

UNIFORM NETWORK CODE – TRANSPORTATION PRINCIPAL DOCUMENT

SECTION K – OPERATING MARGINS

1 GENERAL

1.1 Introduction

1.1.1 National Grid NTS shall be entitled:

- (a) to enter into arrangements ("**Operating Margins Capacity Arrangements**") pursuant to which National Grid NTS will hold Operating Margins Capacity in Operating Margins Facilities, and may input (whether by injection, unloading of sea-going vessels or otherwise) gas into, hold gas in, and withdraw gas from such Operating Margins Facilities; and
- (b) to enter into arrangements ("**Operating Margins Gas Delivery Arrangements**") pursuant to which:
 - (i) Users will hold Operating Margins Capacity in Operating Margins Facilities, and may input (whether by injection, unloading of sea-going vessels or otherwise) gas into, hold gas in and withdraw gas from such Operating Margins Facilities, for delivery to the NTS in such quantities and at such times as National Grid NTS and the User in question may agree; and/or
 - (ii) Users will increase the delivery of gas into the NTS or reduce or delay the offtake of its nominated quantity of gas from the NTS in such quantities and at such times as National Grid NTS and the User in question may agree

in each case subject to and in accordance with this Section K, for the purpose of meeting the requirements ("**Operating Margins Requirements**") set out in paragraph 2.1.

1.1.2 For the purposes of the Code:

- (a) anything done or to be done by National Grid NTS pursuant to any provision of this Section K for the purposes of meeting or otherwise in connection with Operating Margins Requirements is done or to be done for "**Operating Margins Purposes**";
- (b) references to "**Operating Margins**" are to the Operating Margins Capacity Arrangements and gas which National Grid NTS holds in storage at Operating Margins Facilities for Operating Margins Purposes, or to the Operating Margins Gas Delivery Arrangements and the gas that National Grid Gas NTS may utilise pursuant to such Operating Margins Gas Delivery Arrangements at Operating Margins Facilities for Operating Margins Purposes;
- (c) a reference to the utilisation of Operating Margins is to:
 - (i) the withdrawal of gas from an Operating Margins Facility in which National Grid NTS holds Operating Margins pursuant to any

Operating Margins Capacity Arrangement; and/or

- (ii) the delivery of gas by Users to the NTS from an Operating Margins Facility pursuant to any Operating Margins Gas Delivery Arrangements; and/or
 - (iii) the reduction or delay in the offtake of gas by Users to an Operating Margins Facility from the NTS pursuant to any Operating Margins Gas Delivery Arrangements;
- (d) references to **“Operating Margins Gas”** are references to:
- (i) the gas which National Grid NTS holds in storage at Operating Margins Facilities pursuant to Operating Margins Capacity Arrangements;
 - (ii) the gas whether in storage or otherwise which National Grid NTS may utilise pursuant to Operating Margins Gas Delivery Arrangements;
- (e) references to **"Operating Margins Capacity"** are references to Storage Capacity and LNG Importation Capacity;
- (f) references to **"Operating Margins Facilities"** are references to Storage Facilities, LNG Importation Facilities and other facilities (connected to one or more System Points) which can be utilised by National Grid NTS acting for Operating Margins Purposes through arrangements with Users to provide either the delivery of gas into the NTS or a reduction or delay in the offtake of the nominated quantity of gas from the NTS;
- (g) references to **"Operating Margins Space"** are references to Storage Space and LNG Importation Space;
- (h) references to **"Operating Margins Injectability"** are references to Storage Injectability and LNG Importation Injectability;
- (i) references to **"Operating Margins Deliverability"** are references to Storage Deliverability, LNG Importation Deliverability, Entry Facility Deliverability and Exit Facility Deliverability; where:
- (i) **“Entry Facility Deliverability”** is the capability of the relevant Operating Margins Facility (as agreed in the relevant Operating Margins Facility Terms) to deliver an increase in the nominated quantity of gas to the NTS, expressed as a rate or a quantity in a given period; and
 - (ii) **“Exit Facility Deliverability”** is the capability of the relevant Operating Margins Facility (as agreed in the relevant Operating Margins Facility Terms) to reduce or delay the offtake of the nominated quantity of gas from the NTS, expressed as a rate or quantity in a given period;
- (j) references to **"Operating Margins Facility Terms"** are references to Storage Terms, LNG Importation Terms and any other such terms and conditions entered into between National Grid NTS and Users for Operating Margins

Purposes;

- (k) references to “**Operating Margins Year**” are references to the period of 12 Months commencing on the date set out in the Operating Margins Statement.

1.1.3 Certain costs incurred and/or revenues received by National Grid NTS for Operating Margins Purposes will be recovered from or paid to Users in accordance with paragraph 4.

