

UNIFORM NETWORK CODE – TRANSPORTATION PRINCIPAL DOCUMENT

**SECTION D – OPERATIONAL BALANCING AND TRADING
 ARRANGEMENTS¹**

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; and
- (b) within such operational tolerance as National Grid NTS may determine; and
- (c) after taking account of estimated shrinkage and intended changes in NTS Linepack and LDZ stock; and
- (d) having regard to all Transportation Constraints and other factors relevant to the operation of the Total System

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

1.1.2 For the purposes of Operational Balancing (and without prejudice to Section Q) National Grid NTS may:

- (a) utilise Operating Margins in accordance with Section K; and/or
- (b) take Eligible Balancing Actions in accordance with this Section D.

1.1.3 For the purposes of the Code an "**Operational Balancing Requirement**" is any requirement for Operational Balancing Steps to be taken; and "**Operational Balancing Steps**" are steps taken by National Grid NTS pursuant to the Code for the purposes of Operational Balancing.

1.1.4 It is acknowledged that the measures referred to in paragraph 1.1.2 are among the measures which are specified in the statement prepared by National Grid NTS pursuant to Special Condition 8A of National Grid NTS's Transporter's Licence, and that such statement does not form a part of and is not incorporated into, and is not binding upon National Grid NTS pursuant to, the Code.

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 NTS over the whole

¹ Implementation of modification 0504 effective 05:00hrs on 01/03/2016, will amend this document in whole or in part.

of the Gas Flow Day are more or less (after taking account of NTS shrinkage and any intended changes in NTS Linepack) than those expected to be offtaken from the NTS over the whole of that Day;

- (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 NTS) pressures in the NTS and/or NTS Linepack are or are expected to be more or less than the operationally acceptable limit determined by National Grid NTS.

- 1.2.2 Operational Balancing Steps 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).
- 1.2.3 Subject to the provisions of Section C, National Grid NTS will accept a Renomination for any Renomination Effective Time, irrespective of whether an Operational Balancing Requirement under paragraph 1.2.1(b) may arise as a result.

1.3 Operational Balancing decisions

- 1.3.1 In making decisions as to the taking of Operational Balancing Steps, National Grid NTS will and shall be entitled to take into account such information as it shall judge appropriate, including:
 - (a) its own estimates of demand and profiles of demand within the Day;
 - (b) Nomination Information under Output Nominations (including Renominations pursuant to Interruption of Interruptible Supply Points and Constrained Storage Renominations); and, in respect of NExA Supply Meter Points and Connected System Exit Points, information provided pursuant to Section J4, J5 or J6 and the applicable Network Exit Provisions; and similar information provided to National Grid NTS pursuant to any other transportation arrangement;
 - (c) Nomination Information under Input Nominations; and
 - (d) Local Operating Information.
- 1.3.2 "**Nomination Information**" means information, concerning the rates at and quantities in which gas is to be delivered to or offtaken from the Total System, which is provided under or can be inferred from Users' Nominations (including Renominations), System Trade Nominations and Transaction Details.
- 1.3.3 Without prejudice to National Grid NTS's entitlement (under paragraph 1.3.1) to take account of such information as it judges appropriate, where after any Renomination is made there is any inconsistency (outside such tolerance as National Grid NTS may reasonably determine to be appropriate) between Nomination Information and Local Operating Information in respect of any System Entry Point:
 - (a) National Grid NTS may view Nomination Information as decreasingly reliable, and Local Operating Information as increasingly reliable, with the passage of time (during the Gas Flow Day) after the relevant Renomination;

- (b) to the extent that Nomination Information proves to have been more accurate than any Local Operating Information on which National Grid NTS may have relied, an additional Operational Balancing Requirement may arise.

1.4 Eligible Balancing Actions

1.4.1 For the purposes of the Code.

- (a) **"Eligible Balancing Actions"** are:
 - (i) Market Balancing Actions;
 - (ii) other actions provided for in the Code to be 'Eligible Balancing Actions';
- (b) the **"Market Balancing Action Charge"** is the amount payable by or to National Grid NTS in respect of a Market Balancing Action;
- (c) a **"Market Balancing Action"** is a Market Balancing Buy Action or a Market Balancing Sell Action.
- (d) a **"Market Balancing Buy Action"** is the effecting of a Balancing Transaction between National Grid NTS and a User, pursuant to which the User agrees to make a Disposing Trade Nomination;
- (e) a **"Market Balancing Sell Action"** is the effecting of a Balancing Transaction between National Grid NTS and a User, pursuant to which the User agrees to make an Acquiring Trade Nomination;
- (f) **"Market Balancing Action Quantity"** is the Trade Nomination Quantity in respect of a Market Balancing Action;
- (g) **"NTS Linepack"** is, for a Day, the volume of gas within the National Transmission System (ascertained in accordance with the principles set out in the statement prepared by National Grid NTS pursuant to Special Condition 8A of National Grid NTS's Transporter's Licence);
- (h) **"Balancing Transaction"** is a Market Transaction or a Non-Trading System Transaction;
- (i) **"Balancing Transaction Charge"** is a Market Transaction Charge or a Non-Trading System Transaction Charge; and
- (j) **"Balancing Action Offer Price"** is the Market Offer Price or Non-Trading System Offer Price (as the case may be) in respect of a Balancing Transaction.

1.4.2 National Grid NTS will maintain a record (which, without prejudice to any other provision of the Code, will not be available to Users) of each Eligible Balancing Action taken.

1.4.3 For the purposes of the Code:

- (a) the **"highest Market Offer Price"** is either the highest Market Offer Price or

highest Non-Trading System Offer Price for the Gas Flow Day in question; and

- (b) the “**lowest Market Offer Price**” is either the lowest Market Offer Price or lowest Non-Trading System Offer Price for the Gas Flow Day in question.

