable costs and expenses reasonably incurred by the Shipper in consequence of the offtake of the non-compliant gas, including (without limitation) costs and expenses incurred:
- a) in cleaning or clearing any part of the relevant pipework downstream of the System Exit Point; and/or
 - b) in taking reasonable measures to secure that the relevant offtake facility can be operated in accordance with applicable Legal Requirements notwithstanding the offtake or continued off- take of such non-compliant gas.
- 3.4.2 The amount payable by the Operator to an Offtaking Shipper shall be the amount calculated as the Shipper's Offtake Proportion of the total quantity of non-compliant gas offtaken from the System at the relevant System Exit Point on the relevant Day under the Code multiplied by 50% of the gas transportation tariff in US\$ per Mscf.

Where the Shipper has accepted to take delivery of Exit Point Non-Compliant Gas at the Exit Point, then the Shipper shall pay to Transporter ninety per cent (90%) of the sum of Applicable Commodity Rate and Applicable Capacity Charge Daily Rate as Transportation Charges ("Exit Point Non-Compliant Gas Transportation Charges") provided that the Shipper delivered Entry Point Compliant Gas to the Transporter at Entry Point on that day. For the avoidance of doubt, the Shipper shall not be entitled to the Exit Point Non-Compliant Gas Transportation Charges where the Shipper delivered Entry Point Non-Compliant Gas to Transporter at the Entry Point.

- 3.4.3 Where costs and expenses referred to in paragraph 3.4.1 are incurred in consequence of the offtake of non-compliant gas from the System on more than one Day at a System Exit Point:
- (i) references in paragraphs 3.4.1 and 3.4.2 to a Shipper's Offtake Proportion shall be deemed to be references to a weighted average Offtake Proportion determined for each Offtaking Shipper as the sum, for all such Days, of the Shipper's Offtake Proportion for each Day multiplied by the Exit Point Daily Quantity Offtaken, divided by the sum of the Exit Point Daily Quantities Offtaken for all such Days;
 - (ii) the reference in paragraph 3.4.2 to the total quantity of non-compliant gas offtaken on the relevant Day shall be to the total quantity of non-compliant gas offtaken on all such Days.
- 3.4.4 Where any amount has become payable to an Offtaking Shipper pursuant to paragraph 3.3.4:
- a) the Shipper shall as soon as reasonably practicable after issue of the Exit Allocation Statement so notify the Operator specifying:
 - (i) the relevant System Exit Point and the Day or Days on which non-compliant gas was offtaken from the System;
 - (ii) the total quantity of non-compliant gas referred to in paragraph 3.4.2, and reasonable details of the respect(s) in which the non-compliant gas did not comply with the Applicable Offtake Requirements;
 - (iii) reasonable details of the costs and expenses referred to in paragraph 3.4.1 and the person(s) by whom and purposes for which they were incurred; and
 - (iv) the Offtaking Shipper's Offtake Proportion.
 - b) the amount payable by the Operator shall be invoiced and paid in accordance with Section K or, at the option of the Shipper, Operator may issue a credit note to the Shipper for Operator future obligation to the Shipper.
- 3.4.5 Any dispute as to anything specified by a Shipper under paragraph 3.4.4(a) (other than a dispute as to anything specified under paragraph 3.4.4(a)(i) or (ii) which was resolved pursuant to a Network Exit Agreement) shall be referred to Expert Determination.

3.5 Gas not made available for Offtake

3.5.1 Where:

- a) the Operator is or has been in breach of its obligation to make gas available for offtake from the System at a System Exit Point, or
- b) gas made available for offtake from the System at a System Exit Point does not comply with the Applicable Offtake Requirements and an Offtaking Shipper declined (in accordance with paragraph 3.3.2(ii)) to offtake such gas.

The further provisions of this paragraph 3.5 shall apply.

- 3.5.2 Where either of the circumstances envisaged in paragraph 3.5.1(a) or 3.5.1(b) apply at a System Exit Point on any Day, the Operator will pay to any Shipper holding Registered Firm System Exit Capacity at that point an amount determined as:

$$C * (1 - X/Y) * 0.30$$

where:

- C is the amount of the Capacity Charges payable by the Shipper in respect of the Registered System Exit Capacity held by the Shipper at the System Exit Point on the relevant Day.
- X is the SDQO for the Shipper at that System Exit Point on that Day, or the amount Y, whichever is the smaller.
- Y is the Nominated Quantity under the Shipper's Output Nomination in respect of the System Exit Point and Day, provided that Y shall not be greater than Shipper's Registered System Exit Capacity at the relevant System Exit Point for that Day.

- 3.5.3 Where by reason of Force Majeure affecting the Operator, the Operator is relieved from liability in respect of the circumstances envisaged in paragraph 3.5.1(a) or 3.5.1(b) at a System Exit Point, for each Day the Operator, where applicable, will refund to each Shipper holding Registered Firm System Exit Capacity at that point an amount determined as:

$$C * (1 - X/Y)$$

where C, X and Y are as defined in paragraph 3.5.2

3.5.4 Where the circumstances described in paragraphs 3.5.2 or 3.5.3 continue for a period of six (6) or more months either the Operator or any Shipper holding Registered System Capacity at that System Exit Point may give ten (10) Business Days' notice to the other (a Capacity Cancellation Notice) and, notwithstanding the provisions of Section B2.8, on expiry of such notice such Shipper shall cease to be registered as holding any Registered System Capacity at that System Exit Point.

3.6 Point of Offtake

3.6.1 The point of offtake in respect of a System Exit Point shall be identified in accordance with paragraph 3.6.2.

3.6.2 The Network Exit Agreement in force in respect of a System Exit Point will identify (by description or a diagram or both) the point of offtake in respect of such System Point.

3.6.3 Risk in gas offtaken from the System at a System Exit Point shall pass to the Offtaking Shipper at the relevant point of offtake in accordance with paragraph 3.6.1.

3.7 Shipper Offtake Obligations

3.7.1 A Shipper is not entitled to offtake gas from the System at a System Exit Point at a rate which exceeds the maximum rate permitted (for that Shipper) in accordance with the Network Exit Agreement.

3.7.2 Where:

- (i) the Operator believes on reasonable grounds that gas is being or will be offtaken from the System at a System Exit Point at a rate which exceeds the maximum aggregate rate permitted in accordance with the relevant Network Exit Agreement, and
- (ii) in the Operator's reasonable judgement System security may be prejudiced as a result;

The Operator may (subject to and/or in accordance with any provisions of the Network Exit Agreement) take any steps available to it to secure the required reduction in the rate of or discontinuance of offtake of gas from the System Exit Point.

3.7.3 The Operator will not be obliged under any provision of the Code to make gas available for offtake from the System at a relevant System Exit Point:

- (i) by Shippers in aggregate, at any time, at a rate which exceeds the maximum aggregate rate permitted in accordance with the Network Exit Agreement;
- (ii) by a Shipper, on any Day, in a quantity which exceeds the Shipper's Available System Exit Capacity.

4. SYSTEM EXIT POINT REQUIREMENTS

4.1 General

- 4.1.1 The requirements of this paragraph 4 apply, as and to the extent required by the Operator pursuant to the relevant Network Exit Agreement, in respect of the plant and equipment to be installed at and the offtake of gas from the System at a System Exit Point.
- 4.1.2 Each of paragraphs 4.4 to 4.6 applies in respect of a System Exit Point where the relevant Network Exit Agreement contains provisions (whether or not expressly referring to such paragraph) by reference to which such paragraph is capable of applying.
- 4.1.3 Where and for so long as any requirement applying pursuant to this paragraph 4 (other than a requirement applying to the Operator) of a Network Exit Agreement is not for the time being complied with or is incapable of being complied with in relation to a System Exit Point the Operator shall (until such time as it is reasonably satisfied that such non-compliance has been remedied) be entitled to require by notice to Shippers that the offtake of gas shall be discontinued or its rate reduced, and may in any event take any steps available to it to secure such discontinuance or reduction.
- 4.1.4 The Operator shall not be required (for itself or for the benefit of any Shipper) to secure in any Network Exit Agreement any remedy against the relevant Offtake Facility Operator, nor to take any steps to enforce any provision of such a Network Exit Agreement.
- 4.1.5 The Operator will not be required to make gas available for offtake at a System Exit Point where the applicable Network Exit Agreement has been suspended or terminated in accordance with its terms.

4.2 Application

- 4.2.1 Shippers holding System Exit Capacity in respect of a System Exit Point shall be jointly responsible for securing that the requirements of paragraphs 4.4 to 4.6 are complied with in respect of a System Exit Point.

- 4.2.2 The requirements of paragraphs 4.4 to 4.6 apply as to the offtake of gas from the System at a System Exit Point in aggregate by all Shippers.
- 4.2.3 The Operator may agree, pursuant to a Network Exit Agreement, that no Shipper shall hold System Exit Capacity in respect of a System Exit Point unless such Shipper has agreed, together with any other Shipper holding System Exit Capacity in respect of such System Exit Point:
- (i) to appoint the Offtake Facility Operator or any other person as Shipper Agent for such purposes as may be specified in the Network Exit Agreement, and/or to cooperate in such manner as may be prescribed in the Network Exit Agreement with the Offtake Facility Operator and with each other Shipper holding System Exit Capacity in respect of such System Exit Point to secure co-ordinated communications with the Operator in respect of the offtake of gas from the System;
 - (ii) to enter into or accede to any agreement with the Offtake Facility Operator and any other Shipper holding System Exit Capacity in respect of such System Exit Point for the purposes of paragraph 4.2.3 (i) (to which agreement the Operator may or may not be party).

4.3 Plant and Equipment installed at a System Exit Point

- 4.3.1 The plant and equipment installed at a System Exit Point at the expense of Shippers (as between the Operator and Shippers) will, if the Operator so requires, include:
- (i) volumetric control or override, by means of which the instantaneous rate (in terms of volume) at which gas may be offtaken may be limited (and such limit set remotely by the Operator);
 - (ii) remote isolation valve, by means of which the Operator may remotely cause the offtake of gas to be discontinued;
 - (iii) calorimetric equipment, by means of which the calorific value of gas offtaken may be continuously monitored;
 - (iv) preheating equipment, by means of which the temperature of gas offtaken may be maintained (having regard to the operation of any other plant or equipment installed pursuant to this paragraph 4.3.1 or paragraph 4.3.2) at a given temperature (not less than 0°C);

And, in any event, metering.

- 4.3.2 The plant and equipment required by the Operator to be installed pursuant to paragraph 4.3.1 will be specified in the relevant Network Exit Agreement (and may where so provided in such Agreement be or have been furnished and installed by the Operator).
- 4.3.3 Where volumetric control or override is installed pursuant to paragraph 4.3.1(i), the Operator may, but (subject to any provision of the Network Exit Agreement) shall not be required to, set such control or override, or require it to be set, so as to limit the rate (in volume terms) at which gas is offtaken to a rate equivalent (on the basis of the applicable calorific value) to the Prevailing Offtake Rate, or otherwise as may be provided in the Network Exit Agreement.
- 4.3.4 Where a remote isolation valve or volumetric control or override is installed pursuant to paragraph 4.3.1(ii), the Operator may, but (subject to any provision of the Network Exit Agreement) shall not be required to, operate such valve control or override in any circumstances in which, in accordance with the Code, the Operator is permitted to interrupt or cause the discontinuance or reduction of offtake, or disconnect the System Exit Point.
- 4.3.5 The Operator will not be in breach of its obligation to make gas available for offtake at a System Exit Point
- a) where and to the extent that:
- (i) any plant or equipment installed pursuant to paragraphs 4.3.1 operates (in accordance with any provisions of the Network Exit Agreement as to such operation or the control or setting of such plant or equipment) so as to limit or discontinue the offtake of gas from the System;
- or
- (ii) the Operator takes any action in accordance with any provisions of this paragraph 4 or of a Network Exit Agreement which limits or discontinues the offtake of gas from the System;
- b) in the event of any failure of or defect in any plant or equipment installed by the Operator at a System Exit Point, or requirement for maintenance thereof, until and unless:
- (i) any Shipper or the Offtake Facility Operator has notified the Operator of such failure, defect or requirement, and

- (ii) following such notice, the Operator has not, within 72 hours after such notification or such other period as may be provided in the Network Exit Agreement, and subject to having such access as shall be reasonable in the circumstances, repaired or replaced the relevant plant or equipment or carried out the required maintenance.

4.4 Offtake Profile Notice

- 4.4.1 Where this paragraph 4.4 applies, a notification ("**Offtake Profile Notice**") shall be provided to the Operator, not later than the time on the Preceding Day specified in the Network Exit Agreement, setting out average rates of offtake (not exceeding the Permitted Offtake Rate) for each Whole Hour throughout the Gas Flow Day.
- 4.4.2 For the purposes of this paragraph 4, "**rate of offtake**" means the instantaneous rate (expressed in MMscf per hour) of offtake of gas from the System at a System Exit Point (and references to the rate of offtake include a rate of zero where gas is not offtaken, and references to a change in rate of offtake shall be construed accordingly).
- 4.4.3 For the purposes of this paragraph 4, "**average rate of offtake**" means the average rate (expressed in MMscf per hour) of offtake of gas from the System at a System Exit Point over a Whole Hour (and references to the average rate of offtake include a rate of zero where gas is not offtaken over a Whole Hour, and references to a change in average rate of offtake shall be construed accordingly), and a "**Whole Hour**" shall mean a period of 60 minutes on any day.
- 4.4.4 Where this paragraph 4.4 applies, the Network Exit Agreement will prescribe a period of notice to be given (by way of modified Offtake Profile Notice) to the Operator of any change ("**Offtake Rate Change**"), by reference to the prevailing Offtake Profile Notice, in the average rate of offtake of gas, which period of notice may depend:
 - (i) on whether the Offtake Rate Change is an increase or a decrease in rate of offtake,
 - (ii) on the amount of the Offtake Rate Change, expressed as an absolute amount or a percentage of a rate determined from the Permitted Offtake Rate or otherwise, and
 - (iii) on whether any earlier change in the rate of offtake has been notified or occurred within any specified period before the Offtake Rate Change.

- 4.4.5 The Offtake Profile Notice may be modified, as to the average rate of offtake from and after any time, by notice before that time of the period referred to in paragraph 4.4.4, but not otherwise.
- 4.4.6 No communication to the Operator pursuant to this paragraph 4.4 shall be (or shall be treated as in substitution for) a Nomination under Section C.
- 4.4.7 Without prejudice to this paragraph 4, the Shipper shall in any event ensure that as much notice as is reasonably practicable is given to the Operator of any change in the average rate of offtake.

4.5 Prevailing Offtake Rate

- 4.5.1 At any time on the Gas Flow Day the "**Prevailing Offtake Rate**" is the average rate of offtake set out in respect of such time in the Offtake Profile Notice (as from time to time modified pursuant to paragraph 4.4.5).
- 4.5.2 Where this paragraph 4.5 applies, during any Whole Hour, gas may not be offtaken from the System at the System Exit Point on any Day at an average rate of offtake which exceeds or is less than the Prevailing Offtake Rate by more than the tolerance specified (for the purposes of this requirement) in the Network Exit Agreement.
- 4.5.3 Where this paragraph 4.5 applies, the Operator will not be required to make gas available for offtake from the System at the System Exit Point during any Whole Hour on any Day at an average rate of offtake which exceeds the Prevailing Offtake Rate.

4.6 Ramp Rates

- 4.6.1 A Network Exit Agreement may prescribe maximum rates of change (expressed in MMscf/minute/minute or other units of rate of change) of the average rate of offtake.
- 4.6.2 Where this paragraph 4.6 applies at any time on the Gas Flow Day at which there is a change (pursuant to the Offtake Profile Notice) in the Prevailing Offtake Rate, the rate of change of the average rate of off- take shall not exceed the rate of change prescribed (in accordance with paragraph 4.6.1) in the Network Exit Agreement.

4.6.3 Where this paragraph 4.6 applies, the Operator will not be required to make gas available for offtake from the System at the System Exit Point at an increasing rate the rate of change which exceeds the rate of increase prescribed (in accordance with paragraph 4.6.1) in the Network Exit Agreement.

4.7 Connected Offtake Facility

4.7.1 For the purposes of the Code:

- a) "**Connected Offtake Facility**" is a single system or facility (comprising pipeline(s), plant and/or other installations) operated by one person (or jointly operated by several persons) and connected to the System at the System Exit Point; and
- b) "**Offtake Facility Operator**" is the operator of a Connected Offtake Facility.