1.2 National Grid NTS as Storage User or LNG Importation User

1.2.1 Subject to paragraph 1.2.2, National Grid NTS shall be entitled to be a Storage User or a LNG Importation User (as the case may be) in respect of Operating Margins Facilities for Operating Margins Purposes, and in particular National Grid NTS:

- (a) may apply for and hold Operating Margins Capacity in, and inject and withdraw gas to and from Operating Margins Facilities; and

- (b) may make Storage Gas Transfers pursuant to the relevant Operating Margins Facility Terms.

1.2.2 For the purposes of Section R4, no Constrained Storage Renomination may be made for withdrawal of gas-in-storage held by National Grid NTS for Operating Margins Purposes.

1.2.3 For Operating Margins Purposes, the requirements of Section Z as to Storage Duration in relation to National Grid LNG Storage Facilities do not apply.

1.2.4 National Grid NTS will (as provided in Section Z) have priority over all other Users in applications for Storage Capacity for Operating Margins Purposes in National Grid LNG Storage Facilities.

1.2.5 References to the amount of Storage Space or LNG Importation Space held by a Relevant System Manager are to the amount held pursuant to the relevant provisions of this Section K.

1.3 National Grid NTS as NTS User

1.3.1 National Grid NTS will be a User for the purposes of the Code in respect of the NTS for Operating Margins Purposes; and in particular National Grid NTS:

- (a) may apply for and hold NTS Entry Capacity at System Entry Points (subject to paragraph 1.3.2) and NTS Exit Capacity at Storage Connection Points in accordance with Section B;
- (b) will make Nominations in accordance with Section C;
- (c) may make Acquiring Trade Nominations in accordance with Section C;
- (d) will pay and receive Balancing Charges in accordance with Section F.

1.3.2 In particular, on any Day on which National Grid NTS withdraws gas from an Operating Margins Facility for delivery to the Total System (pursuant to Operating

Margins Capacity Arrangements) or has gas delivered to it by a third party (pursuant to Operating Margins Gas Delivery Arrangements) for Operating Margins Purposes, National Grid NTS will (by virtue of the fact that it does not and is not deemed to offtake gas from the Total System and does not make Disposing Trade Nominations) have a Daily Imbalance equal (subject to anything else done by it) to the quantity of gas so withdrawn or delivered, and will receive Daily Imbalance Charges accordingly.

1.3.3 The general provisions of the Code are (as provided in the relevant Section) modified in respect of their application to National Grid NTS for Operating Margins Purposes as follows:

- (a) Balancing Neutrality Charges and Reconciliation Neutrality Charges are not payable by or to National Grid NTS for Operating Margins Purposes;
- (b) Initial Input Nominations may be made at any time up to 04:00 hours on the Gas Flow Day.

1.3.4 National Grid NTS will not take Market Balancing Actions for Operating Margins Purposes.

1.4 DNO User

In this Section K references to Users includes DNO Users unless otherwise expressly stated.

1.5 Relevant System Managers

For the purposes of this Section K, references to a “**Relevant System Manager**” unless otherwise expressly stated shall mean National Grid NTS acting for Operating Margins Purposes.

1.6 Trader User

In this Section K references to Users exclude Trader Users.

2 OPERATING MARGINS

2.1 Operating Margins Requirements

2.1.1 Operating Margins Requirements are requirements for quantities of gas to be delivered to the NTS or for quantities of gas nominated to be offtaken from the NTS to be reduced or delayed:

- (a) for the purposes of Operational Balancing to the extent that National Grid NTS determines at any time on the Gas Flow Day that there is an Operational Balancing Requirement which cannot be satisfied by the taking of any Market Balancing Action (because there are no or insufficient Market Offers which are operationally suitable);
- (b) for the purposes of Operational Balancing where and for so long as National Grid NTS determines that, as a result of damage to or failure of any part of the NTS (other than Programmed Maintenance) occurring on the Gas Flow Day, there is an Operational Balancing Requirement, whether or not capable of being satisfied by the taking of a Market Balancing Action;

- (c) in an Emergency (in accordance with Section Q), for the purposes of maintaining safe pressures in the NTS during the period in which (pursuant to Emergency Steps in relation to demand under Section Q3.4 and 3.5) the NTS is run down.
- 2.1.2 For the purposes of paragraph 2.1.1(b) damage or failure to the NTS includes the failure of any compression facility within the NTS to operate (or continue to operate) or a break in any pipe forming part of the NTS.

2.2 Annual estimation of Operating Margins Requirements

2.2.1 For each Operating Margins Year National Grid NTS will estimate:

- (a) an aggregate quantity of gas required for Operating Margins Requirements for the Operating Margins Year;
- (b) the maximum rate of delivery to, or reduction or delay in the offtake of gas from the NTS required for Operating Margins Requirements on any Day;
- (c) on the basis of the amounts under paragraphs (a) and (b), the aggregate amounts of Operating Margins Gas and Operating Margins Deliverability required for Operating Margins Requirements (irrespective of whether such Operating Margins Gas and Operating Margins Deliverability is held or is to be held by National Grid NTS pursuant to Operating Margins Capacity Arrangements or by a third party pursuant to Operating Margins Gas Delivery Arrangements); and
- (d) a profile ("**Operating Margins Profile**") of the quantity of Operating Margins Gas for Operating Margins Requirements at different times during the Operating Margins Year, and the aggregate ("**Aggregate Operating Margins Profile**"), the maximum amount of which being the quantity under paragraph (a) of such profiles for all Operating Margins Facilities.