1.5 Localised Transportation Deficit

- 1.5.1 Where after 24:00 hours on the Preceding Day it appears to National Grid NTS that a Localised Transportation Deficit, Transportation Constraint, Entry Capability Shortfall or Firm Capacity Shortfall is likely to arise or has arisen, National Grid NTS may take (at such times as it judges operationally appropriate) Market Balancing Buy Action(s) and/or Market Balancing Sell Action(s) as required at relevant System Point(s) with a view to gas flow rates at such System Points being increased or (as the case may be) decreased so as to avoid or remedy the Localised Transportation Deficit, Transportation Constraint, Entry Capability Shortfall or Firm Capacity Shortfall.
- 1.5.2 In paragraph 1.3 references to Operational Balancing shall be construed as including the taking of Market Balancing Buy Actions or Market Balancing Sell Actions by National Grid NTS under paragraph 1.5.1 and Market Balancing Sell Actions or Market Balancing Buy Actions taken as a consequence with a view to maintaining an Operational Balance and references to Operational Balancing Steps and Operational Balancing Requirements will be construed accordingly.
- 1.5.3 For the purposes of the Code a “**Localised Transportation Deficit**” is a condition affecting a part of the NTS resulting in a deficiency in the quantities of gas which National Grid NTS is able to make available for offtake from that part of the NTS whether such condition results from the size of any part of the NTS, the operation or failure to operate any part of the NTS or the extent or distribution of supply or demand in any part of the NTS but which does not result from a Transportation Constraint affecting a particular System Entry Point or System Entry Points.

1.6 Emergencies

In a Network Gas Supply Emergency the provisions of this Section D, shall apply to the extent provided by Section Q.

1.7 Scottish Independent Networks

- 1.7.1 References in this Section D to the NTS do not include references to the Scottish Independent Networks.
- 1.7.2 Injection of gas to LNG Facilities for the purposes described in Section B1.9.2(a) will take place only at certain times of the year and not at a uniform rate through the year; and accordingly quantities delivered by Users to the Total System with a view to balancing the quantities offtaken from the Scottish Independent Networks will at certain times of the year exceed, and at others be less than, the quantities offtaken from the Total System for injection into LNG Facilities for such purposes.
- 1.7.3 National Grid NTS will manage and account for the differences in quantities referred to in paragraph 1.7.2 as changes in NTS Linepack (potentially giving rise to or contributing to Operational Balancing Requirements) each Day; and will not be treated

as a User of the NTS in so doing.

- 1.7.4 In accordance with paragraph 1.7.3, Storage Injection Nominations made by the Transporter for the purposes referred to in paragraph 1.7.2 will not take effect as Output Nominations.

1.8 DNO Users

In this Section D references to Users exclude DNO Users other than a DNO User in its capacity as an LDZ Shrinkage Provider.

1.9 Trader User

In this Section D references to Users include Trader Users.

2 TRADING ARRANGEMENTS

2.1 On the Day Market

- 2.1.1 Where National Grid NTS appoints a person who has established a market for the purposes referred to in Standard Special Condition A11(22A and 22B), inserted by Special Condition C6 of National Grid NTS's Transporter's Licence, National Grid NTS will make arrangements with such person pursuant to which such person will provide and operate an electronic trading system by means of which Users and National Grid NTS may (if they have been admitted by such person as participants in such system) post and accept (and revise and withdraw) offers to effect Market Transactions.
- 2.1.2 Without prejudice to the provisions of Section V4, provided such person has complied with the relevant requirements of Section V2, National Grid NTS will admit the Trading System Clearer as a User pursuant to Section V2.5.1 for the purposes only of making Trade Nominations (including System Trade Nominations) pursuant to Section C5.
- 2.1.3 For the purposes of the Code:
- (a) "**Trading System**" is an electronic trading system provided and operated by the Trading System Operator for the purposes described in paragraph 2.1.1; provided that references to the Trading System shall not include any part of such system by means of which transactions other than Market Transactions may be effected, or by means of which Market Transactions (other than Multi-Day Balancing Transactions) may be effected earlier than the 08:00 hours on the Day before the Gas Flow Day;
 - (b) "**Trading System Operator**" is the person providing and operating the system referred to in paragraph (a);
 - (c) "**Trading System Clearer**" is the Trading System Operator, or a person designated by the Trading System Operator to provide clearing services for the purposes of the Trading System;
 - (d) "**Trading System Arrangements**" are the arrangements including the rules for use of the Trading System made by the Trading System Operator in respect of the provision and operation of the Trading System;

- (e) **"Trading System Contract"** is the contract between National Grid NTS and the Trading System Operator setting out the arrangements made by National Grid NTS for the purposes of paragraph 2.1.1.
- 2.1.4 The requirement to make arrangements in paragraph 2.1.1 is without prejudice to National Grid NTS's rights of termination pursuant to the Trading System Contract and National Grid NTS shall not be in breach of the obligation in paragraph 2.1.1 were the Trading System Contract to terminate as a consequence of:
- (a) National Grid NTS exercising its rights of termination thereunder;
 - (b) the Trading System Operator ceasing to, or otherwise being unable to, carry on its business in providing and operating the Trading System;
 - (c) the giving of a Termination Notice by National Grid NTS pursuant to paragraph 2.9.3 of the Network Code Supplement.
- 2.1.5 National Grid NTS shall not be liable to any User for any act, omission or failure of the Trading System Operator under or relating to the terms of the Trading System Contract or the Trading System Arrangements and National Grid NTS shall not be required to incur any liability or be required to take any steps, including the commencement of proceedings in connection with the enforcement against the Trading System Operator of its rights pursuant to the Trading System Contract.