4.8 Provisions of Network Exit Agreement

4.8.1 A Network Exit Agreement:

- (i) will specify the point of offtake in accordance with paragraph 3.6.2;
- (ii) will specify the procedures, methods and standards by which the volume and quantity of gas offtaken each Day from the System at the relevant System Exit Point is to be determined;
- (iii) may specify the basis on which the pressure and composition of gas made available for offtake each Day at the relevant System Exit Point is to be determined;
- (iv) will specify the measurement equipment required to be installed in connection with the requirements (where applicable) specified under paragraphs 4.8.1 (ii) and (iii);
- (v) may require plant and equipment required to be installed, maintained and operated by the Offtake Facility Operator or the Operator;

- (vi) may contain provisions (including operating procedures, requirements as to notifications by the Offtake Facility Operator, and provisions as to the control or setting of any plant, equipment or installation installed pursuant to paragraph (v)) pursuant to which the offtake of gas from the System at the System Exit Point may be discontinued or restricted, or changes (including reductions) in the rate of such offtake limited; and the Operator will not be in breach of its obligation to make gas available for offtake at the System Exit Point by virtue of the operation (in accordance with its terms) of any such provision;
- (vii) (without prejudice to paragraph 2.1.5) may specify requirements as to the pressure at which gas is to be made available for offtake from the System at the System Exit Point, and the rate or rates at which gas is permitted to be offtaken from the System at the System Exit Point;
- (viii) may specify matters relating to the offtake of gas for purposes of the commissioning of the Connected Offtake Facility, including any Equipment referred to in paragraph 4.3 and may provide for any Shipper to be relieved from liability to pay Overrun Charges pursuant to such arrangements.
- (ix) may contain any provision contemplated by any other Section of the Code;
- (x) may provide for the Offtake Facility Operator or the Operator to implement any reduction in the rate of or discontinuance of offtake of gas from the Connected Offtake Facility (including disconnection of any premises therefrom) where the Operator or the Offtake Facility Operator believes on reasonable grounds that gas is being or will be offtaken from the System by a Shipper or Shippers in aggregate at a rate which exceeds the maximum rate or maximum aggregate rate (as the case may be) permitted in accordance with the Network Exit Agreement;
- (xi) will specify the plant and equipment installed pursuant to paragraph 4.3;
- (xii) may provide (whether by express reference to such provisions or otherwise) for the application of any of paragraphs 4.4 to 4.6;
- (xiii) may contain provisions applicable for the purposes of paragraph 4.2.3;
- (xiv) may provide for the Operator and the Offtake Facility Operator to have access to each other's facilities for the purposes of verification of compliance with the requirements of the Agreement;

- (xv) may include terms according to which and circumstances in which the Agreement may be terminated, suspended or expire;
- (xvi) any other terms or conditions which may be appropriate for the purposes of the Code in respect of the offtake of gas from the System or (in relation to such offtake) the Connected Offtake Facility.

4.9 Offtake Measurement Provisions and Requirements

The procedures, methods and standards by which the volume and quantity of gas offtaken each Day from the System at each System Exit Point is to be determined are set out in Annex I-2 Offtake Measurement Provisions and Annex I-3 Offtake Measurement Requirements.

ANNEX I-1

APPLICABLE OFFTAKE REQUIREMENTS

All quantities of gas made available for offtake shall at the point of offtake at any System Exit Point conform to the following Applicable Offtake Requirements:

| 1. Composition | | | |
|---|--|---------------|--------------------|
| Components, Units | Minimum | Maximum | Method |
| a. Hydrocarbon Dew Point, °C | | 10 °C (50°F) | Note 1 |
| b. Water Content Max, lbs/MMscf | | 7 | Note 2 |
| c. Methane, percent by volume | 85% | 95 % | Note 3 |
| d. Ethane, percent by volume | - | 10 % | |
| e. Propane, percent by volume | - | 8 % | |
| f. Butanes and higher hydrocarbons (C4+), percent by volume | - | 5 % | |
| g. N ₂ , percent by volume | - | 3 % | |
| h. CO ₂ , percent by volume | - | 4 % | |
| i. H ₂ S, ppm by volume | - | 4 | Notes 3 and Note 4 |
| j. Total sulphur, ppm by volume | - | 28 | |
| k. O ₂ , ppm by volume | - | 10 | |
| 2. Heating Value and Wobbe | | | |
| a. Higher Heating Value Btu per scf | 1000 | 1150 | Note 5 |
| b. Wobbe index (GHV basis), MJ/ m ³ | 47 | 52 | |
| 3. Temperatures & Pressures | | | |
| Temperature, °C and ° F | 10°C 50°F | 49°C 120°F | Note 6 |
| Pressure, Bar Gauge | The pressure of gas made available for offtake shall be specified in the Network Exit Agreement. | | |

Solids or Liquids

Gas made available for offtake shall be:

- a) Free by normal commercial standards of objectionable odours, dusts, solid or liquid matter, waxes, gums and gum forming constituents, or aromatic hydrocarbons which might cause injury to or interfere with proper operation of all equipment through which it flows.
- b) Free of water and hydrocarbons in liquid form upon offtake from the System

Note 1 – A standard gas analysis of C6+ is not acceptable for dew point calculation unless it is known that heavier hydrocarbons (C7, C8, etc.) are not present. Hydrocarbon dew point is for all pressures up to the maximum pressure for the System Exit Point. Hydrocarbon dew point as used herein refers to the cricondenthem temperature of the stream as measured at the System Exit Point. The cricondenthem temperature is the highest dew point temperature seen on a liquid-vapor curve for a specific gas composition over the full range of possible line pressures. Manual spot/composite samples will be analyzed in accordance with Gas Processors Association Standard 2286, Tentative Method of Extended Analysis of Natural Gas (GPA 2286).

Note 2 – The water content of the gas delivered shall be determined in lbs per MMscf on a daily basis. If an in-line electronic moisture analyzer is utilized the testing must conform with ASTM International standard D5454 Standard Test Method for Water Vapor Content of Gaseous Fuels Using Electronic Moisture Analyzers. If manual samples are utilized the testing must conform to the latest versions of ASTM International standard D1142, Standard Test Method for Water Vapor Content of Gaseous Fuels by Measurement of Dew-Point Temperature, and ASTM International standard D4888, Standard Test Method for Water Vapor in Natural Gas Using Length-of-Stain Detector Tubes. All measurements standards referred to in this Annex I-1 shall be the version in existence as at the date the Code is first used for the transportation of gas in the System.

Note 3 – Analysis with gas chromatographs shall be carried out in accordance with the standards set forth in ASTM International standard D-1945, Standard Test Method for Analysis of Natural Gas by Gas Chromatography. Collecting and handling of gas samples shall be carried out in accordance with ISO 10715, Natural Gas - Sampling Guidelines.

Note 4 – The sulphur and oxygen content to be determined from monthly composite sample.

Note 5 – The Gross Heating Value, Density, Relative Density, and Wobbe Index of Gas shall be calculated in accordance with ISO 6976, Natural Gas - Calculation of Calorific Values, Density, Relative Density and Wobbe Index from Composition (ISO 6976).

Note 6 – As measured and recorded by temperature and pressure compensated electronic transmitters that are calibrated against a traceable internationally recognized standard.

ANNEX I-2

OFFTAKE MEASUREMENT PROVISIONS

All measurement standards referred to in this Annex I-2 shall be the version in existence as at the date the Code is first used for the transportation of gas in the System.

1. Measurement Equipment

- (a) Orifice meters will be used with flange-type connections and with electronic Gas measurement equipment and any other auxiliary measuring equipment such as continuous sampling devices and/or on-line gas chromatograph necessary to accomplish accurate measurement of the quality and quantity of gas offtaken.
- (b) Electronic Gas measurement installations will be used, including electronic means for recording flow data and calculation of gas volumes, and using instrumentation for each meter run that at a minimum consists of differential pressure, static pressure, and temperature transmitters, including the use of smart transmitters (devices which self-correct the effects of temperature and when applicable pressure on the output signal of a transmitter) and a flow computer that performs flow calculations including compressibility.

2. Volume Measurement

(a) Standards

Measuring stations and measurement equipment shall be designed and installed in accordance with International Organization for Standardization standards 5167-1 Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full – Part 1: General principles and requirements and 5167-2, Measurement of fluid flow by means of pressure differential devices inserted in circular cross- section conduits running full – Part 2: Orifice plates (together ISO 5167) and American Petroleum Institute Manual of Petroleum Measurement Standards Chapter 21.1: Flow measurement using electronic metering systems Section 1: Electronic gas measurement.

(b) General

- (i) In determining the Gas flow rate and volumes of gas offtaken during any period, electronic gas measurement shall be used. Calculations shall be carried out in accordance with ISO 5167 and results shall be reported in Mscf and Cubic meters.
- (ii) The unit of volume reported for one thousand (1,000) Cubic Feet of gas (1 Mscf) and for Cubic Meters shall be at base conditions of 14.73 psia (1.01560 bar) and 60°F (15.5°C).

- (iii) Volumes shall be corrected for temperature and specific gravity as provided in Item (c) below.
 - (iv) For the purposes of measurement and meter calibration, the atmospheric pressure shall be assumed to be constant at an absolute pressure of 14.73 psia (1.01560 bar).
- (c) Calculations
- (i) Volumes shall be computed in accordance with the instructions for computing the flow of gas through orifice meters contained in ISO 5167. In the event physical properties of the gas are not within the variations provided in ISO 5167, volume shall be calculated by such method as may be mutually agreed upon.
 - (ii) The temperature of the gas shall be determined by means of a temperature averaging device, flow computer, or a recording thermometer of standard manufacture. Volumes shall be corrected for each degree of variation in the average temperature from 60° F (15.5°C) in accordance with ISO 5167.
 - (iii) Corrections of volumes for deviation from Boyle's Law shall be made in accordance with the procedures published in American Gas Association Report No. 8: Compressibility Factor of Natural Gas and Related Hydrocarbon Gases.

3. Heating Value Measurement

(a) Equipment

Unless otherwise agreed upon, the Higher Heating Value of gas delivered hereunder shall be determined from read-outs of one or more of the following:

- (i) on-line gas chromatograph; or
- (ii) continuous composite sampler.

(b) Standards

Analysis of gas with gas chromatographs shall be carried out in accordance with the standards set forth in ASTM International Standard D-1945: Standard Test Method for Analysis of Natural Gas by Gas Chromatography. Collecting and handling of gas samples shall be carried out in accordance with ISO 10715: Natural gas sampling guidelines. The Higher Heating Value of the gas shall be calculated in accordance with ISO 6976: Natural Gas – Calculation of calorific values, density, relative density and Wobbe index from composition (ISO 6976).

(c) Calculation

In determining the Higher Heating Value and the density of gas offtaken during any period, the gas components as determined by continuous proportional flow sampling or an online gas chromatograph shall be used. Calculations shall be carried out in accordance with ISO 6976.

(d) Reporting

Higher Heating Value shall be converted and reported for contractual and operational purposes to British Thermal Unit at standard conditions of 14.73 psia (1.01560 bar) and 60° F (15.5°C).

4. Quality Testing

The quality of the gas offtaken shall be determined by tests which include the component analysis, hydrocarbon dew point and Higher Heating Value of the gas utilizing daily analysis and monthly cumulative analysis as required and as described hereunder:

Monthly cumulative analysis: Composite gas samples shall be taken using an automatic proportional flow sampler in accordance with American Petroleum Institute Manual of Measurement Standards Chapter 14.1, Natural gas fluids measurement Section 1: Collecting and handling of natural gas samples for custody transfer (API MPMS 14). An extended analysis (up to C9+) must be performed by an independent or approved operator's laboratory utilizing temperature programmed gas chromatography in accordance with Gas Processors Association standard 2286, Tentative Method of Extended Analysis of Natural Gas (GPA 2286).

Daily Testing: A daily field test shall be conducted by either utilizing a manual spot sample or an in-line chromatograph capable of analysis up to C9+. All sampling shall be done in accordance with API MPMS 14.1. For manual spot samples, an extended analysis (up to C9+) must be performed utilizing temperature programmed gas chromatography in accordance with GPA 2286.

ANNEX I-3

OFFTAKE MEASUREMENT REQUIREMENTS

1. For the purposes of this Annex I-3:
 - (a) The Responsible Party shall mean the Operator where the Operator owns or is responsible for the operation of the Offtake Measurement Equipment, in which case Other Party shall mean any Shipper holding System Capacity at the relevant System Exit Point
 - (b) In any other case, the Responsible Party shall mean any Shipper holding System Capacity at the relevant System Exit Point, in which case the Other Party shall mean the Operator
2. The Responsible Party will procure that:
 - (a) the Other Party is granted free access to the Offtake Measurement Equipment and the associated electronic data during Normal Working Hours on receipt of reasonable notice.
 - (b) the reading of instruments and the collection and processing of data is carried out.
 - (c) the data used to determine invoiced quantities will be retained respectively for a period of thirty-six (36) months from the end of the year to which they relate (unless there is a dispute, in which case such records shall be retained until the resolution of the dispute) and will be available for review by either Party during such period.
 - (d) the Other Party shall have the right to check measurements and calculations made by or on behalf of the other and, in case of disagreement, the measurements and calculations shall be checked jointly. Any such disagreement which cannot be settled through direct discussions shall be referred to Expert Determination.
3. The accuracy of all measuring instruments (including Higher Heating Value measuring instruments) shall be tested as follows, and the Responsible Party shall procure that:
 - (a) the Offtake Measurement Equipment shall be inspected, tested and calibrated at least once each year.
 - (b) the Other Party is given reasonable advance notice of the date and hour of each such test and is entitled to have a representative present to witness such Offtake Measurement Equipment tests at its own cost and risk; provided that the findings of such test shall be valid notwithstanding the absence of a representative of the Other Party.
 - (c) the results of any inspections, testing and calibration are provided to the Other Party.

4. The Other Party may request that a test be made of the Offtake Measurement Equipment at any reasonable times and the Responsible Party shall procure that such test is carried out as soon as reasonably practicable. The costs and expense of such test shall if the Offtake Measurement Equipment are found to read inaccurately by an amount exceeding 2% be paid by the Responsible Party and in any other case by the Other Party.
5. Where following any test of the Offtake Measurement Equipment the percentage of inaccuracy of the equipment in question is found to be:
 - (a) less than 2%, then no correction of previous readings shall be made for the period since the last test; or
 - (b) in excess of 2%, then previous readings of such equipment shall be corrected for any period which is definitely known or agreed upon, but in case such period is not so known or agreed upon, such correction shall be made for a period covering the last half of the period since the last test.
6. The Responsible Party shall procure that where the Offtake Measurement Equipment is found to read inaccurately by more than 2%, or is out of calibration or otherwise defective it shall be repaired or replaced or re-set to read accurately within a reasonable time.
7. If for any reason any part of the Offtake Measurement Equipment is out of service or out of repair so that the quantity of gas offtaken cannot be ascertained or computed from the readings thereof, or if the readings from the Offtake Measurement Equipment are not available for any reason, the quantity of gas offtaken during such period shall be estimated by the use of the first of the following methods which is feasible:
 - (a) by correcting the error if the percentage of error is ascertainable by calibration, test or mathematical calculation; or
 - (b) in the absence of (a), by using the registration of any check meter measuring equipment if installed and accurately registering; or
 - (c) in the absence of (a) and (b), by estimating the quantity delivered by reference to actual deliveries during preceding periods under similar conditions when the equipment in question was registering accurately.
8. The Responsible Party shall procure that:
 - (a) all measurement readings and calculations for any Day shall be undertaken and completed within three (3) Days
 - (b) an estimate is made of missing or late measurement data, and that when the actual quantity is ascertained the difference shall be treated as a Reconciliation Quantity in accordance with Section E5.

**SECTION J:
MAINTENANCE AND OPERATIONAL PLANNING**

SECTION J: MAINTENANCE AND OPERATIONAL PLANNING

1. GENERAL

1.1 Introduction

- 1.1.1 Shippers are required to provide information to the Operator in accordance with this Section J for the purposes of enabling the Operator to comply with its obligations pursuant to applicable Legal Requirements in relation to the maintenance and development of the System and connections to the System.
- 1.1.2 The Operator will establish and update each year a programme for the maintenance of the System, a "**Maintenance Programme**".
- 1.1.3 In undertaking maintenance activities the Operator will be relieved of its obligations in respect of the delivery and offtake of gas subject to and in accordance with paragraph 3.
- 1.1.4 References in this Section J to maintenance of any part of the System include any works in connecting the pipework of third parties to the System and any inspection, repair, replacement, reinstatement, recommissioning, development and extension thereof or of any pipework owned by the Operator downstream of the System, and works preparatory to such maintenance or required for the return to service of such part of the System after such maintenance.

1.2 Maintenance Programme

- 1.2.1 For the purposes of this Section J a "**Maintenance Programme**" is a programme (or an updated programme) of planned maintenance of the System containing the information specified in paragraph 1.2.3 and such other information as the Operator shall decide to include. By the last working Day in November of the preceding year, the Operator will publish the Maintenance Programme.
- 1.2.2 A "**Planned Maintenance Period**" a non-binding estimate of the duration of the planned maintenance in any given year.
- 1.2.3 A Maintenance Programme will identify:
 - (i) the System Points at which the ability of the Operator to accept delivery of gas or to make gas available for offtake will be affected by planned maintenance;

- (ii) the periods (within the relevant Planned Maintenance Period) for which such System Points will be so affected;
- (iii) where the Operator expects that it will continue within such period (or part thereof) to be able to accept delivery of gas or make gas available for offtake at any such System Point, but (by reason of such maintenance) on a restricted basis, an indicative estimate of the maximum rate at which the Operator expects to be able to accept delivery of gas or make gas available for offtake at such point.