2.2.2 The estimates under paragraph 2.2.1 will be made:

- (a) on the basis of such assumptions as National Grid NTS shall (in the light of the circumstances prevailing at the time and experience of a number of years) reasonably determine to be appropriate as to the probable extent and frequency of occurrence of the circumstances in which Operating Margins Requirements under paragraphs 2.1.1(a) and (b) may arise;
- (b) having regard to the need to balance the costs of Operating Margins with the risk of there being insufficient Operating Margins Gas and/or Operating Margins Deliverability for such requirements;
- (c) having regard to the location on the Total System and operational characteristics of each Operating Margins Facility;
- (d) on the basis of the estimate of 1-in-50 Severe Annual Demand as may be published from time to time by National Grid NTS (provided publication occurs at an interval of not more than 12 months); and
- (e) on the basis of such other reasonable assumptions as National Grid NTS shall

determine to be appropriate in the circumstances (but for the avoidance of doubt assuming that shrinkage requirements will be provided for by NTS Shrinkage Provider).

- 2.2.3 National Grid NTS will, not later than 1 March in each Operating Margins Year, provide to Users and the Authority a statement (an "**Operating Margins Statement**") containing details of:
- (a) the assumptions made pursuant to paragraph 2.2.2; and
 - (b) the amounts estimated under paragraph 2.2.1 and (on the basis of the assumptions referred to in paragraph (a)) the calculation of such estimated amounts.
- 2.2.4 National Grid NTS's assumptions and estimates under paragraphs 2.2.1 and 2.2.2 will be made in good faith; but (provided that National Grid NTS has entered into Operating Margins Capacity Arrangements and/or Operating Margins Gas Delivery Arrangements on the basis of such assumptions and estimates, and procured and injected gas, in accordance with paragraph 3) to the extent that on any Day:
- (a) the quantities or rates of delivery of gas or reduction in the offtake of gas required to be utilised for Operating Margins Requirements exceed the quantities of Operating Margins Gas and/or the Operating Margins Deliverability held by, or available to, National Grid NTS pursuant to Operating Margins Capacity Arrangements and/or Operating Margins Gas Delivery Arrangements for Operating Margins Purposes; and
 - (b) as a result, National Grid NTS is unable (after utilising in accordance with paragraph 2.3.1 such Operating Margins as are available) to maintain an Operational Balance in the Total System or any part thereof (or to do so without taking Emergency Steps)

National Grid NTS (and each other Transporter) will not be liable under Section J3.2.1 in respect of any resulting failure to make gas available for offtake from the Total System.

2.3 Utilisation of Operating Margins

- 2.3.1 National Grid NTS shall be entitled to utilise Operating Margins (in such Operating Margins Facilities as it shall determine to be operationally appropriate in the circumstances) with a view to meeting Operating Margins Requirements in accordance with the relevant provisions of paragraph 2.1.1.
- 2.3.2 National Grid NTS may only utilise Operating Margins for the requirements in paragraph 2.1.1(b) within 24 hours of the time that the damage or failure referred to in that paragraph occurs.
- 2.3.3 The costs that National Grid NTS may recover for the utilisation of Operating Margins through the Daily Margins Recovery Amount are set out at paragraph 4.3 below.

3 PROCUREMENT OF OPERATING MARGINS ARRANGEMENTS

3.1 General

- 3.1.1 Nothing shall prevent National Grid NTS from entering into Operating Margins Capacity Arrangements and Operating Margins Gas Delivery Arrangements in respect of the same Operating Margins Facility for the same or an overlapping period.
- 3.1.2 National Grid NTS will in or before the Operating Margins Year enter into such Operating Margins Capacity Arrangements and/or Operating Margins Gas Delivery Arrangements as it shall determine to be appropriate with a view to balancing the cost of such arrangements with the need to secure the availability of gas, the need to secure injection in accordance with the provisions of the relevant Operating Margins Facility Terms, requirements of flexibility as to the delivery of gas and such other factors as it may reasonably determine to be relevant to the discharge of its functions under this Section K.
- 3.1.3 Where National Grid NTS has entered into an Operating Margins Gas Delivery Arrangement or an Operating Margins Capacity Arrangement, nothing shall (subject to the relevant Operating Margins Facility Terms) prevent National Grid NTS from:
- (a) terminating such Operating Margins Gas Delivery Arrangement or Operating Margins Capacity Arrangement;
 - (b) transferring or otherwise disposing of any Operating Margins Capacity; or
 - (c) entering either into alternative Operating Margins Gas Delivery Arrangements or Operating Margins Capacity Arrangements

in respect of such quantities of Operating Margins Gas or Operating Margins Capacity or Operating Margins Deliverability as National Grid NTS may determine at the relevant time, and procuring and disposing of such amounts of Operating Margins Gas as is required by National Grid NTS (provided always that such procurement and disposal is carried out in accordance with this Section K).