2.2 Market Transactions and Trading Arrangements

2.2.1 For the purposes of the Code:

- (a) a **"Market Transaction"** is a transaction effected (by means of the Trading System) between two Trading Participants, pursuant to which the Trading System Clearer agrees with each of the Trading Participants separately to make equivalent Trade Nominations (so that the Trading System Clearer agrees with one such participant to make an Acquiring Trade Nomination, and with the other such participant to make a Disposing Trade Nomination);
- (b) the **"Originating Participant"** in relation to a Market Transaction is the Trading Participant which posted (using the Trading System) the offer, acceptance of which by National Grid NTS or another User (the **"Accepting Participant"**) effected such transaction; and where the Originating Participant is a User it is an **"Originating User"**;
- (c) a **"Physical Market Transaction"** is a Market Transaction pursuant to which the Originating User agrees:
 - (i) to modify the quantity of gas to be delivered to and/or offtaken from the System by the User in aggregate on the Gas Flow Day by an amount equal to the Trade Nomination Quantity (and to modify the rate of such delivery and/or offtake accordingly); and
 - (ii) accordingly to make a Nomination(s) or Renomination(s) in accordance with paragraph 2.3;

- (d) a "**Locational Market Transaction**" is a Physical Market Transaction pursuant to which the Originating User agrees to make a Nomination or Renomination in respect of a specified System Point in accordance with paragraph 2.3;
- (e) a "**Non-physical Market Transaction**" is a Market Transaction which is not a Physical Market Transaction;
- (f) in respect of an Originating User and in relation to a Physical Market Transaction an "**Eligible Trading System Point**" is a System Point in respect of which the following conditions are satisfied:
- (i) the System Point is:
 - (1) a System Entry Point in respect of which the User has complied with the requirement in Section B1.5; or
 - (2) a Supply Point in respect of which the User is the Registered User and in relation to which the User may submit a separate Output Nomination; or
 - (3) an eligible Connected System Exit Point in relation to which the User is a CSEP User; and
 - (ii) in the case of a Physical Market Transaction under which the Originating User has agreed to reduce:
 - (1) the quantity of gas to be delivered to the Total System at a System Entry Point, the User has made an Input Nomination for the Gas Flow Day at such System Entry Point; or
 - (2) the quantity of gas to be offtaken from the Total System at a System Exit Point, the User has made an Output Nomination for the Gas Flow Day at such System Exit Point
- in either case for which the Implied Nomination Flow Rate is not less than the Market Transaction Flow Rate Change;
- (g) "**Contract Renomination**" is a Renomination made or to be made by a User (pursuant to a Physical Market Transaction) in accordance with paragraph 2.3;
- (h) in relation to a Physical Market Transaction the "**Contract Renomination Time**" is the later of 19:00 hours on the Day preceding the Market Offer Date and that time falling 60 minutes after notification by the Trading System Operator to National Grid NTS of the Transaction Details, but not later than 03:00 hours on the Market Offer Date;
- (i) in respect of a Market Transaction the "**Contract Renomination Time**" are those details to be provided to National Grid NTS by the Trading System Operator (in accordance with the Trading System Arrangements) when the Trading System Operator notifies National Grid NTS that the Market Transaction has been effected;
- (j) "**Trading Participant**" means a User (other than one admitted pursuant to Section V2.5.1) or National Grid NTS, which is for the time being admitted by

the Trading System Operator as a participant under the Trading System in relation to Market Transactions;

- (k) references to '**acceptance**' of an offer include acceptance by 'order matching', that is where the posting of the later posted of two matching orders acts as the acceptance of the earlier posted of such orders.
- 2.2.2 The Trading System Contract will provide for the Trading System Arrangements to be consistent with Annex D-1 and will in addition contain provision whereby the Trading System Operator shall covenant with National Grid NTS not to make any modification, change or other alteration to the Trading System Arrangements in respect of a matter within the scope of Annex D-1 other than with the prior written agreement of National Grid NTS.
- 2.2.3 National Grid NTS shall not agree with the Trading System Operator pursuant to the terms of the Trading System Contract to any amendment, change or other alteration to the Trading System Arrangements in respect of a matter within the scope of Annex D-1 unless pursuant to a Code Modification Annex D-1 has been amended in a manner such that following such modification Annex D-1 is consistent with the Trading System Arrangements following the amendment, change or alteration thereto.
- 2.2.4 In the event that pursuant to a Code Modification the terms of Annex D-1 are modified, changed or otherwise altered, National Grid NTS shall not be required to secure that the Trading System Operator modify the Trading System Arrangements such that they are made consistent with Annex D-1 following such Code Modification.
- 2.2.5 The Trading System Arrangements will provide that, following the effecting of a Market Transaction, the Trading System Operator will submit, on its own account (or where the Trading System Operator and the Trading System Clearer are different persons, on the Trading System Clearer's behalf) and as User Agent on behalf of the Originating and Accepting Participants, the Trade Nominations agreed to be made pursuant to such Market Transaction.
- 2.2.6 The Trading System Operator shall be deemed to have submitted Trade Nominations pursuant to paragraph 2.2.5 (and complying with Section C6.2) by notifying to National Grid NTS details of the Market Transaction pursuant to those provisions of the Trading System Arrangements which comply with paragraph 5.4(c) of Annex D-1.
- 2.2.7 A Trading Participant may not post a Market Offer to effect a Physical Market Transaction in relation to which the Market Transaction Lead Time is less than one (1) hour.
- 2.2.8 Where National Grid NTS takes a Market Balancing Action:
- (a) in the case of a Market Balancing Sell Action (or negatively priced Market Balancing Buy Action) the Trading System Clearer shall pay to National Grid NTS the Market Balancing Action Charge;
- (b) in the case of a Market Balancing Buy Action (or negatively priced Market Balancing Sell Action) National Grid NTS shall pay the Trading System Clearer the Market Balancing Action Charge.
- 2.2.9 The Market Balancing Action Charges payable pursuant to paragraph 2.2.8 shall:

- (a) in the case of Multi-Day Balancing Transactions, be calculated on the basis of the original Market Offer Price; and
- (b) in the case of any other Market Transaction, be calculated on the basis of the Market Offer Price;

and such Market Balancing Action Charges shall be invoiced and are payable in accordance Section S.

2.3 Contract Renominations

2.3.1 Subject to paragraph 2.3.6, where a Physical Market Transaction is effected, the Originating User shall make Contract Renomination(s) which are in compliance with the requirements in paragraphs 2.3.2 and 2.3.3.