1.3 Maintenance Relevant Facility and Maintenance Relevant Party

For the purposes of this Section J a "**Maintenance Relevant Facility**" is a Connected Delivery Facility or Connected Offtake Facility or any pipework owned by the Operator downstream of the System, and a "**Maintenance Relevant Party**" is any Shipper, a Delivery Facility Operator or Offtake Facility Operator.

2. SHIPPER INFORMATION REQUIREMENTS

2.1 Planning Information

2.1.1 In each year each Shipper shall provide, within 3 months of being requested, and in respect of the period requested, the following:

- (i) the quantities of gas expected to be offtaken from the System on a Day at each System Exit Point;
- (ii) the quantities of gas expected to be delivered to the System on a Day (in each such week) at each System Entry Point;
- (iii) the average calorific value and Wobbe Index value of gas to be delivered at each System Entry Point;
- (iv) such further information (if any) as the Operator may reasonably require for the purposes of this Section J.

2.1.2 The quantities referred to in paragraphs 2.1.1(i) and (ii) are the average quantities expected (in accordance with paragraph 2.1.4) to be offtaken or delivered on a Day in the relevant week.

2.1.3 The information required under paragraph 2.1.1 is to be provided in such format as the Operator shall from time to time notify to Shippers.

3. SYSTEM MAINTENANCE

3.1 Maintenance of the System under the Maintenance Programme

3.1.1 In carrying out maintenance of the System, the Operator will adhere so far as is reasonably practicable to the dates and periods provided for in the applicable Maintenance Programme, but without prejudice to paragraph 3.1.2.

3.1.2 The Operator may revise the Maintenance Programme by providing for additional maintenance and/or by varying the dates or periods of any maintenance already provided for, upon notifying relevant Shippers not less than seven (7) Days (or such lesser period as relevant Shippers may agree) before:

- (i) the date on which (following such revision) such maintenance is to commence, or
- (ii) where the effect of the revision is to defer maintenance, the date of commencement thereof as shown in the Maintenance Programme before such revision.

3.1.3 For the purposes of this paragraph 3.1, a relevant Shipper is a Shipper who at the relevant time holds System Capacity at a System Point at which the delivery or offtake of gas will be affected by maintenance provided for by a Maintenance Programme or any proposed revision thereto; provided that the Operator may elect to give any notification under this paragraph 3.1 to all Shippers generally.

3.1.4 The Operator shall plan and prepare a Maintenance Programme and undertake maintenance in a way that has regard to the operational requirements and legal constraints of the Operator, is consistent with normal working practices and will, so far as reasonably possible, minimise disruption to any affected Maintenance Relevant Facility or Maintenance Relevant Party.

3.2 Operator Maintenance Entitlements

3.2.1 To the extent that on any Day it is not feasible for the Operator to make available gas for offtake from the System by a Shipper at a System Exit Point, or to accept into the System gas tendered for delivery by a Shipper at a System Entry Point, or (in either case) its ability to do so is restricted, by reason of it carrying out any maintenance in a Planned Maintenance Period:

- (i) such System Point is a “**Maintenance Affected Point**”; and
 - (ii) the Operator will be relieved of its obligations under Section H3.6 to accept into the System gas tendered for delivery, or (as the case may be) under Section I3.2 to make gas available for offtake from the System, at such System Point.

- 3.2.2 The Operator will not be relieved by virtue of paragraph 3.2.1(ii) of its obligations under Sections H3.6 or I3.2 in respect of a Maintenance Affected Point:
 - a) in the case of a System Entry Point, on more than thirty-five (35) Days in any Planned Maintenance Period;
 - b) in the case of a System Exit Point, on more than thirty-five (35) Days in any Planned Maintenance Period;

- 3.2.3 Where the Operator is relieved from liability for the non-performance of any obligations under this Section J as a result of Force Majeure, the Operator shall use all reasonable endeavours to overcome or circumvent such Force Majeure

- 3.2.4 For the avoidance of doubt, the provisions of Sections H3.6.3 and I3.5.3, will apply in circumstances where the limitations in paragraph 3.2.2 are exceeded by the Operator for reasons of Force Majeure

- 3.2.5 For the avoidance of doubt the Operator may conduct any maintenance activities at any times and over any periods that, in its sole judgement, it deems appropriate or necessary, including at times outside the Planned Maintenance Period, but it shall only be relieved of its obligations under Sections H3.6 or I3.2 in respect of maintenance activities in accordance with this paragraph 3.

SECTION K: INVOICING AND PAYMENT

SECTION K: INVOICING AND PAYMENT

1. INVOICING

1.1 Introduction

- 1.1.1 The amounts payable by Shippers to the Operator and by the Operator to Shippers in accordance with the Code will be invoiced and payable in accordance with this Section K.
- 1.1.2 The Operator will submit to each Shipper Invoice Documents in respect of each Billing Period in accordance with this Section K.
- 1.1.3 For the purposes of this Section K:
- a) subject to paragraph 2.5.2, a "**Billing Period**" is a calendar month;
 - b) a "**Billing Day**" is a Day in a Billing Period;
 - c) an "**Invoice Document**" is an invoice document submitted by the Operator to a Shipper pursuant to this Section K;
 - d) an "**Invoice Item**" is an item (in respect of all charges of a particular kind) shown as payable by the Operator or by a Shipper in an Invoice Document (including where relevant a self-bill amount in accordance with paragraph 1.1.4);
 - e) the "**Invoice Amount**" in relation to an Invoice Item is the amount in Naira or US Dollars shown as payable by the Shipper or the Operator in respect of that item under the relevant Invoice Document.
- 1.1.4 An Invoice Document may show as an Invoice Amount an amount (a "self-bill amount") payable by the Operator to a Shipper.
- 1.1.5 An Invoice Document may contain an adjustment by way of credit ("Invoice Credit") in respect of an Invoice Amount in another Invoice Document.
- 1.1.6 An Invoice Document shall take effect as a separate invoice in respect of each Invoice Item, but without prejudice to paragraph 4.
- 1.1.7 No delay by the Operator in submitting an Invoice Document shall prejudice the liability (once such Invoice Document has been submitted) of the Operator or the Shipper for the amounts subject thereto.

1.2 Invoice Types

- 1.2.1 For each Billing Period separate Invoice Documents (as described in paragraph 1.2.2) will be submitted to each Shipper in respect of amounts payable (if any) under different provisions of the Code.
- 1.2.2 The types (each an "Invoice Type") of Invoice Document to be submitted are Capacity Invoices, Balancing Invoices, Commodity Invoices, Adjustment Invoices, Interest Invoices and Ad-hoc Invoices in accordance with paragraph 2. For the avoidance of doubt, the invoice types may be consolidated in a single Invoice Document

1.3 Form and Content of Invoice Document

- 1.3.1 Each Invoice Document will specify:
- (i) the identity of the Shipper;
 - (ii) the Billing Period to which the Invoice Document (other than as respects any Invoice Credit) relates;
 - (iii) the Invoice Type(s);
 - (iv) in respect of each Invoice Item, the Invoice Amount;
 - (v) a unique number by which the Invoice Document may be identified, and a reference number for each Invoice Item; and
 - (vi) the amount of Value Added Tax (if any) payable in respect of each Invoice Item and any further details required under tax regulation
- 1.3.2 An Invoice Document which contains an Invoice Credit will also identify the Invoice Document and Invoice Item to which the Invoice Credit relates and the amount of the Invoice Credit.
- 1.3.3 Each Invoice Document will be accompanied by a remittance advice ("Invoice Remittance Advice"), to be completed by the Shipper in accordance with paragraph 3.4.
- 1.3.4 Invoice Documents will be accompanied by the relevant supporting data in respect of each Invoice Item.
- 1.3.5 An Invoice Document will not be invalid solely by reason of its not being accompanied by any particular item of relevant supporting data, but (in accordance with paragraph 4.2.1(c)(i)) the specificity of any Invoice Query will depend on the extent to which such data was provided.

1.4 Invoice Timing

- 1.4.1 Subject to paragraph 1.6 the Operator shall submit Invoice Documents not more than ten (10) Days after the Billing Period to which they relate.

1.5 Value Added Tax

- 1.5.1 All amounts expressed as payable by a Shipper or the Operator pursuant to the Code, and whether the amount thereof is set out in the Code or determined by reference to the Transportation Charge Statement or otherwise, are exclusive (unless expressly otherwise stated) of any applicable Value Added Tax (and accordingly Value Added Tax shall be paid by the paying party where payable in respect of any such amount).

1.6 Termination

- 1.6.1 Notwithstanding paragraph 1.4, the Operator may, at any time (whether before or after the Shipper Discontinuance Date) after submitting to a Shipper a Termination Notice under Section M4.3, submit to that Shipper any Invoice Document in respect of any Billing Period or part of a Billing Period ending at or before the time at which the Operator submits such Invoice Document.

- 1.6.2 Where the Operator has submitted a Termination Notice to a Shipper, all amounts payable by that Shipper to the Operator or by the Operator to the Shipper (whether the Invoice Document in which such amounts are shown was submitted before or after the date of the Termination Notice) shall be immediately payable notwithstanding paragraph 3.1.

1.7 Invoice Adjustment

- 1.7.1 Subject to paragraph 1.7.3, where it appears to the Operator that any Invoice Amount has been incorrectly stated in an Invoice Document, the Invoice Amount may be adjusted by an Adjustment Invoice or as the case may be an Ad-hoc Invoice submitted by the Operator in accordance with paragraph 2.2 or 2.4 (and the Operator will not be required to revise and resubmit the original Invoice Document).

- 1.7.2 An adjustment (by way of debit) representing an increase in an Invoice Amount shall be a new Invoice Amount in respect of which the Invoice Due Date will be the Invoice Due Date of the relevant Adjustment Invoice or Ad-hoc Invoice.

- 1.7.3 In the absence of fraud and any other requirement under applicable law, after the expiration of 36 months (or any other period agreed between the Operator and the Shipper) after the Invoice Due Date (in accordance with paragraph 3.1) in respect of any Invoice Document:
- a) no adjustment may be made to an Invoice Amount under that Invoice Document, other than:
 - (i) an adjustment of which the Operator had given notice to the Shipper, or
 - (ii) an adjustment pursuant to an Invoice Query raised by a Shipper (in accordance with paragraph 4) before the expiry of such period.
 - b) no Invoice Query may be raised in respect of the Invoice Document; and
 - c) the Invoice Document shall (subject to any adjustments already made and any permitted under paragraph (a)) be deemed to be final and conclusive as to the amounts shown as payable thereunder.
- 1.7.4 The provisions of this Section K whereby an Invoice Amount may be adjusted or an Invoice Query raised are without prejudice to the provisions of the Code pursuant to which determinations of quantities delivered to and offtaken from the System are made final.

2. INVOICE TYPES

2.1 General

- 2.1.1 Capacity Invoices, Balancing Invoices and Commodity Invoices are Invoice Documents of the Invoice Types described in Annex L-1.
- 2.1.2 Subject to paragraph 2.1.3, the Invoice Items to be comprised in each of the Invoice Types referred to in paragraph 2.1.1 are set out in Annex L-1.
- 2.1.3 Upon not less than 3 months' notice to Shippers, the Operator may include in any Invoice Document of an Invoice Type referred to in paragraph 2.1.1 Invoice Items which previously were or would have been contained in an Ad-hoc Invoice.

2.2 Adjustment Invoice

2.2.1 An Adjustment Invoice is an Invoice Document containing Invoice Credits or Invoice Amounts (if not contained in an Ad-hoc Invoice) representing adjustments (by way of credit or debit) to Invoice Amounts contained in one or more Capacity Invoices or Commodity Invoices.

2.2.2 The amount of interest (if any) payable in respect of any amount payable or repayable pursuant to an Adjustment Invoice will be shown in an Ad-hoc Invoice or Interest Invoice and not in the relevant Adjustment Invoice.

2.3 Interest Invoice

An Interest Invoice is an Invoice Document containing Invoice Amounts representing interest payable pursuant to paragraph 3.5 (other than pursuant to paragraph 4.2.4) by a Shipper or the Operator in respect of an Invoice Amount under any Invoice Document (including an earlier Interest Invoice).

2.4 Ad-hoc Invoice

2.4.1 An Ad-hoc Invoice is an Invoice Document in respect of an amount not included in another Invoice Type.

2.4.2 the Operator may submit an Ad-hoc Invoice to any Shipper at any time (but subject to paragraph 1.7.3) in respect of any amount (not included in another Invoice Type) which, at any time prior to the submission of such Invoice Document, becomes payable or repayable by the Shipper or the Operator to the other pursuant to any provision of the Code.

2.4.3 An Ad-hoc Invoice may also contain adjustments (by way of credit or debit) in respect of any Invoice Amount, other than adjustments to be contained (in accordance with paragraph 2.2) in Adjustment Invoices.

2.5 Miscellaneous

2.5.1 An Adjustment Invoice, Interest Invoice or Ad-hoc Invoice may contain Invoice Amounts (or Invoice Credits in respect of Invoice Amounts) accruing (before such invoice is submitted):

- (i) in the calendar month in which the Invoice Document is submitted, and/or
- (ii) in more than one calendar month.

- 2.5.2 A reference to a Billing Period in the context of an Adjustment Invoice, Interest Invoice or Ad-hoc Invoice is to the period from the date of accrual of the first to that of the last accruing Invoice Amount contained in such Invoice Document.

3. INVOICE PAYMENT

3.1 Invoice Due Date

- 3.1.1 Subject to paragraph 4.2.2, the Invoice Amounts under each Invoice Document shall be paid (by the Shipper to the Operator or by the Operator to the Shipper, as the case may be) on or before the Invoice Due Date.
- 3.1.2 The "Invoice Due Date" in respect of an Invoice Document is the day ending at 24:00 hours on:
 - a) subject to paragraph (b) the 15th Day after the Day on which the Invoice Document was received in accordance with Section M9;
 - b) where the Day (the "**target due date**") determined under paragraph (a) is not a Business Day:
 - (i) subject to paragraph (ii), the Business Day (whether before or after the target due date) which is nearest to the target due date, or
 - (ii) if the nearest Business Days before and after the target due date are equally near, the nearest Business Day after the target due date.

3.2 Payment Details

- 3.2.1 Subject to paragraph 3.2.4 payment of any amount payable under the Code shall be made in Naira in same day funds to the account of the payee at a bank in Nigeria notified to the paying party in accordance with paragraph 3.2.2.
- 3.2.2 The Operator will notify each Shipper, and each Shipper shall notify the Operator, of the account name and number, and the name, address and sort code of the account bank, to which payments to the Operator by such Shipper or (as the case may be) to such Shipper by the Operator are to be made, within 5 Business Days after the Shipper Accession Date, and of any change in such details not less than 30 Days before such change occurs.

- 3.2.3 The payer shall instruct the bank remitting payment of any amount payable under the Code to quote the number (under paragraph 1.3.1(v)) of the relevant Invoice Document to the payee's bank when remitting such payment.
 - 3.2.4 If a Party is or becomes legally obliged to make payment in a currency other than Naira then that Party shall make payment of an amount in any other currency that would result in the requisite full amount being received by the Party due to receive payment upon the conversion of that other currency into Naira.
 - 3.2.5 For the purposes of conversion of the Invoice Amounts in US\$ in relation to an Invoice Item shown as payable by the Shipper or the Operator in respect of a month under any Invoice Document the applicable US\$/Naira conversion rate shall be the monthly average of the Central quotations for buying and selling US\$ dollars as published by the Central Bank of Nigeria for that month.
- 3.3 Deductions, Withholdings, Taxes, etc.
- 3.3.1 Without prejudice to paragraph 4.2.2, amounts payable under the Code shall be paid:
 - (i) free and clear of any restriction, reservation or condition, and
 - (ii) except to the extent (if any) required by law, without deduction or withholding in respect of tax or on account of any amount due or to become due to the paying party, whether by way of set off, counterclaim or otherwise.
 - 3.3.2 If, in respect of a payment to be made to the Operator by a Shipper, any deduction or withholding is required to be made by the law of any country other than Nigeria, the Shipper shall:
 - (i) ensure that the amount of such withholding or deduction does not exceed the minimum so required;
 - (ii) forthwith pay the Operator such additional amounts as will ensure that the net amount received by the Operator will be equal to that which would have been received had no deduction or withholding been made; and
 - (iii) pay the amount withheld or deducted to the relevant authority in accordance with the relevant requirement of law, and provide to the payee a receipt issued by such authority or (if such a receipt is not available) a certificate in respect of such payment.