3.2 Procurement of Operating Margins Gas Delivery Arrangements

- 3.2.1 National Grid NTS may enter into Operating Margins Gas Delivery Arrangements in respect of the amounts (when aggregated with those amounts subject to Operating Margins Capacity Arrangements) as National Grid NTS may reasonably determine to be necessary to meet the Operating Margins Requirements as set out at paragraph 2.2.1(c) above.
- 3.2.2 National Grid NTS will in or before the Operating Margins Year make such arrangements ("**Margins Delivery Procurement Arrangements**") for the delivery of gas to or a reduction or delay in offtake of gas from the NTS pursuant to paragraph 3.2.1 as it shall determine to be appropriate with a view to balancing the cost of such arrangements with the need to secure the availability of gas, the need to secure delivery of gas to the NTS or reduction or delay in the offtake of gas from the NTS in accordance with the provisions of the relevant Operating Margins Facility Terms, requirements of flexibility as to the delivery of gas and such other factors as it may reasonably determine to be relevant to the discharge of its functions under this Section K.
- 3.2.3 In particular National Grid NTS may (with a view to meeting the objectives in paragraph 3.2.2):
- (a) contract with Users for the delivery of gas to the NTS, or reduction or delay in

the offtake of gas from the NTS on such terms (as to price, quantities, rates and times of delivery or offtake of gas, payment for gas which it was unable to take, and otherwise) as it shall determine;

- (b) contract for the delivery of gas or the reduction or delay in the offtake of gas (as to all or any part of its requirements) under agreement(s) providing for the delivery of gas or the reduction or delay in the offtake of gas from the NTS over such period as it may determine, and/or on a spot basis; and
- (c) conduct a tender for the award of a contract under paragraph (b) (the terms of which need not require National Grid to accept the lowest priced or any offer where in its reasonable opinion a prudent purchaser in comparable circumstances would not do so).

3.2.4 National Grid NTS may procure delivery of gas for Operating Margins Purposes and on behalf of the NTS Shrinkage Provider and/or another Relevant System Manager on an integrated basis; but National Grid NTS shall in any event maintain separate records of the quantities of deliveries of gas procured for Operating Margins Purposes and for the NTS Shrinkage Provider and/or another Relevant System Manager.

3.3 Procurement of Operating Margins Capacity Arrangements

3.3.1 For the purposes of paragraphs 3.3 to 3.9:

- (a) references to a User shall exclude DNO Users; and
- (b) relevant WACOG is Operating Margins WACOG at the end of the preceding Storage Year.

3.3.2 National Grid NTS may apply for and be registered as holding Operating Margins Capacity in respect of the amounts (when aggregated with those amounts subject to Operating Margins Gas Delivery Arrangements) as National Grid NTS deems is reasonably required for Operating Margins Purposes under paragraph 2.2.1(c), together with such amounts of Operating Margins Injectability as National Grid NTS may deem necessary.

3.3.3 For the purposes of avoiding or reducing the liability of a Relevant System Manager to pay Storage Overrun Charges under Section Z or equivalent charges under other Operating Margins Facility Terms in respect of the withdrawal of gas on any Day from an Operating Margins Facility, National Grid NTS may on behalf of a Relevant System Manager make, subject to the relevant Operating Margins Facility Terms, a Storage Gas Transfer in favour of another Relevant System Manager.

3.3.4 For the purposes of this Section K, in respect of each Operating Margins Facility the "**Carry-over Margins Gas**" is the amount of Relevant Residual Gas (as defined in paragraph 3.6.1) held by National Grid NTS for Operating Margins Purposes after taking account of any Storage Gas Transfer under paragraphs 3.6 and 3.8 and less the amount of the Residual Surplus Gas (if any) under paragraph 3.7.

3.3.5 National Grid NTS will in or before the Storage Year make such arrangements ("**Margins Gas Procurement Arrangements**") for the procurement of gas (in excess of the aggregate Carry-over Margins Gas) for injection into Operating Margins Capacity held by it pursuant to paragraph 3.3.2 as it shall determine to be appropriate

with a view to balancing the cost of such arrangements with the need to secure the availability of gas, the need to secure injection in accordance with the provisions of the relevant Operating Margins Facility Terms, requirements of flexibility as to the delivery of gas and such other factors as it may reasonably determine to be relevant to the discharge of its functions under this Section K.