2.3.2 The requirements referred to in paragraph 2.3.1 are that:

- (a) without prejudice to Section C4.1.3(b), the Contract Renomination(s) are submitted not earlier than the time the Trading System Operator notifies National Grid NTS of the Transaction Details and not later than the Contract Renomination Time;
- (b) the Contract Renomination(s) shall be submitted in accordance with Section C4.1.5 and shall in addition specify:
 - (i) that the Renomination is a Contract Renomination;
 - (ii) the Physical Market Transaction in respect of which it is made;
- (c) a Contract Renomination may not for the purposes of paragraph (b) specify more than one Physical Market Transaction;
- (d) where the User is required to make Contract Renomination(s):
 - (i) other than pursuant to a Locational Market Transaction, the Contract Renomination(s) submitted by the User shall:
 - (1) be in respect of an Eligible System Trading Point(s); and
 - (2) be for Renomination Quantity(ies) in aggregate equal to the Trade Nomination Quantity in respect of which the relevant Physical Market Transaction was effected;
 - (ii) pursuant to a Locational Market Transaction, the Contract Renomination submitted by the User shall:
 - (1) be in respect of the Eligible System Trading Point in respect of which the Locational Market Transaction was effected; and
 - (2) be for a Renomination Quantity equal to the Trade Nomination Quantity in respect of which the relevant Locational Market Transaction was effected.

- 2.3.3 Without prejudice to the requirements of paragraph 2.3.2, where pursuant to the Physical Market Transaction:
- (a) the User has agreed to make a Disposing Trade Nomination, the User must make a Contract Renomination(s) which:
 - (i) revises the User's Input Nomination for a System Entry Point by increasing the Nomination Quantity; and/or
 - (ii) is an original Input Nomination for a System Entry Point in respect of which the User has made no earlier Nomination; and/or
 - (iii) is a Renomination which revises the User's Output Nomination for a System Exit Point by reducing the Nomination Quantity;
 - (b) the User has agreed to make an Acquiring Trade Nomination, the User must make a Contract Renomination(s) which:
 - (i) revises the User's Input Nomination for a System Entry Point by reducing the Nomination Quantity; and/or
 - (ii) is an original Output Nomination for a System Exit Point in respect of which the User has made no earlier Nomination; and/or
 - (iii) is a Renomination which revises the User's Output Nomination for a System Exit Point by increasing the Nomination Quantity.
- 2.3.4 Where pursuant to a Physical Market Transaction in respect of which the Originating User agrees to make:
- (a) a Disposing Trade Nomination in relation to a System Entry Point, the Originating User shall not make a Renomination (other than a Contract Renomination) in respect of such System Entry Point as a result of which the Implied Nomination Flow Rate would be less than the aggregate of the Market Transaction Flow Rate Changes in relation to all earlier Contract Renominations made by the Originating User in respect of such System Entry Point;
 - (b) an Acquiring Trade Nomination in relation to a System Exit Point, the Originating User shall not make a Renomination (other than a Contract Renomination) in respect of such System Exit Point as a result of which the Implied Nomination Flow Rate would be less than the aggregate of the Market Transaction Flow Rate Changes in relation to all earlier Contract Renominations made by the Originating User in respect of such System Exit Point.
- 2.3.5 The Renomination Effective Time of a Contract Renomination shall be the Transaction Effective Time of the Physical Market Transaction pursuant to which the Contract Renomination is to be made.
- 2.3.6 In relation to a Locational Market Transaction in the event the System Point in respect of which the User has agreed to submit Contract Renomination(s) is not an Eligible System Trading Point:

- (a) the User shall not be entitled, notwithstanding paragraph 2.3.1, to make a Contract Renomination; and
- (b) paragraph 2.3.7 shall nonetheless apply.

2.3.7 Where a Physical Market Transaction is effected, in the event the Originating User:

- (a) does not submit a Contract Renomination in accordance with this paragraph 2.3;
- (b) submits a Contract Renomination(s) which does not comply with the provisions of this paragraph 2.3

the Originating User shall pay a charge ("**Physical Renomination Incentive Charge**") calculated in accordance with paragraph 2.3.8.

2.3.8 The Physical Renomination Incentive Charge shall be the greater of:

- (a) an amount calculated in accordance with the following formula:

$$\text{TNQ} * 0.005 \text{ pence}$$

where TNQ is the Trade Nomination Quantity in respect of which the relevant Physical Market Transaction was effected; and

- (b) £200.

2.3.9 The Physical Renomination Incentive Charge will be invoiced and payable in accordance with Section S.

2.4 Trading System Contingencies

2.4.1 Where National Grid NTS is of the opinion that its ability to carry out Operational Balancing is prejudiced by an event or circumstance affecting the Trading System such that no Trading Participant is able to post or accept a Market Offer National Grid NTS shall notify Users and with effect from the time specified in such notice National Grid NTS shall cease to make use of the Trading System for the purposes of Operational Balancing and National Grid NTS may make use of Contingency Balancing Arrangements.

2.4.2 Following the use of Contingency Balancing Arrangements pursuant to paragraph 2.4.1 where National Grid NTS is of the opinion that the Trading System may be used by National Grid NTS for the purposes of Operational Balancing, National Grid NTS shall notify all Users of the Day with effect from the start of which National Grid NTS shall recommence use of the Trading System (and cease to make use of Contingency Balancing Arrangements) by not later than 10:00 on the Preceding Day.

2.4.3 In the event that:

- (a) National Grid NTS exercises its rights of termination pursuant to the Trading System Contract;
- (b) the Trading System Operator ceases to, or is unable to, carry on its business as

the provider and operator of the Trading System;

- (c) National Grid NTS gives the Trading System Operator a Termination Notice pursuant to paragraph 2.9.3 of the Network Code Supplement

National Grid NTS shall promptly notify Users, and with effect from the time specified in such notice National Grid NTS shall cease to make use of the Trading System for the purposes of Operational Balancing and National Grid NTS may make use of Contingency Balancing Arrangements.

2.4.4 Where National Grid NTS is of the opinion that by reference to the aggregate quantities of gas for which Users have posted Market Offers and Nomination Information its ability to carry out Operational Balancing is or may be prejudiced National Grid NTS shall notify Users of its opinion and request that Trading Participants post further Market Offers provided that the giving of such notice(s) shall be without prejudice to the provisions of Section Q and any actions National Grid NTS may take in its capacity as NEC where so appointed.