3.4 Remittance Advice

- 3.4.1 Where payment of any amount is made pursuant to an Invoice Document, the Shipper shall complete and submit to the payee the Invoice Remittance Advice not later than the Day on which payment is made (but no inability of the Shipper to do so shall affect its obligation to make payment).
- 3.4.2 The completed Invoice Remittance Advice shall specify:
- (i) the date when payment is to be made;
 - (ii) the amounts, by reference to each Invoice Item (payable to the Operator) specified in the Invoice Document, in respect of which the payment is to be made, and the total amount to be paid;
 - (iii) any amount or amounts, by reference to each Invoice Item, in respect of which payment is not being made pursuant to paragraph 4.2.2.
- 3.4.3 Where the Operator makes payment of any amount pursuant to an Invoice Document, the Operator will not later than the date on which payment is made notify the Shipper of details equivalent to those to be specified in an Invoice Remittance Advice pursuant to paragraph 3.4.2 (but no inability of the Operator to do so shall affect its obligation to make payment).
- 3.4.4 Where the Operator or a Shipper makes payment under more than one Invoice Document on the same Day, it shall secure that a separate remittance is made in respect of each Invoice Document.
- 3.4.5 Where the Invoice Document number is not quoted with any remittance made by or on behalf of a Shipper, and no Invoice Remittance Advice corresponding to the remittance is submitted, the Operator will endeavour to obtain the Shipper's instructions (by telephone or facsimile) as to the application thereof; but if it has not (by the Business Day following the Day of the remittance) obtained such instructions, the Operator will apply the amount remitted to or towards Invoice Amount(s) in order of Invoice Due Date (the earliest first) and proportionately as between Invoice Amounts with the same Invoice Due Date, but applying such amount last to any Invoice Amounts which are subject to an Invoice Query.

3.5 Late Payment

- 3.5.1 Without prejudice to Section M4.3.1, where any amount payable under an Invoice is not paid on or before the Invoice Due Date, the paying party shall pay interest, after as well as before judgement, at the Applicable Interest Rate, on the unpaid amount from the Invoice Due Date until the Day on which payment is made.
- 3.5.2 For the avoidance of doubt paragraph 3.5.1 shall not be construed as permitting late payment of any Invoice Amount.

3.6 Interest

- 3.6.1 Where pursuant to any provision of this Section K interest is payable by the Operator or a Shipper, such interest shall accrue on a daily basis and on the basis of a 365-day year.
- 3.6.2 Interest payable under this Section K will be compounded to the extent and by virtue of being invoiced (not more frequently than each calendar month) in an Interest Invoice, late payment of which will itself be subject to interest under this paragraph 3.6.
- 3.6.3 The "Applicable Interest Rate" is the rate of interest, expressed as a percentage rate per annum, payable in respect of amounts overdue for payment, or subject to repayment, under the Code.
- 3.6.4 The Applicable Interest Rate shall be the Monetary Policy Rate (MPR) for the time being of the Central Bank of Nigeria (CBN) plus two (2) percentage points per annum.

4. INVOICE QUERIES, ETC.

4.1 Invoice Queries

- 4.1.1 For the purposes of this Section K an "Invoice Query" is any question or dispute as to the proper calculation of any amount shown as payable by a Shipper or the Operator under an Invoice Document or as to whether any such amount is or was properly payable.
- 4.1.2 A Shipper shall notify the Operator of any Invoice Query by written notice.
- 4.1.3 The Operator and the relevant Shipper will endeavour to resolve Invoice Queries by agreement.

4.1.4 Any reference in this Section K:

- a) to the resolution of an Invoice Query is a reference to the resolution thereof by agreement (at any time) between the Operator and the relevant Shipper or by determination thereof (in accordance with paragraph (b));
- b) to the determination of an Invoice Query is a reference:
 - (i) to the resolution of a dispute in respect thereof under any provision of Section L where applicable;
 - (ii) except as provided in paragraph (i), to the outcome of any proceedings commenced by the Operator or the relevant Shipper in respect thereof.

4.2 Invoice Queries before Payment

4.2.1 Where a Shipper wishes to raise any Invoice Query in respect of an amount shown as payable by the Shipper under an Invoice Document, the Shipper may, not later than ten Days prior to the Invoice Due Date, notify (in accordance with paragraph 4.1.2) such Invoice Query to the Operator, specifying:

- a) the Invoice Type, date and number of the Invoice Document;
- b) the Invoice Item to which the Invoice Query relates;
- c) an explanation of the basis on which the Invoice Query arises, and the amount of the Invoice Amount which is subject to the Invoice Query:
 - (i) identified by reference to the particular item of relevant supporting data (in accordance with paragraph 1.3.4) in respect of which the Invoice Query arises, on the basis of the level of greatest detail of such relevant supporting data provided to the extent that such data was provided by the Operator; and
 - (ii) where the basis of the Invoice Query is that the value of any parameter by reference to which the Invoice Amount is determined is incorrectly stated in such relevant supporting data, the amount (estimated as accurately as is reasonably practicable) by which such value is incorrectly stated;

- d) the amount of the Invoice Amount which is not subject to the Invoice Query, determined on the basis that only so much of the Invoice Amount as is identified in paragraph (c) is subject to the Invoice Query.
- 4.2.2 Where a Shipper raises an Invoice Query in accordance with the requirements of paragraph 4.2.1 (but not otherwise), the amount subject to the Invoice Query (in accordance with paragraph 4.2.1(c)) shall not be payable on the Invoice Due Date, but without prejudice to paragraph 4.2.4.
- 4.2.3 Except as provided in paragraph 4.2.2, but without prejudice to paragraph 4.3.1, the whole amount shown as payable by a Shipper in any Invoice Document shall be payable on the Invoice Due Date.
- 4.2.4 Where pursuant to paragraph 4.2.2 any amount is not paid on the Invoice Due Date by a Shipper, the amount (if any) which is agreed or determined (following resolution of the Invoice Query) to be payable by the Shipper shall be payable upon such resolution, and interest from the Invoice Due Date shall be payable in accordance with paragraph 3.5 (but subject to paragraph 4.2.5) on such amount.
- 4.2.5 For the purposes of paragraph 4.2.4, where it is agreed or determined that the question or dispute the subject of the Invoice Query pursuant to paragraph 4.2.2 was a bona fide question or dispute, the Applicable Interest Rate shall be the rate under paragraph 3.6.4 until the expiry of 2 Business Days after the date of resolution of the Invoice Query.
- 4.3 Other Invoice Queries
- 4.3.1 Subject to paragraph 1.7.3, nothing in this paragraph 4 shall prevent a Shipper from raising any Invoice Query other than pursuant to paragraphs 4.2.1 and 4.2.3, including in respect of any amount after payment has been made in respect of such amount, or from paying any such amount at the same time as notifying an Invoice Query in respect thereof; provided that (without prejudice to the resolution of the Invoice Query) no constructive trust or other implied term as to the receipt or application by the payee of the amount paid shall arise.

- 4.3.2 Where, upon the resolution of an Invoice Query or otherwise, it is agreed or determined that any amount or part of any amount paid should not have been paid, the payee shall repay such overpaid amount with interest at the Applicable Interest Rate from the date on which payment was made to it or if later the Invoice Due Date until the date of such repayment.
- 4.3.3 An Invoice Query may not be raised by a Shipper in relation to any delay on the part of the Operator in submitting an Invoice Document.

4.4 Invoicing of Resolved Queries

As soon as reasonably practicable after any Invoice Query is resolved, and in any event by the end of the second following month, the Operator will prepare and submit to the relevant Shipper an appropriate Invoice Document in respect of the amount (if any) agreed or determined to be payable or repayable by the Operator or the relevant Shipper.

ANNEX K-1

INVOICE TYPES AND INVOICE ITEMS

1. Capacity Invoice

A **"Capacity Invoice"** is an Invoice Document in respect of the following separate Invoice Items:

In respect of System Entry Points and System Exit Points separately:

- a) Capacity Charges;
- b) Overrun Charges.

2. Commodity Invoice

A **"Commodity Invoice"** is an Invoice Document in respect of the following separate Invoice Items:

In respect of System Entry Points and System Exit Points separately:

- a) Commodity Charges.

3. Balancing Invoice

A **"Balancing Invoice"** is an Invoice Document in respect of the following Invoice Items:

- a) Cumulative Imbalance Charges in respect of which the Shipper is the seller;
- b) Cumulative Imbalance Charges in respect of which the Operator is the seller;
- c) In respect of System Entry Points and System Exit Points separately; and
- d) Scheduling Charges.

SECTION L: DISPUTE RESOLUTION

SECTION L: DISPUTE RESOLUTION

1. GENERAL

1.1 Introduction

1.1.1 This Section L provides for the resolution of certain disputes between the Operator and Shippers.

1.1.2 For the purposes of this Section L:

- a) a "dispute" is any dispute or difference arising between the Operator and any Shipper or Shippers under or in connection with the Code or the Framework Agreement or any Ancillary Agreement; and
- b) in respect of any dispute "parties" means the Operator and the Shipper or Shippers party to such dispute, and "party" shall be construed accordingly.

1.2 Expert Determination

1.2.1 For the purposes of the Code "Expert Determination" means the determination of an expert pursuant to paragraph 2.

1.2.2 Where the Code provides or the parties have agreed that a dispute is to be referred to or resolved by Expert Determination:

- (i) paragraph 2 shall apply; and
- (ii) subject to paragraph 1.4, no party shall commence proceedings in any court in respect of or otherwise in connection with such dispute.

1.3 Mediation

The parties may agree to refer any dispute (including such a dispute as is referred to in paragraph 1.2) to mediation in accordance with paragraph 3.

1.4 Arbitration

Any dispute arising between or among the parties which is not a dispute which shall be determined by Expert Determination in accordance with paragraph 2 shall (unless the parties otherwise agree in writing) be finally resolved by arbitration conducted in accordance with the Arbitration and Conciliation Act Cap A18 Laws of the Federation of Nigeria, 2004 in accordance with paragraph 4.

1.5 Interlocutory Relief

Nothing in this Section L shall prevent any party from seeking interim or interlocutory relief in any court.

1.6 Communications

1.6.1 Except where otherwise provided in this Section L, any notice, submission, statement or other communication relating to any dispute to be given pursuant to this Section L by or to any party, an expert, a mediator, or a Shipper shall be in writing.

1.6.2 Where two or more Shippers are parties to a dispute any such notice, submission, statement or communication to be given by them may be given by them jointly (and any reference to the party or parties by whom and to whom it is to be given shall be construed accordingly).

1.6.3 For the purposes of any limit under this Section L on the length of any submission or statement or any attachments thereto a "page" is a single-sided A4 sheet which may contain single spaced type in a normal font size.

2. EXPERT DETERMINATION

2.1 Introduction

2.1.1 A dispute which is to be referred to or resolved by Expert Determination shall be determined by an individual appointed as expert in accordance with this paragraph 2.

2.1.2 No person shall be nominated as a proposed expert under paragraph 2.2.2 or 2.2.3 unless that person has the requisite qualifications to resolve a dispute referable under the Code to Expert Determination by virtue of his education, experience and training.

2.2 Initial Notice and Selection of Expert

- 2.2.1 Any party to a dispute which is to be resolved by or referred to Expert Determination may give notice of the dispute in accordance with paragraph 2.2.2.
- 2.2.2 The notice shall be given to each other party and shall:
- a) provide brief details of the issues to be resolved; and
 - b) nominate four persons as proposed experts.
- 2.2.3 The parties shall endeavour within 10 Business Days after the notice under paragraph 2.2.1 was given to agree upon the selection of an expert, and may meet for this purpose. Failing such agreement, the parties shall refer the appointment of an expert to the president from time to time of the professional body most closely related to the dispute for Expert determination.
- 2.3 Appointment of the Expert
- 2.3.1 Upon the selection under paragraph 2.2 or 2.3.3 of an expert, the parties shall forthwith notify the expert selected of his selection and request him to confirm within 5 Business Days whether or not he is willing and able to accept the appointment.
- 2.3.2 The notification to the expert shall include the following:
- a) the names of the parties and a summary of the dispute;
 - b) a request that the expert provide the confirmation required under paragraph 2.6;
 - c) a request for confirmation of the expert's scale of fees;
 - d) a statement that the expert's fees and expenses will be paid as provided in paragraph 2.8;
 - e) a statement that the information disclosed in the notification is confidential and that it should not be disclosed, copied or revealed whether the appointment is accepted or not;
 - f) a copy of this paragraph 2, and
 - g) a request for confirmation that the expert is able and willing to act in accordance with the procedure set out herein.

- 2.3.3 If the selected expert is unwilling or unable to accept the appointment, or shall not have confirmed his willingness and ability to accept such appointment within the period required under paragraph 2.3.1, or the amount of his remuneration or terms of his appointment are not agreed within the period required under paragraph 2.3.4, the parties shall endeavour to agree upon the selection of another expert within 3 Business Days, failing which another expert shall be selected in accordance with paragraph 2.2.4.
- 2.3.4 The parties shall use their best endeavours to ensure that the terms of the contract of appointment of the expert are agreed with him within 10 Business Days following his confirmation of ability and willingness to act, and agree that if the parties are unable to agree with the expert the amount of his remuneration or any other terms of his appointment then:
- (i) if one or more of the parties is willing to agree what the expert proposes, such amount or terms shall be determined by the President from time to time of the professional body most closely related to the dispute for Expert determination whose decision shall be final and binding on the parties to the dispute and whose costs of such reference shall be borne by the parties to the dispute equally;
 - (ii) if none of the parties is willing to agree what the expert proposes, or the expert is not willing to agree what is determined pursuant to paragraph (i), another expert shall be selected in accordance with paragraph 2.3.3.
- 2.3.5 The expert shall be an independent contractor and the relationship of the parties and the expert shall in no event be construed to be that of principal and agent or master and servant.
- 2.3.6 The expert shall not act as an arbitrator (and accordingly the provisions of the Arbitration and Conciliation Act 2004 shall not apply) nor as mediator.

2.4 Timetable and Procedure

- 2.4.1 No later than 5 Business Days following his appointment, the expert shall by giving reasonable notice to each party convene a meeting with the parties at which he shall raise any matters upon which he requires clarification and discuss with the parties any additional procedural requirements he or they may have.

- 2.4.2 The parties shall, not later than 10 Business Days after the appointment of the expert, submit to the expert and to each other party written submissions together with all supporting documentation, information and data which they wish to submit in respect of the dispute; and the parties may also submit a statement of facts which they have agreed between themselves to the expert.
- 2.4.3 Each party may, not later than 20 Business Days after the appointment of the expert, submit to the expert and each other party written submissions together with any additional supporting documentation, information and data, in reply to the sub- missions made under paragraph 2.4.2.
- 2.4.4 The expert shall disregard any documentation, information, data or submissions supplied or made (other than pursuant to paragraph 2.4.9) by any party later than 20 Business Days after his appointment unless the same are provided in response to a request from the expert.
- 2.4.5 If the expert shall wish to obtain independent professional and/or technical advice in connection with the dispute:
- a) he shall first provide the parties with details of the name, organisation and estimated fees of the professional or technical adviser, and
 - b) he may engage such adviser with the consent of the parties (which consent shall not be unreasonably withheld) for the purposes of obtaining such professional and/or technical advice as he may reasonably require.
- 2.4.6 The expert may at his discretion and at any time request information from any of the parties orally but shall only do so in the presence of the other parties.
- 2.4.7 At any time after the period referred to in paragraph 2.4.3 expires, with the written consent of the parties, the expert may (but shall not be required to) convene a hearing upon giving the parties reasonable notice.
- 2.4.8 The expert shall provide a draft of his determination, which shall be a report in writing giving reasons for the determination, to the parties not later than 35 Business Days following his appointment.

- 2.4.9 Each party may, within 10 Business Days following delivery of the draft determination, submit to the expert any documentation, information, data, submissions or comments on or in respect of the draft determination.
- 2.4.10 The expert shall submit his final determination, which shall be a report in writing giving reasons for his determination of the dispute, to the parties not later than 50 Business Days following his appointment.
- 2.4.11 If the expert fails to submit the final determination by the time required under paragraph 2.4.10, at the request of any party another expert may be appointed in accordance with the provisions of this paragraph 2 and the appointment of the previous expert shall cease unless before the appointment of the new expert, the previous expert shall have submitted his final determination hereunder, in which case the new expert shall be forthwith informed that his services will not be required.

2.5 Effect of Determination

- 2.5.1 The expert's final determination shall (unless given after the appointment of another expert under paragraph 2.4.11) be final and binding on the parties except in the event of fraud or where it is so clearly erroneous on its face that it would be unconscionable for it to stand, in which case another expert may be appointed in accordance with the provisions of this paragraph 2.
- 2.5.2 Except as provided in paragraph 2.5.1, no party shall commence proceedings in respect of or refer to any court any finding by the expert, whether made at any time after his appointment or in his determination, as to the dispute or the construction of or otherwise in respect of the Code or any Ancillary Agreement.