- 3.3.6 In particular National Grid NTS may (with a view to meeting the objectives in paragraph 3.3.5):
- (a) contract with Users or others for the purchase of gas on such terms (as to price, quantities and times of delivery of gas, payment for gas which it was unable to take, and otherwise) as it shall determine;
 - (b) contract for the purchase of gas (as to all or any part of its requirements) under agreement(s) providing for delivery over a period of up to 12 months and/or on a spot basis;
 - (c) conduct a tender for the award of a contract under paragraph (b) (the terms of which need not require National Grid NTS to accept the lowest priced or any offer where in its reasonable opinion a prudent purchaser of gas in comparable circumstances would not do so);
 - (d) make Acquiring Trade Nominations on any terms as to payment and quantity;
 - (e) make Storage Gas Transfers (as transferee) on terms requiring payment and upon any other terms as to payment and quantity; and
 - (f) where permitted under this Section K, make Output Nominations (for injections at a Storage Connection Point) for a Day without delivering gas to the NTS or making an Acquiring Trade Nomination.
- 3.3.7 National Grid NTS will make its Margins Gas Procurement Arrangements for material quantities of gas under paragraph 3.3.5 on the basis in paragraph 3.3.6(c) where reasonably feasible in the circumstances (and having regard to the time or times for delivery of such gas); and in any case where such arrangements are not made on such basis agrees to inform Users of the circumstances in which its arrangements were not so made.
- 3.3.8 Without prejudice to paragraph 3.3.7, National Grid NTS may procure gas (in accordance with paragraph 3.6) for Operating Margins Purposes and on behalf of the NTS Shrinkage Provider on an integrated basis; but National Grid NTS shall in any event maintain separate records of the quantities of gas procured for Operating Margins Purposes and the NTS Shrinkage Provider.

3.4 Injection – general (Operating Margins Capacity Arrangements)

National Grid NTS will arrange its injections of gas (in accordance with the relevant Operating Margins Facility Terms) in respect of Operating Margins Space allocated to it under paragraph 3.3 (after taking account of Carry-over Margins Gas and any Margins Gas Procurement Arrangement under paragraph 3.3.6(e)) on such basis as it shall in its discretion determine having regard to:

- (a) the requirement to secure injection of quantities in aggregate equal to its Operating Margins Space;

- (b) the injection rules under the relevant Operating Margins Facility Terms;
- (c) the extent to which it has (under paragraph 3.3.6) chosen to purchase gas under term and not spot arrangements (and the delivery terms of such term arrangements); and
- (d) any differences in the rates of injection charges at different times in the relevant injection periods.

3.5 Reprofilling of Existing Gas-in-Storage across Storage Years prior to the start of or during the Storage Year for Operating Margins Capacity Arrangements

3.5.1 Following 1 February in a Storage Year, National Grid NTS may, in respect of each Operating Margins Facility, estimate:

- (a) the Relevant Residual Gas that will be held by each Relevant System Manager in the Operating Margins Facility at the end of the Storage Year (the "**estimated Relevant Residual Gas**");
- (b) the amount (if any) (the "**pre-Storage Year estimated surplus**") by which the estimated Relevant Residual Gas of a Relevant System Manager (the "**pre-Storage Year transferor**") exceeds the amount of Operating Margins Space that National Grid NTS estimates will be held for the following Storage Year in that Operating Margins Facility by the Relevant System Manager.

3.5.2 In respect of an Operating Margins Facility where there exists a pre-Storage Year estimated surplus, National Grid NTS may on behalf of a pre-Storage Year transferor seek to make a transfer in favour of a User(s) in respect of the pre-Storage Year estimated surplus before the end of the Storage Year by way of:

- (a) Storage Gas Transfer(s);
- (b) Storage Gas Transfer(s) between relevant Operating Margins Facilities; or
- (c) withdrawal from a relevant Operating Margins Facility and Trade Nominations in respect of the quantity of gas withdrawn by conducting a tender or a series of tenders.

3.5.3 If, following the termination or expiry of any Operating Margins Capacity Arrangements or the transfer of any Operating Margins Capacity at any time during a Storage Year, National Grid NTS, in respect of an Operating Margins Facility, estimates that the amount of gas-in-storage held by each Relevant System Manager at that Operating Margins Facility may exceed the amount of Operating Margins Space that National Grid NTS estimates will be held in that Operating Margins Facility following such termination or transfer, (the "**post transfer estimated surplus**") then National Grid NTS may seek to make a transfer in favour of a User(s) in respect of the post transfer estimated surplus by way of:

- (a) Storage Gas Transfer(s);
- (b) Storage Gas Transfer(s) between relevant Operating Margins Facilities; or
- (c) withdrawal from a relevant Operating Margins Facility and Trade Nominations

in respect of the quantity of gas withdrawn by conducting a tender or a series of tenders.