2.4.5 National Grid NTS may, with Condition A11(18) Approval of the Authority, following the use of Contingency Balancing Arrangements pursuant to paragraph 2.4.1, recommence use of the Trading System for Operational Balancing Purposes and in such circumstances National Grid NTS shall notify all Users of the Day with effect from the start of which National Grid NTS shall recommence use of the Trading System (and cease to make use of Contingency Balancing Arrangements) by not later than 10:00 on the Preceding Day.

2.4.6 In relation to each Day in respect of which National Grid NTS uses Contingency Balancing Arrangements the provisions of paragraph 2.3 as to Physical Renomination Incentive Charges will not apply.

2.4.7 For the purposes of the Code "**Contingency Balancing Arrangements**" are other arrangements provided for in the Code to be 'Contingency Balancing Arrangements'.

3 Non-Trading System Transactions

3.1.1 For the purposes of the Code:

- (a) A "**Non-Trading System Transaction**" is a transaction effected (other than by means of the Trading System) between National Grid NTS and a User who is not a Trading Participant, pursuant to which each of National Grid NTS and the User agrees to make equivalent Trade Nominations (so that the one such participant agrees to make an Acquiring Trade Nomination, and the other such participant agrees to make a Disposing Trade Nomination);
- (b) "**Non-Trading System Offer Price**" is (subject to paragraph 4) the price (in pence/kWh) specified in relation to a Non-Trading System Offer by the party making the Non-Trading System Offer, and the "**original**" Non-Trading System Offer Price is the price (in pence/kWh) specified by the party making the Non-Trading System Offer when posting the Non-Trading System Offer without applying the provisions of Section D4 to such price;
- (c) "**Non-Trading System Offer**" is an offer made by a User who is not a Trading Participant or National Grid (other than by way of the Trading System),

acceptance of which will effect a Non-Trading System Transaction;

- (d) the "**Non-Trading System Transaction Charge**" is the Non-Trading System Transaction Quantity multiplied by the Non-Trading System Offer Price;
- (e) the "**Non-Trading System Transaction Quantity**" is the quantity which is the Trade Nomination Quantity in respect of the Trade Nominations to be made pursuant to acceptance of the Non-Trading System Offer.

3.1.2 Subject to paragraph 4.1.1, National Grid NTS may only enter into Non-Trading System Transactions only in relation to a Gas Flow Day in respect of which a Gas Deficit Warning is in place.

3.1.3 Where National Grid NTS takes a Market Balancing Action that is a Non-Trading System Transaction:

- (a) in the case of a Market Balancing Sell Action (or negatively priced Market Balancing Buy Action) the User shall pay to National Grid NTS the Market Balancing Action Charge;
- (b) in the case of a Market Balancing Buy Action (or negatively priced Market Balancing Sell Action) National Grid NTS shall pay the User the Market Balancing Action Charge.

3.1.4 The Market Balancing Action Charges payable pursuant to paragraph 3.1.3 shall:

- (a) in the case of Multi-Day Balancing Transactions, be calculated on the basis of the original Non-Trading System Offer Price; and
- (b) in the case of any other Non-Trading System Transaction, be calculated on the basis of the Non-Trading System Offer Price;

and such Market Balancing Action Charges shall be invoiced and are payable in accordance Section S.

4 Multi-Day Balancing Actions

4.1.1 Where a User makes a Market Offer or a Non-Trading System Offer to National Grid NTS in relation to a Gas Flow Day in respect of which a Gas Deficit Warning is in place and up to six (6) subsequent consecutive Gas Flow Days, and it is a condition of accepting such Market Offer or Non-Trading System Offer that National Grid NTS and the User makes (or, in the case of a Market Offer, the Trading System Operator makes on their behalf) the appropriate Trade Nominations for each such Gas Flow Day, National Grid NTS shall be entitled to accept such a Market Offer or Non-Trading System Offer and accordingly enter into a Market Transaction or Non-Trading System Transaction (any such Market Transactions or Non-Trading System Transactions shall be known as "**Multi-Day Balancing Transactions**").

4.1.2 For the purposes of the Code, Multi-Day Balancing Transactions entered into by way of the Trading System will be entered into as Locational Market Transactions.

4.1.3 A Market Offer or a Non-Trading System Offer which would result in a Multi-Day Balancing Transaction must specify the same price in respect of each Day to which the Multi-Day Balancing Transaction would relate.

4.1.4 For the purposes of the Code, in relation to Multi-Day Balancing Transactions:

- (a) the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction on each Gas Flow Day to which the Multi-Day Balancing Transaction relates shall be calculated as follows:

$$(N)MOP = AP * (Offered Price * ND)$$

Where:

(N)MOP is the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction for the Gas Flow Day in question;

AP is a factor determined as:

$$AP = PR / APR$$

PR is the probability (expressed as a percentage and estimated by National Grid NTS) of National Grid NTS requiring to take Market Balancing Buy Actions (where the Multi-Day Balancing Transaction is a Market Balancing Buy Action) or Market Balancing Sell Actions (where the Multi-Day Balancing Transaction is a Market Balancing Sell Action) on the Gas Flow Day in question;

APR is the sum of the PRs for each Gas Flow Day to which the Multi-Day Balancing Transaction relates;

Offered Price is the price (in pence/kWh) offered by the User when making a Market Offer or a Non-Trading System Offer that resulted in the Multi-Day Balancing Transaction;

ND is the number of Gas Flow Days to which the Multi-Day Balancing Transaction relates;

- (b) references to Market Balancing Action Charges in the Code (other than in Section S or in the definition of “Energy Balancing Charges” in GTC Section C1) relating to Multi-Day Balancing Transactions shall (unless the context expressly requires otherwise) be calculated using the Market Offer Price or Non-Trading System Offer Price (as the case may be) as adjusted pursuant to paragraph 4.1.4(a); and
- (c) references to Market Balancing Action Charges relating to Multi-Day Balancing Transactions in Section S and in the definition of “Energy Balancing Charges” in GTC Section C1 shall (unless the context expressly requires otherwise) be calculated using the original Market Offer Price or original Non-Trading System Offer Price (as the case may be).