2.6 Conflict of Interests

- 2.6.1 The expert shall confirm to the parties before his appointment that he does not hold any interest or duty which would or potentially would conflict with the performance of his duties under his contract with the parties.
- 2.6.2 If after his appointment the expert becomes aware of any interest or duty which conflicts or potentially conflicts with the performance of his duties under his contract with the parties, the expert shall inform the parties forthwith of such conflict giving full details thereof.

2.6.3 Any party may within 5 Business Days of the disclosure of any such conflict or potential conflict object to the appointment or continued appointment of an expert, in which case the expert shall not be or shall cease to be appointed and a new expert shall be selected and appointed in accordance with this paragraph 2 (and the rejected expert shall not be nominated for such selection).

2.7 Confidentiality

2.7.1 The parties and the expert shall keep the fact that the Expert Determination is taking place and its outcome confidential.

2.7.2 All documentation, information, data, submissions and comments disclosed or delivered whether in writing or otherwise by any party to the expert or to any other party either in connection with or in consequence of the appointment of the expert shall be regarded and treated as confidential; and the expert and the parties shall not disclose any or all of the documentation, information, data, submissions and comments including the contents and copies thereof in any form except in connection with any proceedings in any court which a party is not prohibited under this Section L from commencing.

2.8 Costs

2.8.1 Each party shall bear its own costs including without limitation costs of providing documentation, information, data, submissions or comments under this paragraph 2 and all costs and expenses of all witnesses and other persons retained by it.

2.8.2 The expert shall provide the parties with a breakdown of:

- a) his fees;
- b) his reasonable expenses, including the fees of and reasonable expenses incurred by any technical or professional advisers.

2.8.3 The expert's fees and expenses under paragraph 2.8.2 shall be payable by the parties in equal amounts, unless the expert (having regard to the conduct of the parties with respect to the dispute in question) shall direct in his final determination that such costs and expenses should be borne by one or some only of the parties, in which case the parties shall pay such fees and expenses in accordance with such direction.

2.8.4 If the terms of the expert's appointment provide for the payment of his fees and expenses before the delivery of the final determination, the parties shall pay such fees and expenses in equal amounts, and shall make adjustment payments inter se following any such direction as is referred to in paragraph 2.8.3.

2.9 Miscellaneous

The expert shall not be held liable for any act or omission unless it shall be shown that the expert has acted fraudulently or in bad faith.

3. MEDIATION

3.1 Introduction

3.1.1 A dispute which is to be referred to mediation shall be referred to a single mediator who shall explore the interests of the parties to the dispute and encourage the parties to resolve the dispute in light of such interests.

3.2 Appointment of Mediator

3.2.1 Within 5 Business Days after agreeing to refer a dispute to mediation the parties shall meet and use their best endeavours to agree upon a person to act as mediator, unless they have agreed upon a mediator when agreeing so to refer the dispute.

3.2.2 Where the parties agree upon a mediator, they shall request such person to accept appointment as mediator, and shall use all reasonable endeavours to agree (between themselves and with the mediator) upon the terms of his appointment.

3.2.3 A person shall be treated as appointed as a mediator for the purposes of this paragraph 3 when he has confirmed his acceptance to act as mediator in accordance herewith.

3.3 Procedure and Timetable

3.3.1 Within 5 Business Days following his appointment, the mediator shall require each party to provide him with a written summary of the dispute.

3.3.2 The mediator may in his discretion:

- (i) request any party to provide him with copies of any documentation or information which he believes will assist to explain any such summary; and

- (ii) provide any such written summary and/or any information or copy documentation received under paragraph (i) to the other party(ies) to the dispute.

- 3.3.3 Within 10 Business Days following his appointment, the mediator shall contact the parties and shall arrange to meet them.
- 3.3.4 Each party shall attend the meeting with the mediator with a maximum of five representatives, one of whom shall be a person with decision making authority in relation to the subject matter of the dispute and one of whom may be the legal adviser of that party.
- 3.3.5 No additional persons shall attend without the prior written consent of the mediator.
- 3.3.6 The mediator may convene more than one meeting with the parties but shall not convene any meetings later than 40 Business Days following his appointment, unless the parties agree otherwise.
- 3.3.7 The mediator may at his discretion meet each party on his own whether during a meeting attended by the other parties or otherwise, but he shall not disclose to any other party matters disclosed to him in such circumstances without the consent of the disclosing party.
- 3.3.8 At any meeting attended by the parties, the mediator may require each party to make a brief presentation of its case and he may also require the other parties to reply to another party's presentation.
- 3.3.9 The mediator shall not act as an arbitrator (and accordingly the provisions of the Arbitration and Conciliation Act 2004 shall not apply).

3.4 Result of Mediation

- 3.4.1 The mediator shall encourage the parties to resolve the dispute by agreement and may also discuss informally with any party his own views as to the merits of the dispute.
- 3.4.2 If the dispute remains unresolved 45 Business Days after the mediator's appointment the mediator shall, if so requested by any party, advise the parties of his views and may, at his discretion, also inform them of what he considers to be a fair settlement of the dispute.
- 3.4.3 No party shall be bound to adopt the views or advice expressed or provided by the mediator.

3.4.4 If the dispute is resolved or the parties accept the views and advice of the mediator under paragraph 3.4.2, the parties shall use their best endeavours, within 5 Business Days after such resolution or acceptance, to enter into a settlement agreement which shall:

- (i) set out the terms accepted by the parties or on which the dispute was resolved; and
- (ii) contain provisions of confidentiality similar to those set out in paragraph 3.5.

3.4.5 Such settlement agreement shall be made pursuant to the law of Nigeria and courts in Nigeria shall be given exclusive jurisdiction over any dispute arising from the settlement agreement.

3.5 Confidentiality

3.5.1 The mediator and the parties, their representatives and advisers and any person connected in any way with the mediation shall keep confidential the fact that the mediation is taking place, and its outcome, and all documents, submissions, statements, information and data including anything revealed orally or otherwise during the mediation and any settlement agreement except as may be necessary for implementation or enforcement of the settlement agreement.

3.5.2 All documents and information prepared by a party for and disclosed in the mediation, and all discussions which take place with a party during the course of the mediation, shall be afforded the same protection from discovery as "Without Prejudice" negotiations in proceedings in court; provided that this shall not preclude any document, which may have been disclosed during the mediation but was not prepared solely for use in the mediation, from being discoverable in any proceedings.

3.6 Costs

3.6.1 The parties shall unless they agree otherwise bear their own costs and expenses of whatsoever nature of the mediation.

3.6.2 The parties shall bear the fees and expenses of the mediator and the mediator's appointment and all administrative costs arising from the mediation equally.

3.7 Further Proceedings

- 3.7.1 The mediator shall not act in any subsequent legal or similar proceedings in respect of the dispute in which he acted as mediator.
- 3.7.2 The mediator shall not be held liable for any act or omission unless it shall be shown that he has acted fraudulently or in bad faith.

4. ARBITRATION

4.1 Commencement of Arbitration

- 4.1.1 A party may at any time give notice to the other party of the existence of a dispute (an Arbitration Notice) and such Arbitration Notice shall set out in reasonable detail the grounds for the dispute in the opinion of the party giving the Arbitration Notice.
- 4.1.2 Pending the resolution of a dispute in accordance with this paragraph 4 the parties shall to the greatest extent possible continue to perform their covenants and obligations in accordance with the Code.

4.2 Appointment of Arbitrator

- 4.2.1 Each party shall appoint an arbitrator within 10 Business Days after the date of receipt of an Arbitration Notice by the Party to which the Arbitration Notice was given and those arbitrators shall then jointly appoint a third arbitrator within 5 Business Days after the date of appointment of the second arbitrator to act as chairman of the arbitral panel.
- 4.2.2 Arbitrators not appointed within the time limits specified in paragraph 4.2.1 shall at the written request of a party be appointed by the Chartered Institute of Arbitrators (CIArb) UK, Nigerian Branch.
- 4.2.3 The site of the arbitration shall be Lagos or such other place in Nigeria, as the parties may agree in writing.
- 4.2.4 Each Party shall bear the costs and expenses of all professional advisers, witnesses and employees retained by it. Costs and expenses associated with the arbitral tribunal shall be apportioned equally between the parties.

4.3 The Arbitration Award

4.3.1 Any arbitration award rendered in consequence of an arbitration commenced in accordance with this paragraph 4:

- a) shall be in writing and shall set out in reasonable detail the facts of the dispute and the reasons for the decision of the arbitral panel;
- b) (to the greatest extent possible under applicable law) shall be final and binding upon the parties; and
- c) shall forthwith be implemented by the Parties.

4.3.2 Judgment on any arbitration award rendered in accordance with this paragraph 4 shall be entered in court for its enforcement.

**SECTION M:
GENERAL**

SECTION M: GENERAL

1. INTRODUCTION

1.1 Code

1.1.1 References to the "Code" are to this Network Code and any other documents as necessary as from time to time modified in accordance with the Modification Rules and references to the Code include the Code as given contractual effect by the Framework Agreement.

1.2 Network Code Framework Agreement

For the purposes of this Section M "Network Code Framework Agreement" or "Framework Agreement" means an agreement in such form as may be required by the Operator pursuant to which the Code is made binding upon the Operator and each Shipper.

1.3 Parties

In this Section "Party" means in the context of the Network Code Framework Agreement, the Operator or any Shipper.

1.4 Effect of Code

1.4.1 Except where the Code expressly provides otherwise or disapplies this paragraph 1.4.1, neither the Code nor the Framework Agreement creates contractual rights or liabilities between Shippers inter se.

1.4.2 Paragraph 1.4.1 shall not apply in respect of paragraphs 9 and 10.

2. SHIPPER ADMISSION

2.1 Admission Requirements

2.1.1 In order to become a Shipper a person (the "Applicant Shipper") must:

- (i) satisfy or secure satisfaction of the requirements in paragraph 2.1.2, and
- (ii) accede to the Framework Agreement and thereby agree to be bound by the Code.

2.1.2 The requirements referred to in paragraph 2.1.1(i) are as follows:

- a) the Applicant Shipper shall have applied to the Operator, in such form as the Operator may from time to time prescribe, giving the following details:
 - (i) the name of the Applicant Shipper;
 - (ii) the legal nature of the Applicant Shipper, and where the Applicant Shipper is not a company incorporated under the Company and Allied Matters Act, such further information concerning the constitution of the Applicant Shipper as the Operator may reasonably require;
 - (iii) the address, telephone number and email address of the Applicant Shipper, and the individual for whose attention notice is to be marked, for the purposes of notice under paragraph 9.2.3 and 9.3.1; and
 - (iv) where the Applicant Shipper is not a company incorporated under the Company and Allied Matters Act, an address for service in accordance with paragraph 9.8.3.
- b) a Shipper Licence shall have been granted to the Applicant Shipper which is in force and in respect of which no notice of revocation has been given, and the Applicant Shipper shall have provided a copy of such licence to the Operator;
- c) the Applicant Shipper shall have provided the emergency contact details; and
- d) the Applicant Shipper shall have obtained from the Operator one or more copies of the Code and such other documents referred to in the Code or the Framework Agreement as the Operator shall from time to time prescribe for the purposes of this paragraph (d).

2.1.3 Where an Applicant Shipper has acceded to the Framework Agreement, the Applicant Shipper and the Operator shall be bound by this Section M and the Applicant Shipper shall for such purposes only be treated as a Shipper.

2.2 Admission of Shipper

2.2.1 The Applicant Shipper will become a Shipper with effect from the Day ("Shipper Accession Date") which is 3 Business Days after satisfaction of the last of the requirements under paragraphs 2.1.1 and 2.1.2.

- 2.2.2 Upon the Applicant Shipper's becoming a Shipper pursuant to paragraph 2.2.1 the Operator will so notify the Applicant Shipper, specifying the Operator's notice details, including the notice details of any Agent appointed by the Operator for the purposes of paragraph 9.2.3.

2.3 Restricted Authorisation of Shipper

Where the Licence or Authorisation held by a Shipper limits or restricts the premises to which the Shipper may arrange for the conveyance of gas by the System or in any other way limits or restricts the activities which the Shipper is authorised to carry on:

- (i) the Shipper shall be solely responsible for compliance with such limit or restriction and (subject to paragraph (ii)) the Operator shall not in the implementation of the Code as respects such Shipper be concerned with such limit or restriction; but
- (ii) the Operator shall be at liberty in its discretion to (but shall not be required to) withhold from the Shipper any right or entitlement pursuant to the Code so as to give effect to such limit or restriction.

2.4 Single Shipper Admission

Unless expressly otherwise provided in the Code or agreed by the Operator, a person may only be one Shipper, and accordingly a person who is for the time being a Shipper may not make a further application to be admitted as a Shipper.

3. CODE CREDIT RULES

3.1 General

- 3.1.1 The "Code Credit Rules" are the rules from time to time established and revised by the Operator and issued to Shippers setting out (inter alia):

- (i) the principles on which the Operator will assess and from time to time revise its assessment of the credit-worthiness of Shippers (and persons providing surety for Shippers); and
- (ii) the basis on which a Shipper may provide security or make prepayments to the Operator.

- 3.1.2 Nothing in the Code or the Code Credit Rules shall constitute any duty of care or other obligation on the part of the Operator (whether to or for the benefit of the Shipper in question or Shippers in general) in relation to the implementation of the Code Credit Rules or the provisions of this paragraph 3.

3.2 Security under Code Credit Rules

- 3.2.1 Any instrument of security provided by a Shipper pursuant to the Code Credit Rules (and whether or not entered into by the Shipper) shall not be a part of the Code; and no provision of or modification of the Code, nor any inconsistency between the Code and any such instrument, and nothing done by the Operator pursuant to the Code, shall prejudice or invalidate any such instrument.
- 3.2.2 Where a Shipper has provided security pursuant to the Code Credit Rules the Shipper may request the Operator to release all or any of such security or agree to a reduction in any maximum amount of such security.
- 3.2.3 A Shipper may (inter alia) provide security for the purposes of the Code Credit Rules in the form of a bank guarantee or letter of credit

4. DISCONTINUING SHIPPERS AND TERMINATION

4.1 General

- 4.1.1 A Shipper may cease to be a Shipper pursuant to paragraph 4.2 or 4.3; and for the purposes of the Code a "Discontinuing Shipper" is a Shipper who so ceases to be a Shipper and the "Shipper Discontinuance Date" is the date with effect from which (in accordance with paragraph 4.2 or 4.3) a Discontinuing Shipper ceases to be a Shipper.
- 4.1.2 Upon a Shipper's ceasing to be a Shipper subject to paragraphs 5.6 and 4.3.5, the Framework Agreement shall cease to bind the Discontinuing Shipper and (as respects the Discontinuing Shipper) the Operator.
- 4.1.3 The Operator will as soon as reasonably practicable after the Shipper Discontinuance Date notify all other Shippers of a Shipper's ceasing to be a Shipper.

4.2 Voluntary Discontinuance

- 4.2.1 A Shipper may at any time by giving notice ("Discontinuance Notice") to the Operator apply to cease to be a Shipper.
- 4.2.2 A Shipper may not cease to be a Shipper under this paragraph 4.2 until such time as:
 - (i) all amounts payable or which may become payable by the Shipper to the Operator pursuant to any provision of the Code or the Framework Agreement have been paid in full;

- (ii) there is no outstanding Cumulative Imbalance;
- (iii) any outstanding breach, being a breach capable of remedy and of which the Operator has given notice to the Shipper, by the Shipper of any provision of the Code or the Framework Agreement shall have been remedied.

4.2.3 Where a Shipper has given notice under paragraph 4.2.1:

- (i) the Shipper and the Operator shall remain bound by the Code and the Framework Agreement and until the requirements of paragraph 4.2.2 are satisfied;
- (ii) the System Capacity which the Shipper is registered as holding shall not be reduced or cancelled other than in accordance with the relevant provisions of the Code (and the Shipper will remain liable for payment of Transportation Charges in respect thereof but may elect to make prepayment thereof).

4.2.4 Where a Shipper has given notice under paragraph 4.2.1, after the satisfaction of the last of the requirements of paragraph 4.2.2 to be satisfied:

- (i) with effect from the 5th Business Day following such satisfaction, the Shipper will cease to be a Shipper;
- (ii) without prejudice to paragraph 4.2.5, the Operator will as soon as reasonably practicable inform the Shipper of the date on which it ceases to be a Shipper under paragraph (i).