- 3.5.4 For the purposes of the tenders referred to in paragraphs 3.5.2 and 3.5.3, the provisions of paragraph 3.7.2(a) to (h) shall apply as if the references therein to Residual Surplus Gas were references to the pre-Storage Year estimated surplus and/or post transfer estimated surplus as if references to Residual Gas Transfer were references to transfers under paragraphs 3.5.2 and 3.5.3 and as if the reference at paragraph 3.7.2(f)(ii) to paragraph 3.7.6(b) did not apply.
- 3.5.5 If after any Storage Gas transfers or tenders pursuant to paragraph 3.5.3, there is any remaining post transfer estimated surplus, National Grid NTS (on behalf of Relevant System Managers) may take such other reasonable action as it shall think fit to dispose thereof (it being apparent that no User is willing at any price to enter into a Storage Gas Transfer thereof); and any reasonable costs incurred by National Grid NTS in so doing (including costs incurred by reason of having gas-in-storage in excess of its Storage Space or LNG Importation Space) shall be costs of the Relevant System Manager for the purposes of this Section K.

3.6 Re-Profiling Existing Gas-In-Storage at the start of the Storage Year for Operating Margins Capacity Arrangements

- 3.6.1 At the start of each Storage Year National Grid NTS will determine, in respect of each Storage Facility and LNG Importation Facility:
- (a) the amount (the "**Relevant Residual Gas**") of gas-in-storage held at the end of the preceding Storage Year by each Relevant System Manager;
 - (b) whether, and if so the amount (the "**relevant surplus**") by which the Relevant Residual Gas of a Relevant System Manager (the "**transferor**") exceeds the amount of Storage Space or LNG Importation Space held for the Storage Year in that Storage Facility or LNG Importation Facility by that Relevant System Manager; and
 - (c) whether, and if so the amount (the "**relevant deficit**") by which the Relevant Residual Gas of another Relevant System Manager (the "**transferee**") is less than the amount of Storage Space or LNG Importation Space held for the Storage Year in that Storage Facility or LNG Importation Facility by that Relevant System Manager.
- 3.6.2 Subject to the relevant Storage Terms or LNG Importation Terms, a transferor may effect from the start of the Storage Year a Storage Gas Transfer in favour of a transferee in respect of the lesser of the relevant surplus and the relevant deficit, and the transferee shall pay to the transferor an amount determined by multiplying the amount of the transferred gas-in-storage by the relevant WACOG of the transferor.
- 3.6.3 Where in relation to a Storage Facility or an LNG Importation Facility there is more than one transferor or transferee paragraph 3.6.2 shall apply to each so far as practicable pro rata their respective relevant surpluses or relevant deficits.
- 3.6.4 Following National Grid NTS's determination pursuant to paragraph 3.6.1, National Grid NTS shall (subject to paragraph 3.7.6) determine in respect of each Relevant System Manager:

- (a) for each Storage Facility and LNG Importation Facility (a "**surplus**" Storage Facility or LNG Importation Facility) whether, and if so the amount (the "**remaining surplus**") by which, any relevant surplus exceeds the amount(s) to be transferred by the Relevant System Manager in accordance with paragraph 3.6.2; and
 - (b) for each Storage Facility and LNG Importation Facility (a "**deficit**" Storage Facility and LNG Importation Facility) whether, and if so the amount (the "**remaining deficit**") by which, any relevant deficit exceeds the amount(s) to be transferred to the Relevant System Manager in accordance with paragraph 3.6.2.
- 3.6.5 Where this would be consistent with the requirements of paragraph 3.3.5 a Relevant System Manager may choose to make all or part of its Margins Gas Procurement Arrangements in respect of any deficit Storage Facility or LNG Importation Facility by arranging for the withdrawal from a surplus Storage Facility or LNG Importation Facility and injection into a deficit Storage Facility or LNG Importation Facility in the relevant Storage Year of a quantity of gas not in aggregate exceeding the lesser of the remaining surplus and the remaining deficit (the aggregate quantity of gas which is to be so withdrawn and injected, the "**Carry-Across Gas**").

3.7 Disposal of residual gas at the start of a Storage Year (Operating Margins Capacity Arrangements)

3.7.1 For the purposes of this Section K:

- (a) in relation to a Storage Year "**Residual Surplus Gas**" is the amount (if any) of a Relevant System Manager's Relevant Residual Gas in a Storage Facility or LNG Importation Facility at the end of the preceding Storage Year which after taking account of any Storage Gas Transfer and any Carry-Across Gas (in relation to which the Storage Facility is the surplus facility) under paragraph 3.5 and/or 3.6 and/or paragraph 3.8 exceeds the Storage Space or LNG Importation Space held by the Relevant System Manager for the Storage Year in that facility;
 - (b) a "**Residual Gas Transfer**" is a transfer in favour of a User by National Grid NTS on behalf of a Relevant System Manager in respect of Residual Surplus Gas by way of:
 - (i) a Storage Gas Transfer; or
 - (ii) withdrawal from a relevant Storage Facility or LNG Importation Facility and Trade Nominations in respect of the quantity of gas withdrawn.
- 3.7.2 National Grid NTS on behalf of each Relevant System Manager will, as soon as reasonably practicable after the start of the Storage Year, seek to make Residual Gas Transfers in respect of the Residual Surplus Gas in each relevant Storage Facility or LNG Importation Facility by conducting a tender as follows:
- (a) National Grid NTS will issue a tender document to all Users specifying the aggregate amount of Residual Surplus Gas in each Storage Facility or LNG Importation Facility and inviting each User to bid a price at which it would be