4.1.5 For the purposes of Section F:

- (a) the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction will only be used in the determination of the System Marginal Buy Price pursuant to Section F1.2.1(a) where the Multi-Day Balancing Transaction is a Market Balancing Buy Action; and

- (b) the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction will only be used in the determination of the System Marginal Sell Price pursuant to Section F1.2.1(b) where the Multi-Day Balancing Transaction is a Market Balancing Sell Action.
- 4.1.6 For the purposes of calculating the System Average Price pursuant to Section F1.2.1(c), where the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction (as determined pursuant to paragraph 4.1.4) equals zero in relation to a Gas Flow Day, then the Trade Nomination Quantity of such Multi-Day Balancing Transaction for that Gas Flow Day shall be deemed to be zero.
- 4.1.7 For the purposes of calculating the System Marginal Sell Price pursuant to Section F1.2.1(b), where the Market Offer Price or Non-Trading System Offer Price (as the case may be) of a Multi-Day Balancing Transaction (as determined pursuant to paragraph 4.1.4) equals zero in relation to a Gas Flow Day, then such Market Offer Price or Non-Trading System Offer Price shall be excluded from the calculation of the System Marginal Sell Price pursuant to Section F1.2.1(b).
- 4.1.8 For the purposes of the Code, each Multi-Day Balancing Transaction entered into by National Grid NTS by way of the Trading System shall be deemed to be separate Market Transactions for each Gas Flow Day to which the Multi-Day Balancing Transaction relates.

ANNEX D-1

TRADING SYSTEM ARRANGEMENTS

1 Introduction

1.1 This Annex D-1 sets out those terms and conditions relating to the Trading System to be incorporated into the Trading System Arrangements.

1.2 For the purposes of the Code:

- (a) "**Market Offer**" is an offer posted by a Trading Participant by way of the Trading System acceptance of which will effect a Market Transaction;
- (b) "**Market Offer Date**" is the Day which is to be the Gas Flow Day in respect of the Trade Nominations to be made pursuant to acceptance of the Market Offer;
- (c) "**Market Offer Price**" is (subject to Section D4) the price (in pence/kWh) specified by the Originating Participant when posting a Market Offer, and the "**original**" Market Offer Price is the price (in pence/kWh) specified by the Originating Participant when posting a Market Offer without applying the provisions of Section D4 to such price;
- (d) the "**Market Transaction Quantity**" is the quantity which is the Trade Nomination Quantity in respect of the Trade Nominations to be made pursuant to acceptance of the Market Offer;
- (e) the "**Market Transaction Charge**" is the Market Transaction Quantity multiplied by the Market Offer Price;
- (f) the "**Market Transaction System Point**", in respect of a Locational Market Transaction, is the Eligible System Trading Point at which the Originating User offers to modify the gas flow rate;
- (g) the "**Market Transaction Lead Time**", in respect of a Market Offer to enter into a Physical Market Transaction, is the period in time (expressed in whole hours) required by the Originating User after the Contract Nomination Time before the Originating User will modify the gas flow rate at a System Point;
- (h) in relation to a Market Offer:
 - (i) to effect a Physical Market Transaction:
 - (1) the "**Market Offer Specified Quantity**" is the quantity which would be the Trade Nomination Quantity in respect of the Trade Nominations to be made where the Market Offer to effect such Physical Market Transaction is accepted in full;
 - (2) the "**Market Offer Derived Rate**" is the rate in kWh/Day calculated as the Market Offer Specified Quantity multiplied by 24 and divided by the period in hours from the Transaction Effective Time to the end of the Gas Flow Day;

- (3) the "**Market Offer Specified Rate**" is the rate in kWh/Day which would be equivalent to the Trade Nomination Quantity in respect of the Trade Nominations to be made where the Market Offer to effect such Physical Market Transaction is accepted in full and in relation to which the Transaction Effective Time is on or before 05:00 hours on the Market Offer Date;
- (4) the "**Market Offer Derived Quantity**" is the quantity equivalent to the Market Offer Specified Rate divided by 24 and multiplied by the period in hours from the Transaction Effective Time to the end of the Gas Flow Day;
- (ii) to enter into a Non-Physical Market Transaction, the "**Market Transaction Absolute Quantity**" is the maximum quantity which irrespective of the Transaction Effective Time would be the Trade Nomination Quantity in relation to the Trade Nominations to be submitted on acceptance of the Market Offer;
- (i) the three "Market Transaction Types" are:
- (i) Non-physical Market Transactions;
- (ii) Physical Market Transactions not being Locational Market Transactions;
- (iii) Locational Market Transactions;
- (j) the "**Transaction Effective Time**" is, in respect of a Physical Market Transaction, the hour at which, after the Contract Nomination Time, the Market Transaction Lead Time elapses;
- (k) the "**Contract Nomination Time**" is, in relation to a Market Transaction, the hour next falling after the time at which the Market Offer giving rise to the Market Transaction was accepted as ascertained in accordance with the rules of the Trading System;
- (l) a "**Market Transaction ID**" is a unique reference number given to each individual Market Transaction by the Trading System Operator and the "**National Grid NTS Batch Code**" is a unique reference number which identifies those Market Balancing Actions taken by National Grid NTS for the purposes of a particular Operational Balancing Requirement;
- (m) the "**National Grid NTS Reason Code**" is a code which identifies the nature of the Market Balancing Action which National Grid NTS has taken or is seeking to take;
- (n) the "Market Transaction Flow Rate Change" is
- (i) where no earlier Nomination was made in respect of the Eligible System Trading Point, the rate in kWh/hour at which gas the subject of a Market Offer for a Physical Market Transaction is to be delivered or oftaken from the System;

- (ii) where an earlier Nomination was made in respect of the Eligible System Trading Point the amount in kWh/hour by which the gas flow rate is to be increased or (as the case may be) decreased in respect of the gas the subject of a Market Offer for a Physical Market Transaction.