4.2.5 Notwithstanding paragraph 4.2.4, without prejudice to paragraph 4.1.2, the Operator or (as the case may be) the Discontinuing Shipper shall remain liable, subject to and in accordance with the Code, to the other and (in the case of the Discontinuing Shipper, subject to paragraph 1.4.1) to each other Shipper, after the Shipper Discontinuance Date:

- (i) for any amount which was or becomes payable under the Code in respect of any period before the Shipper Discontinuance Date; and
- (ii) in respect of any outstanding breach of any provision of the Code or the Framework Agreement where such breach was not (for the purposes of paragraph 4.2.2(iii)) capable of remedy or (notwithstanding that paragraph) was capable of remedy but was not remedied.

4.3 Termination

- 4.3.1 For the purposes of this paragraph there shall have occurred a "Shipper Default" in relation to a Shipper (the "Defaulting Shipper") in any of the following events or circumstances:
- a) where the Defaulting Shipper has failed to maintain security as required under the Code Credit Rules
 - b) where:
 - (i) the Defaulting Shipper is in material breach, other than such a breach as is referred to in paragraph 4.3.7, of any material provision (other than a payment obligation) of the Code; and
 - (ii) the breach is capable of remedy by the Defaulting Shipper; and
 - (iii) the Operator has given notice (making reference to this paragraph 4.3) of such breach to the Defaulting Shipper; and
 - (iv) within 14 Days after the Operator's notice under paragraph (iii), the Defaulting Shipper does not either:
 - 1. remedy the breach in all material respects, where the breach is capable of remedy within such period of 14 Days; or
 - 2. where the breach is not so capable of remedy, provide to the Operator a programme (setting out the steps to be taken by the Shipper and the timetable for taking such steps) for the remedy of the breach as soon as is reasonably practicable.
 - (v) in the case in paragraph (iv)(2), the Defaulting Shipper does not:
 - 1. remedy the breach in all material respects with all reasonable diligence and in accordance with the programme provided under that paragraph or a revised programme pursuant to paragraph (2), and
 - 2. where notwithstanding the reasonable diligence of the Shipper it is not reasonably practicable for the Shipper to remedy the breach in accordance with that programme, provide to the Operator a revised such programme; and

- (vi) the breach remains unremedied in any material respect after the expiry of 7 Days after a further notice by the Operator to the Defaulting Shipper to the effect that the Defaulting Shipper has not complied with paragraph (iv) or (v).
- c) where:
- (i) the Defaulting Shipper is in material breach, other than such a breach as is referred to in paragraph 4.3.7, of any relevant provision (other than a payment obligation) of the Code; and
 - (ii) the breach is not capable of remedy; and
 - (iii) the Operator has given notice (making reference to this paragraph 4.3) of the breach to the Defaulting Shipper; and
 - (iv) at any time within the period of 12 months following the Operator's notice under paragraph (iii), there occurs a further material breach by the Defaulting Shipper of the same provision of the Code; and
 - (v) the Operator has given a notice of such further breach to the Defaulting Shipper and a period of 7 Days has expired following such notice.
- d) where:
- (i) the Defaulting Shipper is unable to pay its debts (within the meaning of the Company and Allied Matters Act, but subject to paragraph 4.3.2), or any voluntary arrangement is proposed in relation to it under the Company and Allied Matters Act or it enters into any com- position or scheme of arrangement (other than for the purpose of a bona fide solvent reconstruction or amalgamation); or
 - (ii) the Defaulting Shipper has a receiver (which expression shall include an administrative receiver within the meaning of the Company and Allied Matters Act) of the whole or any material part of its assets or undertaking appointed; or
 - (iii) the Defaulting Shipper has an administration order under the Company and Allied Matters Act made in relation to it; or
 - (iv) the Defaulting Shipper passes any resolution for winding-up (other than for the purpose of a bona fide solvent reconstruction or amalgamation); or
 - (v) the Defaulting Shipper becomes subject to an order under the Company and Allied Matters Act for winding- up; or

- e) where the Licence or Authorisation granted to the Defaulting Shipper is determined or revoked or otherwise ceases to be in force for any reason whatsoever, or such licence is assigned unless such assignment is contemporaneous with an assignment by the Shipper of all of its rights and obligations under the Code and the Framework Agreement in accordance with paragraph 10.2.
- 4.3.2 For the purposes of paragraph 4.3.1(d)(i) the Defaulting Shipper shall not be deemed to be unable to pay its debts for the purposes of that paragraph if any such demand as is mentioned in the said Section is being contested in good faith by the Defaulting Shipper with recourse to all appropriate measures and procedures.
- 4.3.3 Upon the occurrence of a Shipper Default, and at any time after such occurrence at which the Shipper Default is continuing, the Operator may give notice ("Termination Notice") to the Defaulting Shipper to the effect that the Shipper shall cease to be a Shipper with effect from the date (which may be any date on or after the date on which the notice is given) specified in the notice.
- 4.3.4 Where the Operator gives Termination Notice to a Defaulting Shipper, with effect from the date specified in the notice, the Shipper will cease to be a Shipper and paragraph 4.1.2 shall apply.
- 4.3.5 The giving of Termination Notice and the application of paragraph 4.3.4 shall not affect the rights and obligations of the Operator and the Defaulting Shipper under the Code or the Framework Agreement (including rights and obligations in respect of the Shipper Default, and in respect of amounts including interest payable by either Party, and rights and obligations arising pursuant to any provision of the Code in respect of the Shipper's ceasing to be a Shipper) accrued up to the date referred to in paragraph 4.3.4, which shall continue to be enforceable notwithstanding that paragraph.
- 4.3.6 Where the Operator has given Termination Notice it shall be entitled to inform such persons as it thinks fit that it has done so, including the Connected Facility Operator in relation to any System Point at which the Defaulting Shipper held System Capacity, and any person from whom the Operator believes the Defaulting Shipper to have purchased gas for delivery to the System, or with whom the Operator believes the Defaulting Shipper has arranged for the conveyance of gas directly or indirectly to the System.

4.3.7 For the purposes of paragraph 4.3.1(b)(i) and (c)(i) the following breaches are excluded:

- a) a breach which results from a breach by the Operator of the Code; or
- b) the delivery or tendered delivery by the Shipper of non-compliant gas (as described in Section H3.3).

4.3.8 For the purposes of paragraph 4.3.1(c)(i) a breach is a material breach of a relevant provision where and only where:

- (i) the breach is willful or reckless; or
- (ii) in the case of any provision, as a result of the breach the Operator or any other Shipper is in material breach of any material provision of the Code or any Legal Requirement or incurs any material liability or expense; or
- (iii) where the breach is one of a series of related or substantially similar breaches and the Operator has previously given the Shipper seven (7) days' notice that, in the event that the Shipper continues to breach the provisions of the Code in a similar manner that it may give Termination Notice to such Shipper.

4.4 Monies Recovered Subsequent to Termination

On giving Termination Notice to any Shipper the Operator shall be entitled to set off all monies received from the Defaulting Shipper subsequent to the date of such Termination Notice against any payments due from such Shipper firstly in respect of Transportation Charges and secondly against Balancing Charges.

5. INFORMATION AND CONFIDENTIALITY

5.1 Operator Obligations

5.1.1 The Operator shall secure that Protected Information is not disclosed to any person other than:

- (i) an officer or employee of the Operator;
- (ii) a professional adviser of or consultant to the Operator or of an Operator Agent;

- (iii) without prejudice to any requirement under the Operator Licence, any Affiliate of the Operator;
- (iv) any subcontractor of the Operator or any officer, employee, professional adviser or consultant of such sub- contractor; and
- (v) as required by any provision of the Code, or any Network Entry Agreement, Network Exit Agreement, Allocation Agreement or Connection Agreement.

In any such case in accordance with the requirements of paragraph 5.4.

5.2 Shipper Obligations

5.2.1 Each Shipper shall secure that Protected Information is not disclosed to any person other than:

- (i) an officer or employee of the Shipper whose province it is to know the same; or
- (ii) a professional adviser of or consultant to that Shipper or a Shipper Agent appointed by that Shipper; or
- (iii) An Affiliate; or
- (iv) subject to paragraph 5.2.3, a consumer or a supplier;
- (v) as required by a provision of the Code any Network Entry Agreement, Network Exit Agreement, Connection Agreement and any Allocation Agreement.

In any such case in accordance with the requirements of paragraph 5.4.

5.2.2 Paragraph 1.4.1 shall not apply in respect of this paragraph 5.

5.2.3 For the purposes of paragraph 5.2.1(iv) Protected Information may be disclosed to the consumer to the extent reasonably necessary to enable the conclusion and implementation of a contract of supply to the consumer.

5.3 Protected Information

5.3.1 In this Section "Protected Information" means:

- a) for the purposes of the Operator's obligations under paragraph 5.1 any information relating to the affairs of a Shipper which is obtained by the Operator pursuant to or in the course of the implementation or performance of the Code or the Framework Agreement or the implementation of the Modification Rules;
- b) for the purposes of a Shipper's obligations under paragraph 5.2 any information relating to the affairs of the Operator or of another Shipper which is obtained by the Shipper pursuant to or in the course of the implementation or performance of the Code or the Framework Agreement to which the Shipper and (in relation to another Shipper) that other Shipper are party, or the implementation of the Modification Rules.

5.3.2 The terms of the Code and the Framework Agreement are not Protected Information.

5.4 Terms of Permitted Disclosure

5.4.1 Where Protected Information is disclosed by the Operator as permitted under paragraph 5.1.1(a) or by a Shipper as permitted under paragraph 5.2.1(a), the Disclosing Party shall (without prejudice to its obligations under paragraph 5.1.1 or 5.2.1) take reasonable steps to secure that the person to whom the information is disclosed:

- (i) is aware of the Disclosing Party's obligations under paragraph 5.1.1 or 5.2.1 in relation thereto, and
- (ii) does not use or disclose the information other than as is permitted of such Party in accordance with paragraph 5.1.1 or 5.2.1.

5.4.2 In connection with the disclosure of Protected Information pursuant to a Network Entry Agreement, Network Exit Agreement or Allocation Agreement, the existence of terms in such agreement, analogous to the term of this paragraph 5 restricting the disclosure of such information by any person to whom such Protected Information is disclosed, shall constitute reasonable steps for the purposes of paragraph 5.4.1.

5.5 Exceptions

5.5.1 For the purposes of this paragraph 5.5, "Disclosing Party" and "Protected Party" shall be construed as follows:

- a) for the purposes of the Operator's obligations under paragraph 5.1, the Disclosing Party is the Operator and the Protected Party is the Shipper to whose affairs any Protected Information relates;
- b) for the purposes of a Shipper's obligations under paragraph 5.2, the Disclosing Party is such Shipper and the Protected Party is the Party (either the Operator or another Shipper) to whose affairs any Protected Information relates.

5.5.2 Nothing in paragraph 5.1 or 5.2 shall apply:

- a) to the disclosure by the Disclosing Party of Protected Information to which the Protected Party has consented in writing;
- b) to any Protected Information which:
 - (i) before it is obtained by the Disclosing Party is in the public domain; or
 - (ii) after it is obtained by the Disclosing Party enters the public domain in either case otherwise than as a result of a breach by the Disclosing Party of its obligations under paragraph 5.1 or 5.2;
- c) to the disclosure of any Protected Information to any person if and to the extent that the Disclosing Party is required to make such disclosure to such person:
 - (i) in compliance with any Legal Requirement; or
 - (ii) pursuant to any provision of Section L or pursuant to any judicial or other arbitral process or tribunal having jurisdiction in relation to the Disclosing Party.

- d) to the disclosure of Protected Information to any lending or other financial institution proposing to provide or arrange the provision of finance to the Disclosing Party, where and to the extent that the disclosure of such information is reasonably required for the purposes of the provision or arrangement of such finance, and provided that the person to whom the information is disclosed undertakes in writing to and in terms reasonably satisfactory to the Protected Party to maintain the confidentiality of such information;
- e) to the disclosure of any Protected Information to the Director.

5.5.3 Nothing in paragraph 5.1 shall apply:

- a) the disclosure by the Operator of Protected Information:
 - (i) to any person to the extent such disclosure is required pursuant to the Modification Rules;
 - (ii) to any Shipper Agent where the disclosure by the Operator of such Protected Information to the appointing Shipper would not have infringed paragraph 5.1; or
- b) to the disclosure by any Shipper of Protected Information to any Operator Agent where the disclosure by such Shipper of such Protected Information would not have infringed paragraph 5.2.

5.6 Survival

The provisions of paragraphs 5.1 to 5.5 shall continue, for a period of 3 years after the Shipper Discontinuance Date, to bind a Discontinuing Shipper and (as respects the Discontinuing Shipper) the Operator and each other Shipper, notwithstanding that the Discontinuing Shipper has ceased to be a Shipper and irrespective of the reason for such cessation.

5.7 The Operator Licence/Authorisation

Nothing in the Code or the Framework Agreement shall be construed as requiring the Operator to disclose or use any information in breach of any requirement of the Operator Licence/Authorisation.

5.8 Data Ownership

- 5.8.1 Subject to paragraph 5.8.2(i), the data, including metering data, which is processed by or recorded or maintained by the Operator pursuant to the Code (including all intellectual property rights in such data) shall belong to the Operator; and subject to paragraph 5.8.2(ii) the Operator may use and deal with such data as it thinks fit.
- 5.8.2 Where pursuant to the Code a Shipper provides or arranges for the provision of data to the Operator:
- (i) such data (as provided to the Operator by the Shipper) shall belong to the Shipper;
 - (ii) the Shipper hereby grants to the Operator a perpetual, non-exclusive, royalty-free licence (which shall survive the Shipper Discontinuance Date) in respect of such data and all intellectual rights therein to use, copy, adapt and deal with such data for the purposes of performance and implementation of the Code and for other purposes contemplated by the Code;
 - (iii) paragraph 5.8.1 shall apply in respect of data derived (pursuant to any process) by the Operator from such data and in all compilations created by or on behalf of the Operator of such data.
- 5.8.3 Where pursuant to the Code the Operator provides data to a Shipper, the Shipper shall (but without prejudice to paragraph 5.2) be entitled without charge to use such data for the purposes of performance and implementation of the Code, and for other purposes contemplated by the Code, but not otherwise.

6. AGENTS

6.1 General

- 6.1.1 The Operator and any Shipper may, subject to and in accordance with this paragraph 6, appoint another person to be its agent (an "Agent") for the purposes of making and receiving Code Communications or particular Code Communications on its behalf.
- 6.1.2 For the purposes of the Code, a "Shipper Agent" is a person who has been appointed as Agent of a Shipper, in accordance with paragraph 6.1.1.

- 6.1.3 For the purposes of the Code, an "Operator Agent" is a person who has been appointed as Agent of the Operator in accordance with paragraph 6.1.1.
- 6.1.4 A Shipper or the Operator may appoint more than one person as Agent, but no more than one person in respect of any particular category of Code Communications;
- 6.1.5 A person may be appointed as Agent by more than one Shipper, or by the Operator and one or more Shippers.

6.2 Appointment

- 6.2.1 A Shipper wishing to appoint an Agent shall give notice to the Operator:
 - (i) specifying the identity of the appointing Shipper and the proposed Agent;
 - (ii) specifying the categories of Code Communication for which the Agent is to be appointed, or specifying that the Agent is appointed for all such categories; and
 - (iii) specifying the Day in accordance with paragraph 6.2.4 with effect from which the appointment is to take effect.
- 6.2.2 In the event that the Operator wishes to appoint an Operator Agent it shall give notice to all Shippers:
 - (i) specifying the identity of the proposed Operator Agent; (ii) specifying the categories of Code Communication for which the Operator Agent is to be appointed, or specifying that the Operator Agent is appointed for all such categories; and
 - (ii) specifying the Day in accordance with paragraph 6.2.3 with effect from which the appointment is to take place.
- 6.2.3 The appointment of an Agent shall be effective from the Day specified in accordance with paragraph 6.2.1 (iii) or 6.2.2 (iii) as the case may be, and shall continue, subject to any change under paragraph 6.2.6, until terminated in accordance with paragraph 6.2.4 or 6.2.5 as the case may be.

- 6.2.4 The appointing Shipper may terminate the appointment of a Shipper Agent by giving notice to the Operator to that effect specifying the date in accordance with paragraph 6.3.6 with effect from which such termination is to take effect.
- 6.2.5 The Operator may terminate the appointment of an Operator Agent by giving notice to all Shippers to that effect specifying the date in accordance with paragraph 6.2.6 with effect from within such termination is to take effect.
- 6.2.6 The date with effect from which an Agent is appointed, or the categories of Code Communication an Agent is appointed may be changed, or the appointment of an Agent may be terminated, shall be not less than 5 Business Days after the Shipper's notice to the Operator thereof, or as the case may be the Operator's notice to Shippers thereof.