willing to enter into a Residual Gas Transfer in respect of a quantity of gas, to be specified by such User, not exceeding the aggregate amount of the Residual Surplus Gas in each Storage Facility or LNG Importation Facility;

- (b) the terms of the tender document (including the tranches of Residual Surplus Gas, if any, for which bids may be made, the times at or periods within which bids are to be made and accepted, the times at or periods within which Residual Gas Transfers will be made, and the terms of payment by Users whose bids are accepted) will be determined by National Grid NTS;
- (c) a bid submitted by a User pursuant to the tender document shall be an offer capable of acceptance by National Grid NTS, and may not be made conditional (save as to any condition provided for in the tender document) in any respect;
- (d) any bid shall be capable of acceptance as to all, or (for the purpose of paragraph (g), and unless the User expressly states otherwise) any part of the quantity specified by the User;
- (e) the terms of the tender document will set out the basis on which Residual Gas Transfers are to be made pursuant to an accepted bid, and may authorise National Grid NTS to make such a Residual Gas Transfer on behalf of any User;
- (f) the tender document:
 - (i) will not (but without prejudice to paragraph 3.7.6) provide for any reserve price below which bids would not be accepted;
 - (ii) may (where it provides for alternative times or forms of Residual Gas Transfer, and/or offers Residual Surplus Gas in more than one Storage Facility or LNG Importation Facility, at the bidding User's option) provide for adjustments to the bid price payable by a User (in respect of a bid accepted by National Grid NTS in accordance with paragraph (g)) to reflect different costs incurred (as a result of the option chosen by the User) by Relevant System Managers (or National Grid NTS on their behalf) in making the Residual Gas Transfer and/or (where paragraph 3.7.6 applies) in Margins Gas Procurement Arrangements;
- (g) National Grid NTS will accept bids in order of price (the highest priced being accepted first) for the whole of the quantity specified in each bid (subject to paragraph (h)) until it has accepted bids for that amount of gas equal to the difference between the aggregate remaining surpluses and the aggregate remaining deficits as determined by National Grid NTS in accordance with 3.6.4 (provided that National Grid NTS shall not be required to accept bids for Residual Surplus Gas at a relevant Storage Facility or LNG Importation Facility in excess of the amount of Residual Surplus Gas at such relevant Storage Facility or LNG Importation Facility);
- (h) the last bid (for the lowest price) accepted may be accepted for a part of the quantity specified in the bid, and if more than one such bid has the same price such bids will be accepted pro rata the amounts of each, disregarding any bid which states that it may only be accepted for the whole of the specified quantity.

- 3.7.3 A Relevant System Manager will not transfer or surrender Storage Capacity or LNG Importation Capacity when making Residual Gas Transfers in respect of Residual Surplus Gas.
- 3.7.4 If after the tender under paragraph 3.7.2 there is any remaining Residual Surplus Gas, National Grid NTS (on behalf of Relevant System Managers) will take such other reasonable action as it shall think fit to dispose thereof (it being apparent that no User is willing at any price to enter into a Storage Gas Transfer thereof); and any reasonable costs incurred by National Grid NTS in so doing (including costs incurred by reason of having gas-in-storage in excess of its Storage Space or LNG Importation Space) shall be costs of the Relevant System Manager for the purposes of this Section K.
- 3.7.5 Where more than one Relevant System Manager holds Residual Surplus Gas in a Storage Facility or LNG Importation Facility, the gas-in-storage subject to Residual Gas Transfers and the proceeds of the tender under paragraph 3.7.2 and any costs under paragraph 3.7.4 will be apportioned pro rata their respective quantities of Residual Surplus Gas in the facility.
- 3.7.6 National Grid NTS may provisionally determine the amount of the Residual Surplus Gas for the purposes of the tender document under paragraph 3.7.2 before determining (under paragraph 3.6.4) the amount of Carry-Across Gas in which case:
- (a) the tender document shall state that the amounts of Residual Surplus Gas subject to tender are liable to be reduced following determination of the amounts of Carry-Across Gas; and
 - (b) the amounts of Carry-Across Gas may be determined having regard to the prices which are bid pursuant to such tender.