1.3 For the purposes of the Code, 'Market Offer' (as defined in paragraph 1.2) includes both an 'offer' to make a Disposing Trade Nomination and an "offer" to make an Acquiring Trade Nomination.

2 Participation and Trading System

2.1 Each Trading Participant shall appoint the Trading System Operator as its User Agent, (and the Trading System Operator shall be required to act as each Trading Participant's User Agent) for the purposes of making Trade Nominations on behalf of Trading Participants pursuant to the acceptance of a Market Offer.

2.2 The identity of a Trading Participant making a Market Offer will not be disclosed to any other Trading Participant at any time prior to or after acceptance of the Market Offer except where a Market Offer in respect of a Physical Market Transaction is accepted where following such acceptance the identity of the Originating User will be disclosed to National Grid NTS.

3 Market Transactions

3.1 A Market Offer to effect a Non-physical Market Transaction must indicate:

- (a) that it is such a Market Offer;
- (b) the Market Offer Date;
- (c) whether the Market Offer is a Market Offer to make a Disposing Trade Nomination or an Acquiring Trade Nomination;
- (d) the Market Transaction Absolute Quantity; and
- (e) the Market Offer Price.

3.2 A Market Offer to effect a Physical Market Transaction must indicate:

- (a) that it is such a Market Offer;
- (b) the Market Offer Date;
- (c) whether the Market Offer is a Market Offer to make a Disposing Trade Nomination or an Acquiring Trade Nomination;
- (d) in the case of:
 - (i) a Market Offer which, if accepted, would result in a Multi-Day Balancing Transaction, the Market Offer Specified Quantity;
 - (ii) any other Market Offer, the Market Offer Specified Quantity or the Market Offer Specified Rate;

- (e) the original Market Offer Price;
 - (f) the Market Transaction Lead Time; and
 - (g) whether the Market Offer may only be accepted in full.
- 3.3 In addition to the requirements of paragraph 3.1 (other than pursuant to paragraph (a) thereof) a Market Offer to effect a Locational Market Transaction must specify:
- (a) that it is such a Market Offer; and
 - (b) the Market Transaction System Point.
- 3.4 Where National Grid NTS posts a Market Offer National Grid NTS shall in addition to the requirements of paragraphs 3.1, 3.2 and 3.3 indicate the National Grid NTS Reason Code.
- 3.5 The information to be indicated (other than pursuant to paragraph 3.4) in a Market Offer will be capable of being displayed (by means of differing screens) on the Trading System.

4 Market Offer Restrictions and Options

- 4.1 Trading Participants may not post:
- (a) a Market Offer which, if accepted, would result in a Multi-Day Balancing Transaction specifying a Market Offer Date for the final Day of such Multi-Day Balancing Transaction falling more than 7 days after the day on which the Market Offer was posted; and
 - (b) any other Market Offer specifying a Market Offer Date falling more than 7 days after the day on which the Market Offer was posted.
- 4.2 There is no limit on the number of Market Offers a Trading Participant may make in respect of a Day.
- 4.3 A Market Offer may only specify:
- (a) a Market Offer Specified Quantity which is expressed as a minimum of not less than 100,000 kWh; or
 - (b) a Market Offer Specified Rate (provided that for the purposes of calculating the Market Offer Derived Quantity such quantity shall be a minimum of not less than 100,000 kWh).
- 4.4 When posting a Market Offer (other than a Market Offer which, if accepted, would result in a Multi-Day Balancing Transaction) an Originating Participant may specify that the Market Offer (an "**Option Market Offer**") is linked to other Market Offers (a "**Related Market Offer**") made by the Originating Participant; and on acceptance of an Option Market Offer each other Related Market Offer shall no longer be capable of being accepted by any Trading Participant.
- 4.5 For the purposes of paragraph 4.4 an Option Market Offer may specify no more than

one other Market Offer of each other Market Transaction Type as being a Related Market Offer.

- 4.6 Trading Participants may revise or withdraw a Market Offer at any time prior to acceptance of the Market Offer.
- 4.7 A Trading Participant may when posting a Market Offer to enter into a Physical Market Transaction specify that the Market Offer is only capable of acceptance in full.
- 4.8 The Trading System Operator will reject any Market Offer which does not comply with the relevant requirements of paragraphs 3, 4.1, 4.3 and 4.5 and where a Market Offer does not so comply it will not be displayed on the Trading System.
- 4.9 A Trading Participant who is a Trader User:
- (a) may post and accept a Market Offer to enter into a Non-physical Market Transaction;
 - (b) may not post but may accept a Market Offer to enter into a Physical Market Transaction.

5 Acceptance

- 5.1 Except in the case of Multi-Day Balancing Transactions, Market Offers in respect of a Market Offer Date will be capable of acceptance by Trading Participants between 08:00 hours on the Day preceding the Market Offer Date and 02:35 hours on the Market Offer Date. Market Offers in respect of Multi-Day Balancing Transactions will only be capable of acceptance by Trading Participants between 08:00 hours on the Day preceding the first Day to which the Multi-Day Balancing Transaction relates and 02:35 hours on the first Day to which the Multi-Day Balancing Transaction relates.
- 5.2 Where a Trading Participant accepts a Market Offer in full the Trade Nomination Quantity in respect of the Trade Nominations to be made pursuant to the Market Transaction shall be equivalent to:
- (a) in the case of a Market Offer to effect a Physical Market Transaction:
 - (i) where the Market Offer specified a Market Offer Specified Quantity, the Market Offer Specified Quantity;
 - (ii) where the Market Offer specified a Market Offer Specified Rate, the Market Offer Derived Quantity;
 - (b) in the case of a Market Offer to effect a Non-physical Market Transaction, the Market Transaction Absolute Quantity.
- 5.3 Where a Trading Participant partially accepts a Market Offer the Trade Nomination Quantity in respect of the Trade Nominations to be made pursuant to the Market Transaction shall be, where the Market Offer:
- (a) was to effect a Physical Market Transaction; and
 - (i) specified a Market Offer Specified Quantity, that quantity in respect of which the Accepting Participant accepted the Market Offer;