6.3 Shipper Agent - Effect of Appointment

- 6.3.1 A Code Communication given by a Shipper Agent in its capacity as Shipper Agent shall identify the appointing Shipper on whose behalf the Code Communication is given, and (subject to paragraph 6.3.2) shall not be effective unless it does so.
- 6.3.2 Where a Shipper Agent who is itself a Shipper gives any Code Communication which does not state that it is given on behalf of an appointing Shipper and identify that Shipper, such Code Communication shall be treated as given by the Shipper Agent on its own account in its capacity as Shipper.
- 6.3.3 Any Code Communication given by a Shipper Agent within the categories for which such agent is appointed shall be deemed to have been given by and shall be binding on the appointing, Shipper and the Operator shall be entitled without enquiry as to the agent's authority to rely on such Code Communication for all purposes of the Code.
- 6.3.4 A Shipper who has appointed a Shipper Agent may continue itself to give Code Communications.
- 6.3.5 Where a Shipper has appointed one or more Shipper Agents:
 - a) the Shipper shall be responsible for ensuring that the actions of the Shipper and each such agent are not in conflict;

- b) where any Code Communication is given by the Shipper or any such agent, any Code Communication subsequently given by any of them which conflicts with the earlier Code Communication will be disregarded.

6.3.6 The Operator shall not be responsible for any unauthorised use or disclosure by a Shipper Agent of information relating to the appointing Shipper.

6.4 Operator Agent - Effect of Appointment

6.4.1 Any Code Communication given by an Operator Agent within the categories for which such agent is appointed shall be deemed to have been given by and shall be binding on the Operator, and Shippers shall be entitled without enquiry as to the agent's authority to rely on such Code Communication for all purposes of the Code.

6.4.2 In the event that the Operator has appointed an Operator Agent, it may continue itself to give Code Communications.

6.4.3 Where the Operator has appointed one or more Operator Agents:

- a) the Operator shall be responsible for ensuring that its actions and those of each such agent are not in conflict;
- b) where any Code Communication is given by the Operator or any such agent:
 - (i) to the extent any further Code Communication is subsequently given by any of them which (in accordance with the Code) is effective to modify or revoke the earlier Code Communication, the earlier Code Communication shall be so modified or revoked;
 - (ii) except as provided in paragraph (i), any Code Communication subsequently given by any of them which conflicts with the earlier Code Communication will be disregarded.

7. LIABILITY AND RELATED ISSUES

7.1 Limitation of Liability

7.1.1 Subject to the further provisions of this paragraph 7, each Party agrees and acknowledges that:

- a) no Party shall be liable to any other Party for loss arising from any breach of the Code or the Framework Agreement, other than (but without prejudice to any other provision of the Code which excludes or limits liability in respect of any breach) for loss directly resulting from such breach and which at the relevant date was reasonably foreseeable as not unlikely to occur in the ordinary course of events from such breach in respect of:
 - (i) physical damage to the property of any other Party, and/or
 - (ii) the liability (in law) of any other such Party to any other person for loss in respect of physical damage to the property of such person;
 - b) no Party shall in any circumstances be liable in respect of any breach of the Code or the Framework Agreement to any other Party for:
 - (i) any loss of profit, loss of revenue, loss of use, loss of contract, loss of goodwill, increased cost of working, or increased or additional costs in respect of the procurement or conveyance of gas; or
 - (ii) any indirect economic or consequential loss; or
 - (iii) except as provided in paragraphs 7.1.1(a)(ii) and 7.1.5, loss resulting from the liability of any other Party to any other person howsoever and whensoever arising.
- 7.1.2 For the purposes of paragraph 7.1.1(a) the **"Relevant Date"** is the date of the Framework Agreement, except that where the breach in question would not have been a breach of the Code but for a modification (pursuant to the Modification Rules or the Operator Licence) of the Code subsequent to the date of execution of the Framework Agreement, the relevant date shall be the date of such modification.
- 7.1.3 The amount or amounts for which a Party may be liable to any other Party or Parties pursuant to paragraph 7.1.1(a) in respect of any one event or circumstance constituting or resulting in the first Party's breach of a provision of the Code or the Framework Agreement shall not exceed:
- (i) as respects the liability of the Operator to any one Shipper or of any one Shipper to the Operator, US\$100,000;

- (ii) as respects the liability in aggregate of the Operator to Shippers collectively or of Shippers collectively to the Operator, US\$1,000,000.

7.1.4 Paragraph 7.1.1 is without prejudice to any provision of the Code which provides for an indemnity, or which provides for any Party to make a payment to another.

7.1.5 Nothing in the Code shall exclude, limit or constitute an indemnity in respect of the liability of any Party for death or personal injury resulting from the negligence of such Party.

7.2 Exclusion of Certain Rights and Remedies

7.2.1 The rights and remedies of the Parties pursuant to the Code and the Framework Agreement exclude and are in place of any rights or remedies of any Party in tort (including negligence and nuisance) or misrepresentation (other than fraudulent misrepresentation) in respect of the subject matter of the Code or the Framework Agreement; and accordingly, but without prejudice to paragraph 7.1.5 each Party (to the fullest extent permitted by law):

- (i) waives any rights or remedies, and
- (ii) releases each other Party from any duties or liabilities arising in tort or misrepresentation (other than fraudulent misrepresentation) in respect of the subject matter of the Code or the Framework Agreement.

7.2.2 Without prejudice to paragraph 7.2.1, where any provision of the Code provides for any amount to be payable by a Party upon or in respect of that Party's breach of any provision of the Code or the Framework Agreement, each Party agrees and acknowledges that the remedy conferred by such provision is exclusive of and is in substitution for any remedy in damages in respect of such breach or the event or circumstance giving rise thereto.

7.2.3 For the avoidance of doubt, nothing in this paragraph 7 shall prevent any Party from or restrict it in enforcing any obligation (including suing for a debt) owed to it under or pursuant to the Code or the Framework Agreement.

7.3 Effect of this Paragraph

Each provision of this paragraph 7 shall be construed as a separate and severable contract term, and shall as respects any Discontinuing Shipper survive that Shipper's ceasing to be a Shipper.

7.4 Indemnities

The amount or amounts for which a Party may be liable to any other Party or Parties pursuant to any indemnity provided for in the Code in respect of any one event or circumstance giving rise to liability under such indemnity shall not exceed:

- (i) as respects the liability of the Operator to any one Shipper or of any one Shipper to the Operator, US\$10,000,000;
- (ii) as respects the liability in aggregate of the Operator to Shippers collectively or of Shippers collectively to the Operator, US\$10,000,000.

7.5 Subject to paragraph 7.6, each Shipper shall, save as otherwise provided by the Code, indemnify and hold harmless the Operator in respect of any claims against the Operator made by any consumer to which such Shipper supplies gas, and any producer from which such Shipper procures gas in respect of any loss or damage incurred or claimed to have been incurred by such consumer or producer, against the Operator in respect of any failure by the Operator to accept the delivery of, or make available for offtake, gas, and all costs and expenses incurred by the Operator in connection thereto.

7.6 The indemnity in favour of the Operator set out in paragraph 7.5 shall not extend to any claims made against the Operator in its capacity as a purchaser of gas.

7.7 The indemnity in favour of the Operator set out in paragraph 7.5 shall not extend to any claims made against the Operator in respect of any losses in respect of any unlawful act or save where such claims arose as a result of any action taken by the Operator in accordance with the provisions of the Code, any claims in respect of physical damage.

8. FORCE MAJEURE

8.1 Meaning of Force Majeure

8.1.1 For the purposes of the Code, subject to paragraph 8.1.2, "Force Majeure" means any event or circumstance, or any combination of events and/or circumstances, the occurrence of which is beyond the reasonable control of, and could not have been avoided by steps which might reasonably be expected to have been taken by, a Party (the "Affected Party") and which

causes or results in the failure of the Affected Party to perform or its delay in performing any of its obligations owed to any other Party or Parties (each an "Other Party") under the Code, including:

- (i) war declared or undeclared, threat of war, act of public enemy, terrorist act, blockade, revolution, riot, insurrection, civil commotion, public demonstration, sabotage, act of vandalism;
- (ii) act of God;
- (iii) strike, lockout or other industrial disturbance;
- (iv) explosion, fault or failure of plant, equipment or other installation which the Affected Party could not prevent or overcome by the exercise of the degree of skill, diligence, prudence and fore-sight which would reasonably and ordinarily be expected from a skilled and experienced operator engaged in the same kind of undertaking under the same or similar circumstances;
- (v) governmental restraint or the coming into force of any Legal Requirement;
- (vi) a failure by any other Party to comply with its obligations pursuant to the Code or the Framework Agreement.

8.1.2 Inability (however caused) of a Party to pay shall not be Force Majeure.

8.1.3 The act or omission of:

- (i) any agent or contractor of a Party, or
- (ii) in relation to a Shipper, any person selling or supplying gas to such Shipper, or any Connected Facility Operator or any producer or consumer shall not be Force Majeure unless such act or omission is caused by or results from events and/or circumstances which would be Force Majeure within the meaning of paragraph 8.1.1 if such person were the Affected Party.

8.2 Effect of Force Majeure

8.2.1 Subject to paragraph 8.2.2, the Affected Party shall be relieved from liability (including any requirement under the Code to make payment of any sum or to take any other action) for any delay or failure in the performance of any obligation under the Code which is caused by or results from Force Majeure.

8.2.2 The Affected Party shall be relieved from liability under paragraph.

8.2.1 Only for so long as and to the extent that the occurrence of Force Majeure and/or the effects of such occurrence could not be overcome by measures which the Affected Party might reasonably be expected to take with a view to resuming performance of its obligations.

8.3 Information

Following any occurrence of Force Majeure, the Affected Party shall:

- a) as soon as reasonably practicable notify each Other Party of the occurrence and nature of the Force Majeure, the expected duration thereof (insofar as the same can reasonably be assessed) and the obligations of the Affected Party performance of which is affected thereby; and
- b) from time to time thereafter provide to each Other Party reasonable details of:
 - (i) developments in the matters notified under paragraph (a), and
 - (ii) the steps being taken by the Affected Party to overcome the Force Majeure occurrence or its effects and to resume performance of its relevant obligations.

9. NOTICES AND COMMUNICATIONS

9.1 General

9.1.1 The Code contemplates that Code Communications may be given by delivery or by email or (in certain cases) by telephone in accordance with paragraphs 9.2 and 9.3 subject to and in accordance with the provisions of the Code.

9.1.2 Any reference in the Code to the time or date of any Code Communication, or the giving or making of a Code Communication, is a reference to the time or date when (in accordance with this paragraph) the Code Communication is received by the Party to which it was sent.

9.1.3 Subject to paragraph 9.1.4, a Code Communication which is given after 17:00 hours on a Day shall be deemed to have been received on the following Day.

9.1.4 Paragraph 9.1.3 does not apply in respect of a communication to be made during an emergency.

9.2 Notices by Delivery, Post or Email

- 9.2.1 References in this paragraph 9.2 to a notice are to any Code Communication or other notice or communication to be given by one Party to another under the Framework Agreement.
- 9.2.2 Any notice shall be in writing and shall be addressed to the recipient Party or at the recipient Party's address or email address referred to in paragraph 9.2.3, and marked for the attention of the representative (identified by name or title) referred to in that paragraph, or to such other address or email address and/or marked for such other attention as the recipient Party may from time to time specify by notice given in accordance with this paragraph 9.2 to the Party giving the notice.
- 9.2.3 The initial address or email address of a Party, and representative for whose attention notices are to be marked, shall be as specified by a Shipper pursuant to paragraph 2.1.2(a)(iii) or by the Operator pursuant to paragraph 2.2.2.
- 9.2.4 Any notice given by delivery shall be given by letter delivered by hand.
- 9.2.5 Any notice shall be deemed to have been received:
- (i) in the case of delivery by hand, when delivered; or
 - (ii) in the case of email, on acknowledgement by the recipient Party.
- 9.2.6 Where a notice is sent by email:
- (i) the Party giving the notice shall (but without prejudice to paragraph 9.2.5(vi)) if requested by the recipient Party, resend as soon as reasonably practicable the notice by email; and
 - (ii) in the case of a Termination Notice, the Operator will in any event, within 2 Days following the sending of such email, send to the recipient Party a copy of the notice by first class prepaid post.
- 9.2.7 A Party may specify different addresses or email addresses and representatives pursuant to paragraph 9.2.2 for the purposes of notices of different kinds or relating to different matters.

9.3 Communication by Telephone

- 9.3.1 For the purposes of enabling Code Communications to be given (where required or permitted to be so given) by telephone:

- a) the Operator shall provide to each Shipper and each Shipper shall provide to the Operator not more than 3 telephone numbers (or such other number as they may agree) and details (by name or title) of the representative to whom the Party giving such a communication should speak;
 - b) each Party shall use reasonable endeavours to ensure that a Party seeking to give such communication will at any time be able to contact a representative (of the first Party) by means of one of such telephone numbers;
 - c) the Operator and each Shipper shall, if either of them shall so request, establish such further procedures as may be reasonable and appropriate for the purposes of ensuring:
 - (i) that a Code Communication being given by telephone may be identified by the recipient as such; and/or
 - (ii) that such communications may be given securely, without delay and effectively.
- 9.3.2 Where a Party seeking to give a Code Communication by telephone is unable to contact a representative of the receiving Party, such Party must give the communication by email and the communication will not be deemed to have been given except in accordance with paragraph 9.2.5(ii).
- 9.3.3 Unless otherwise agreed between the relevant Parties a Code Communication may not be given as a message recorded on a telephone answering device.
- 9.3.4 Where a Code Communication is given by telephone:
- (i) the Operator will promptly after the telephone communication is completed make and keep a record in which the time and content of the Code Communication is logged, but may do so by recording the telephone communication;
 - (ii) the Code Communication shall be treated as given at the time at which the telephone communication is completed.
- 9.3.5 A Party may specify different telephone numbers and representatives pursuant to paragraph 9.3.1 for the purposes of receiving by telephone Code Communications of different kinds or relating to different matters.

- 9.3.6 For the purposes of paragraph 9.3.4, Shippers shall be taken to have consented to any recording of Code Communications made by telephone.

10. GENERAL

10.1 Connected Facility Operators

10.1.1 Where:

- (i) the Code provides for the Operator to do anything at or affecting any System Point, the offtake of or delivery of gas from or to the System at any System Point;
- (ii) in doing that thing the Operator complies with the requirements of the Code and any other agreement with the Shipper, Connected Facility Operator in relation thereto and does not act unlawfully; and
- (iii) by reason of the Operator's doing that thing the Connected Facility Operator suffers loss or damage or claims to have done so or otherwise makes any claim or complaint or brings any action or proceeding against the Operator (other than pursuant to a contract between the Operator and such Connected Facility Operator).

The Shipper or each Shipper which is (at the time at which the Operator does such thing) the Registered Shipper in respect of the relevant Supply System Point shall indemnify the Operator and hold it harmless against any liability to such Connected Facility Operator in respect of any such loss damage, claim, complaint, action or proceeding, and all costs and expenses incurred in connection therewith.

- 10.1.2 Nothing in the Code or the Framework Agreement shall be construed as imposing upon the Operator any obligation or duty to or enforceable by a producer, consumer, Connected Facility Operator; and no Shipper shall make any commitment to any producer, consumer, Connected Facility Operator binding on or purporting to bind the Operator.
- 10.1.3 Nothing in the Code or the Framework Agreement shall prevent the Operator from exercising any right or remedy which it may have against any person other than a Shipper.

10.2 Assignment

10.2.1 Subject to paragraphs 10.2.4 and 10.2.5, a Party may assign in their entirety its rights under the Code and the Framework Agreement:

- (i) to an Affiliate of such Party; or
- (ii) with the prior agreement in writing of each relevant other Party, which shall not unreasonably be withheld, to any person.

10.2.2 For the purposes of this paragraph 10.2, a relevant other Party is:

- (i) where the assigning Party is the Operator, each other Shipper;
- (ii) where the assigning Party is a Shipper, the Operator.

10.2.3 Except as provided in paragraph 10.2.1, a Party shall not assign or transfer and shall not purport to assign or transfer any of its rights or obligations under the Code or the Framework Agreement.

10.2.4 No assignment shall be made to a person unless:

- (i) where the assigning Party is the Operator, that person holds an Operator's Licence/Authorisation;
- (ii) where the assigning Party is a Shipper, that person holds a Licence/Authorisation and has complied with the other requirements which (if the person were an Applicant Shipper) it would be required under paragraph 2 to comply with.

10.2.5 Where a Party assigns its rights under the Code and the Framework Agreement to a person (including an Affiliate) pursuant to paragraph 10.2.1:

- (i) it shall be a condition precedent to such assignment that such person shall enter into an Agreement with each relevant other Party covenanting to be bound by the Framework Agreement and the Code;
- (ii) the assigning Party shall be released from obligations under the Code and the Framework Agreement arising after the time at which the assignment is effective, but shall remain liable for any obligations accruing up to such time.

10.2.6 A reference in the Code or the Framework Agreement to any Party shall be deemed to include a reference to that Party's successors and assigns.