- (ii) specified a Market Offer Specified Rate, that quantity equivalent to the hourly rate in respect of which the Accepting Participant accepted the Market Offer multiplied by the period in hours from the Transaction Effective Time to the end of the Gas Flow Day;
 - (b) was to effect a Non-physical Market Transaction, the quantity in respect of which the Accepting Participant accepted the Market Offer.
- 5.4 Subject to paragraph 5.5, following acceptance of a Market Offer the Trading System Operator will:
- (a) immediately inform both Trading Participants that a Market Transaction has been effected (and whether it is the Originating Participant in relation thereto) and which Market Offer has been accepted;
 - (b) where the Market Offer was to effect a Physical Market Transaction not later than:
 - (i) 5 minutes after acceptance of the Market Offer (which would not result in a Multi-Day Balancing Transaction) submit the details listed in this paragraph (b) to National Grid NTS; or
 - (ii) 5 minutes after acceptance of the Market Offer (which would result in a Multi-Day Balancing Transaction) submit in respect of the first Day to which the Multi-Day Balancing Transaction relates the details listed in this paragraph (b) to National Grid NTS;
 - (iii) 5 minutes after acceptance of the Market Offer (which would result in a Multi-Day Balancing Transaction) submit in respect of the second Day to which the Multi-Day Balancing Transaction relates the details listed in this paragraph (b) to National Grid NTS where the acceptance of the Market Offer occurs after 12:00 hours on the first Day to which the Multi-Day Balancing Transaction relates;
 - (iv) 12:05 hours on each Day to which a Multi-Day Balancing Transaction relates the details listed in this paragraph (b) to National Grid NTS in respect of such Day (except to the extent such details have already been provided pursuant to paragraph (ii) or (iii));
 - (v) The details listed in this paragraph (b) are:
 - (1) the Market Transaction ID;
 - (2) the Market Offer Date;
 - (3) the identity of the Originating Participant;
 - (4) whether the Originating Participant has agreed to make an Acquiring Trade Nomination or a Disposing Trade Nomination;
 - (5) the quantity in respect of which the Trading Participants effected the Market Transaction;

- (6) the relevant Market Transaction Type and, where acceptance has given rise to a Locational Market Transaction, the Market Transaction System Point;
 - (7) the time at which the Market Offer was accepted and the Transaction Effective Time;
 - (8) where National Grid NTS is a party to the Market Transaction, the original Market Offer Price (expressed to four decimal places and as either a positive or negative), the National Grid NTS Reason Code and the National Grid NTS Batch Code;
- (c) not later than 5 minutes after the effecting of a Market Transaction, submit the following details to National Grid NTS for the purpose of Section D2.2.5:
- (i) the Gas Flow Day in respect of which the Market Transaction is effected;
 - (ii) the identity of the Market Participant;
 - (iii) whether the Market Participant had agreed to make an Acquiring Trade Nomination or a Disposing Trade Nomination;
 - (iv) the Market Transaction Quantity (calculated in accordance with paragraph 5.2 or 5.3).
- 5.5 For the purpose of paragraph 5.4(c)(iv), the Trading System Operator will be deemed to have provided such details by providing, for each Trading Participant, the cumulative quantities for which the Trading Participant has made Disposing Trade Nominations and/or Acquiring Trade Nominations in respect of the Market Offer Date up to the time at which the Trading System Operator submits such details.
- 5.6 Where a Market Transaction is effected on the Day preceding the Market Offer Date, the Trading System Operator may not submit the Trade Nominations for the purposes of Section D2.2.5 prior to 13:45 hours on the Day preceding the Market Offer Date.
- 5.7 A Market Offer will not be capable of acceptance by the Trading Participant posting the Market Offer.
- 5.8 Where National Grid NTS accepts a Market Offer it shall indicate by means of the Trading System the relevant National Grid NTS Reason Code.
- 6 Partial Acceptance**
- 6.1 A Market Offer to effect a Non-physical Market Transaction, or a Physical Market Transaction which does not specify that it is only capable of acceptance in full, may be accepted by a Trading Participant for a quantity other than the Market Transaction Absolute Quantity, Market Offer Specified Quantity or Market Offer Derived Quantity and the Trading System will incorporate functionality that permits the partial acceptance of Market Offers by Trading Participants.
- 6.2 Where a Trading Participant partially accepts a Market Offer (including an Option Market Offer) where the Market Transaction Quantity is less than the Market Offer Specified Quantity or, as the case may be, the Market Offer Derived Quantity (such

amount the "**Residual Offer Quantity**") where the Residual Offer Quantity is greater than or equal to 100,000 kWh, the Originating Participant shall be deemed to have posted with effect from the time of such partial acceptance, a further Market Offer with the same specifications for the purposes of paragraph 3 as the original Market Offer but in respect of which the Market Offer Specified Quantity is equal to the Residual Offer Quantity.

- 6.3 A Trading Participant may only partially accept a Market Offer such that the Market Transaction Quantity in relation to such partial acceptance is a quantity equivalent to not less than a minimum quantity of 100,000 kWh.

7 Market Quantities and Charges

In respect of each Day the Trading System Operator shall notify National Grid NTS (by not later than 07:00 hours on the following Day) of:

- (a) the aggregate of the Market Transaction Quantities and the aggregate of the Market Transaction Charges in respect of Market Transactions effected in respect of such Day;
- (b) in respect of each Market Transaction effected in respect of such Day to which National Grid NTS was a party, the Market Offer Date, the Market Transaction ID the National Grid NTS Batch Code, the Market Transaction Quantity, the original Market Offer Price, the National Grid NTS Reason Code, the Market Transaction Type, the time at which the Market Transaction was effected and whether National Grid NTS made a Disposing Trade Nomination or an Acquiring Trade Nomination.

8 Additional Functionality

In addition to the functionality required to meet the requirements of paragraphs 1 to 7 (inclusive), the Trading System will have such additional functionality as the Trading Participants and the Market Operator shall in consultation agree.

9 Class A Contingencies

- 9.1 During the period of a Class A Contingency the relevant Contingency Procedures will apply.