10.3 Operator Performance

10.3.1 In relation to exercising its discretion and performing obligations under the Code the Operator shall at all times:

- a) act in a reasonable and prudent manner in relation to the management and operation of the System; and
- b) act reasonably and in good faith in its dealings with Shippers;

save that the foregoing shall not apply to the extent that:

- (i) there is any standard of performance already provided for by any statute, regulation or licence condition to which the Operator is subject; or
- (ii) the Operator would thereby be required to act in a manner which would conflict with any Legal Requirement.

10.3.2 The operation of this paragraph 10.3 shall not invalidate any determination made by, or act of, the Operator pursuant to the Code, or any Code Communication.

10.4 Waiver

10.4.1 No delay by or omission of any Party in exercising any right, power, privilege or remedy under the Code or the Framework Agreement shall operate to impair such right, power, privilege or remedy or be construed as a waiver thereof.

10.4.2 Any single or partial exercise of any such right, privilege or remedy shall not preclude any other or future exercise thereof or the exercise of any other right, power, privilege or remedy.

10.5 Language

Every Code Communication, and every notice or other communication to be given by one Party to another under the Framework Agreement, shall be in the English language.

10.6 Severance

If any provision of the Code or the Framework Agreement is or becomes invalid, unenforceable or illegal, or is declared to be invalid, unenforceable or illegal by any court of competent jurisdiction or by order of any other Competent Authority, such invalidity, unenforceability or illegality shall not prejudice or affect the remaining provisions of the Code or the Framework Agreement which shall continue in full force and effect notwithstanding the same.

10.7 Entire Agreement

- 10.7.1 The Code and the Framework Agreement contain or expressly refer to the entire agreement between the Parties with respect to the subject matter thereof, and supersede all previous agreements or understandings between the Parties with respect thereto; and any warranty, condition or other term implied at law or by custom is (to the fullest extent permitted by law) expressly excluded therefrom.
- 10.7.2 Each Party acknowledges that in entering into the Framework Agreement it does not rely on any representation, warranty or other understanding not expressly contained in the Code or the Framework Agreement.
- 10.7.3 Nothing contained in a document (other than the Framework Agreement) referred to in the Code, beyond what is expressly contemplated by the Code as being contained in such document or is necessary for the purposes of giving effect to a provision of the Code, shall modify or have any effect for the purposes of the Code or be construed as relevant to the interpretation of the Code.

10.8 Jurisdiction

- 10.8.1 Subject and without prejudice to the provisions of Section L as to Expert Determination, all the Parties irrevocably agree that the courts of Nigeria are to have exclusive jurisdiction to settle any disputes which may arise out of or in connection with the Code and the Framework Agreement and that accordingly any suit, action or proceeding (collectively "proceedings") arising out of or in connection with the Code or the Framework Agreement may be brought in such courts.
- 10.8.2 Each Party irrevocably waives any objection which it may have now or hereafter to the laying of the venue of any proceedings in any such court as is referred to in paragraph 10.8.1 and any claim that any such proceedings have been brought in an inconvenient forum and further irrevocably agrees that a judgement in any proceedings brought in Nigeria shall be conclusive and binding upon such Party and may be enforced in the courts of any other jurisdiction.
- 10.8.3 Any Party which is not a company incorporated under the Companies and Allied Matters Act shall provide to the Operator an address in Nigeria for service of process on its behalf in any proceedings.

10.9 Governing Law

The Code and the Framework Agreement shall be governed by, and construed in all respects in accordance with, the law of The Federal Republic of Nigeria.

SECTION N: INTERPRETATION

SECTION N: INTERPRETATION

1. DEFINED TERMS

In addition to terms defined elsewhere in the Code, the following terms and expressions are used with the following meanings in the Code:

"Allocation Agreement": an agreement in respect of a System Point whereby deliveries or offtake of gas to or from the System may be allocated between Shippers;

"Code Communication": any communication to be given by a Shipper or the Operator (including any notification, application, nomination, confirmation, request, approval, acceptance, invoice or other notice to be given, made or submitted) under the Code;

"Code Modification": a modification of the Code pursuant to the Modification Rules or the Operator Licence;

"Competent Authority": the Director, or any local, national or supra-national agency, authority, department, inspectorate, minister, official, court, tribunal or public or statutory person (whether autonomous or not) of Nigeria (or the government thereof) which has jurisdiction over the Operator or a Shipper or the subject matter of the Code;

"Consumer's Plant": in respect of any System Exit Point, the plant and/or equipment in which gas offtaken from the System at that point is to be used (including any plant or equipment in which gas is compressed or otherwise treated before being consumed);

"Transportation Charge Statement": the prevailing statement furnished by the Operator to the Department under the Operator Licence;

"Department": the Department of Petroleum Resources;

"Directive": any present or future directive, request, requirement, instruction, code of practice, direction or rule of any Competent Authority (but only, if not having the force of law, if it is reasonable in all the circumstances for it to be treated as though it had legal force), and any modification, extension or replacement thereof.

"Director": the Head of the Department;

"Legal Requirement": any legislation, regulation, licence, or Directive of a Competent Authority;

"Modification Rules": the modification rules (which do not form part of and are not incorporated into the Code) prepared by the Operator pursuant to Licence/Authorisation reference.

"Operator": Nigerian Gas Company Limited and any other pipeline system owner that is granted an Operator Licence/Authorisation by the Department to become an operator under the Network Code;

"Operator Licence/Authorisation": the Licence/Authorisation granted to the Operator by the Department, as from time to time in force;

"Own Use Gas": gas used by the Operator in connection with the operation of the pipeline system, including gas used for compression, preheating and vented gas (such venting being counted for the purposes hereof as use by the Operator).

"Recognised Standard": any technical, engineering or other standard, issued or published by any governmental body or professional or other institution, and generally recognised as applying to the gas industry in Nigeria, as from time to time applicable;

"Shipper's Licence": a licence for the shipping of gas granted by Department of Petroleum Resources to a Shipper or Applicant Shipper;

"Shipper": a person other than the Operator acting in its capacity as licensee who is for the time being bound by the Code pursuant to the Framework Agreement.

2. INTERPRETATION

2.1 General

2.1.1 Unless the context otherwise requires, words and expressions defined in or for the purposes of the Code shall have the meanings ascribed thereto under the Code.

2.1.2 In the Code, unless the context otherwise requires:

- (i) a reference to a particular Section, paragraph, or Annex is to a paragraph or Section of or Annex to a Section of the Network Code Principal Document;
- (ii) a reference in a particular Section to a particular paragraph is to a paragraph of that Section;
- (iii) words in the singular may be interpreted as including the plural and vice versa;
- (iv) the word "including" is to be construed without limitation;

- (v) a derivative term of any defined or interpreted term shall be construed in accordance with the relevant definition or interpretation.

2.1.3 A reference in the Code to any Legal Requirement shall be construed, at any particular time, as including a reference to any modification, extension or re-enactment (before or after the date of the Code) of that Legal Requirement in force at that time.

2.1.4 Section and paragraph headings in the Code and clause headings in the Framework Agreement are for ease of reference only and shall not affect the interpretation of any provision thereof.

2.2 Times and Dates

2.2.1 For the purposes of the Code:

- a) "Day" means the period from 06:00 hours on one day until 06:00 hours on the following day;
- b) "Business Day" means a Day other than a Saturday or a Sunday, or a Day which begins at 06:00 hours on a public holiday in Nigeria as declared by the Federal Government of Nigeria;
- c) "Gas Flow Day" means, in relation to the application of any provision of the Code, the Day in relation to deliveries, offtakes or flows of gas or other operations on which such provision is to apply;
- d) "Preceding Day" means the Day before the Gas Flow Day;
- e) "Gas Year" means the period from 1st January in any year until and including 31st December in that year;
- f) in relation to any Gas Year the "Preceding Year" is the Gas Year ending at the start of such Gas Year;

2.2.2 Unless the context otherwise requires, a reference in the Code:

- a) to a calendar day (such as 1st January) or a day of the week (such as Sunday) is to the Day which begins at 06:00 hours on that day;
- b) to a week is to the period from 06:00 hours on a day until 06:00 hours on the 7th day following;

- c) to a month (or a number of months) is to the period from 06:00 hours on a day in one month until 06:00 hours on the same day of the month which follows (or follows by the relevant number of months), or if there is no such day in such month 06:00 hours on the first day of the next following month;
- d) to a calendar month is to the period from 06:00 hours on the first day of a month until 06:00 hours on the first day of the following month, and references to a particular calendar month (such as January) shall be construed accordingly;
- e) to a year is to the period from 06:00 hours on a day in one year until 06:00 hours on the same day (or where the day in the first year was 29th February, on 1st March) in the following year;
- f) to a calendar year (such as 2011) is to be construed accordingly.

2.2.3 References to times of the day in the Code are to official time in Nigeria.

2.2.4 Except where otherwise provided:

- a) where anything is to be done under the Code by or not later than a Day or any period under the Code is to run to a Day, such thing may be done or such period shall run up to the end of such Day;
- b) where anything is to be done under the Code from or not earlier than a Day or any period under the Code is to run from a Day, such thing may be done or such period shall run from the start of such Day.

2.2.5 Where under any provision of the Code the Operator or a Shipper is required to provide any information by a certain date or time, the relevant provision shall be taken to include a requirement that such information shall be provided not earlier than is reasonable before such date or time.

2.3 System Clearing Contract

2.3.1 A "System Clearing Contract" is a contract between the Operator and a Shipper pursuant to which a quantity of gas (which is or was or is not or was not delivered to or offtaken from the System) is treated as purchased and sold.

2.4 Costs and Expenses

2.4.1 For the purposes of any provision of the Code which requires a Shipper or the Operator to pay or reimburse to the Operator or a Shipper (as the case may be) any costs or expenses incurred by the Operator or the Shipper in undertaking any works or performing any service:

- (i) such costs and expenses shall be treated as including a reasonable and appropriate amount in respect of internal costs, including costs of capital, personnel, and materials and reasonable overhead costs, so far as the scope of what is so included is reasonable and appropriate in the circumstances;
- (ii) no element of profit (other than what is implicit in cost of capital under paragraph (i)) shall be included in such costs and expenses;
- (iii) in the case where a Shipper is to pay or reimburse the Operator, where works or services of the same, or of a similar, kind are undertaken or performed by the Operator under engagements of service for Shippers or others, such costs and expenses shall be deemed to be the charges that would at the relevant time be made by the Operator for any such engagement for the relevant works or services (or those most similar);
- (iv) any dispute as to the amount of such costs and expenses shall be referred to Expert Determination.

2.5 Demand

2.5.1 For the purposes of the Code "demand" or "demand for gas", in or in respect of the System or any part of or point on the System, and on any Day or in any other period, is the quantity of gas, offtaken or to be offtaken from the System or that part of the System or at that point on that Day or in that period.

2.6 Miscellaneous

2.6.1 A reference in the Code to:

- a) a "consumer" is a reference to a person who is supplied at particular premises with gas conveyed to particular premises by means of the System whether or not such gas is subsequently conveyed by means of a Connected Offtake Facility;

b) a "producer" is a reference to a person from whom a Shipper has contracted to buy gas.

2.6.2 Where any provision of the Code requires or entitles the Operator to "publish" any information or document, the Operator will provide such information or document to each Shipper, any other person to whom the Operator may (pursuant to the Operator Licence or any other Legal Requirement or any provision of the Code) be required to provide such information and (subject to Section M5) such other persons as the Operator shall think fit.

2.6.3 A reference in the context of any provision of the Code to a "representative" of any person is a reference to any director, officer or employee of that person or any agent, consultant or contractor appointed or engaged by that person for purposes connected with the subject matter of the relevant provision of the Code.

2.6.4 A reference in the Code to the quantities in which or rate or pressure at which it is "feasible" for the Operator to make gas available for offtake from the System at a System Exit Point is a reference to what is in the Operator's reasonable judgement operationally and technically feasible without prejudicing System security, without reinforcement of the System and without prejudicing the Operator's ability to perform its obligations under the Code, or any other contract for the conveyance of gas on the System, or to comply with any Legal Requirement.

2.6.5 An "**Affiliate**" in relation to a body corporate is:

- (i) another body corporate which holds not less than 50% percentage of the voting rights of the first body corporate; or
- (ii) a subsidiary of the first body corporate or of such a body corporate as is referred to in paragraph (i);

and for these purposes '**voting rights**', '**holding**' voting rights and '**subsidiary**' are to be construed in accordance with legislation.

3. TECHNICAL INTERPRETATION

3.1 Gas

3.1.1 In the Code, unless the context otherwise requires, "**gas**" means any hydrocarbons or mixture of hydrocarbons and other gases consisting primarily of methane which at a temperature of 15°C and an absolute pressure of 1.01325 bar are or is predominantly in the gaseous state.

3.1.2 Unless the context otherwise requires, for the purposes the Code:

- (i) a **"quantity"** of gas is a quantity in mmbtu;
- (ii) a **"volume"** of gas is a volume in MMscf/D.

3.2 Units and other Terms

3.2.1 The following terms have the following meanings in the Code:

- **"bar"**: the bar as defined in ISO 1000-1981(E);
- **"calorific value"**: that number of Megajoules produced by the complete combustion at a constant absolute pressure of 1.01325 bar of 1 Cubic Metre of gas at a temperature of 15°C with excess air at the same temperature and pressure as the gas when the products of combustion are cooled to 15°C and when the water formed by combustion is condensed to the liquid state and the products of combustion contain the same total mass of water vapour as the gas and air before combustion; and for the avoidance of doubt calorific value shall be REAL as defined in ISO 6976-1:1983(E);
- **"Cubic Metre" or "M³"**: when applied to gas, that amount of gas which at a temperature of 15°C and an absolute pressure of 1.01325 bar and being free of water vapour occupies one 1 cubic metre;
- **"degree Celsius" and "°C"**: the particular interval between the temperature in Kelvin and the temperature 273.15 Kelvin as defined in ISO 1000-1981(E);
- **"gauge" or its abbreviation "g"**: when used in relation to pressure, the pressure in excess of 1 standard atmosphere where 1 standard atmosphere is 1.01325 bar;
- **"hour"**: the hour as defined in ISO 1000-1981(E);
- **"Joule"**: the joule as defined in ISO 1000-1981(E);
- **"kilogram"**: the kilogram as defined in ISO 1000-1981(E);
- **"mbar"**: one thousandth of a bar;
- **"MCM"**: 1,000,000 Cubic Metres;
- **"Megajoule" or "MJ"**: 1,000,000 Joules;

- **"metre"**: the metre as defined in ISO 1000-1981(E);
- **"mmbtu"**: Million British Thermal units;
- **"mol%"**: molecular percentage;
- **"MW"**: 1,000,000 Watts;
- **"pascal"**: the pascal as defined in ISO 1000-1981(E);
- **"ppm"**: parts per million by volume;
- **"Relative Density"**: shall mean the mass of a volume of dry gas divided by the mass (expressed in the same units) of an equal volume of dry standard air as defined in ISO 6976-1:1983(E) both such gases being at a temperature of 150C and an absolute pressure of 1.01325 bar; and Relative Density (REAL) shall for the avoidance of doubt be REAL as defined in ISO 6976-1:1983(E);
- **"second"**: the second as defined in ISO 1000-1981(E);
- **"Specific Gravity"**: the mass of a volume of dry gas divided by the mass (expressed in the same units) of an equal volume of dry standard air (as defined in ISO 6976-1:1983(E)) both gases being at a temperature 150C and an absolute pressure of 1.01325 bar;
- **"Watt"**: 1 Joule per second;
- **"Wobbe Index"**: when applied to gas, the calorific value divided by the square root of the Relative Density.

3.3 Calorific Value

3.3.1 A reference in the Code to **"calorific value"** or to **the "relevant calorific value"** of gas delivered to or offtaken from the System shall be a reference:

- a) in the context of a System Entry Point, to the calorific value of gas delivered to the System established in accordance with the relevant provisions (if any) of the Network Entry Provisions;
- b) in the context of a Transmission System Exit Point to the calorific value established in accordance with the relevant provisions (if any) of the Network Exit Agreement.

3.3.2 Any reference to a quantity of gas delivered or to be delivered to, or offtaken or to be offtaken from, the System at a System Entry Point or (as the case may be) System Exit Point shall be construed in accordance with paragraph 3.3.1 above.

3.4 Conversions

3.4.1 Where to give effect to any provision of the Code it is necessary to compare an amount of gas which is or is to be delivered to or offtaken from the System, or a rate of such delivery on offtake, expressed in terms of quantity, with such an amount or rate expressed in terms of volume, a conversion shall be made on the basis of the applicable calorific value in accordance with paragraph 3.3.1.

3.4.2 Where to give effect to any provision of the Code it is necessary to do so, a rate of delivery or offtake of gas to or from the System, or any amount of System Capacity, expressed in quantity or volume units per Day, or per hour, or in MMscf per hour, shall be treated as expressed in any other such units on the basis of the appropriate conversion.