3.8 Winter Carry-Across and Winter Storage Gas Transfers (Operating Margins Capacity Arrangements)

- 3.8.1 For the purposes of the Code:
- (a) **"Winter Carry-Across Gas"** means gas withdrawn from one Storage Facility or LNG Importation Facility by a Relevant System Manager and injected into another Storage Facility or LNG Importation Facility by the same or another Relevant System Manager;
 - (b) a **"Winter Storage Gas Transfer"** means a Storage Gas Transfer in respect of a Storage Facility or LNG Importation Facility made by a Relevant System Manager as transferee with another Relevant System Manager or other User as transferor

for the purposes of avoiding or limiting or curing (in accordance with the relevant provisions of this Section K or Section R) a deficiency of gas-in-storage by reference to the Operating Margins Profile or Aggregate Weekly Minimum Requirement respectively.

- 3.8.2 Where two Relevant System Managers make a Winter Storage Gas Transfer the transferee shall pay to the transferor an amount determined by multiplying the amount of the transferred gas-in-storage by the relevant WACOG (in accordance with paragraph 3.3.1 (b)), but as at the Day for which such Nomination was made) of the transferor.

- 3.8.3 In relation to any possible withdrawal of Winter Carry-Across Gas or Winter Gas Storage Transfer, an Operating Margins Facility is "**Available**" for Operating Margins Purposes if at the relevant time:
- (a) National Grid NTS holds gas in storage in the facility for Operating Margins Purposes;
 - (b) the aggregate gas-in-storage held by National Grid NTS for Operating Margins Purposes is not less than the Aggregate Operating Margins Profile; and
 - (c) no Operating Margins Profile Deficiency in respect of such facility exists or would arise as a result of such withdrawal or transfer.
- 3.8.4 For the purposes of paragraph 4, Winter Carry-Across Gas injected by National Grid NTS for Operating Margins Purposes shall be treated as if it were Carry-Across Gas pursuant to paragraph 4.3.4, except that the reference in paragraph 4.2.4(a) to the last Day of the Storage Year shall be treated as a reference to the Day for which such Nomination was made.
- 3.8.5 For the avoidance of doubt, injection of Winter Carry-Across Gas by National Grid NTS for Operating Margins Purposes and any Winter Storage Gas Transfer made for such purposes by it as transferee, shall be treated as part of the Margins Gas Procurement Arrangements.
- 3.8.6 Amounts accruing due on any Day to National Grid NTS (Margins) in respect of Winter Carry-Across Gas or Winter Storage Gas Transfer made by it as transferor shall be counted as Eligible Margins Revenues for the purposes of paragraph 4.3.3.

3.9 Additional injection (Operating Margins Capacity Arrangements)

- 3.9.1 Where at any time in the Storage Year the quantity of gas-in-storage held by National Grid NTS for Operating Margins Purposes in any Operating Margins Facility is less than the quantity shown as required at that time according to the Operating Margins Profile for that Operating Margins Facility (the amount by which it is less being the "**Operating Margins Profile Deficiency**"), National Grid NTS will, but only to the extent that and at a time at which it is reasonably practicable to do so:
- (a) if and to the extent that any other Operating Margins Facility in which National Grid NTS has gas-in-storage for Operating Margins Purposes is Available (in accordance with paragraph 3.8), make an Input Nomination (and a corresponding Storage Withdrawal Nomination) (for Winter Carry-across Gas) in respect of that other Operating Margins Facility for a quantity of gas;
 - (b) where any User offers to do so, on terms which National Grid NTS reasonably determines to be acceptable, make an Acquiring Trade Nomination in respect of a quantity of gas;
 - (c) to the extent, if any, to which its Margins Gas Procurement Arrangements permit it do so on terms which National Grid NTS reasonably determines to be acceptable, secure that a quantity of gas (in addition to any other quantity to be delivered) is delivered to the Total System on the Gas Flow Day
- the amount or aggregate amount of which does not exceed the amount of the relevant deficiency; and (except in the case of a Winter Storage Gas Transfer) inject such

quantity into the Operating Margins Facility for Operating Margins Purposes.

- 3.9.2 Paragraph 2.2.4 shall not be affected by any inability of National Grid NTS to do any of the things referred to in paragraph 3.9.1.

4 RECOVERY OF OPERATING MARGINS COSTS

4.1 Introduction

Certain of the costs incurred by National Grid NTS in connection with Margins Gas Procurement Arrangements and in utilising Operating Margins in accordance with this Section K will subsequently be recovered from Users by virtue of the inclusion of the Daily Margins Recovery Amount in the calculation of Balancing Neutrality Charges under Section F.

4.2 Operating Margins WACOG

- 4.2.1 In respect of each Operating Margins Facility "**Operating Margins WACOG**" is:

- (a) where National Grid NTS has entered into Operating Margins Capacity Arrangements in respect of that Operating Margins Facility, the weighted average cost of gas-in-storage for the time being held by National Grid NTS for Operating Margins Purposes pursuant to those Operating Margins Capacity Arrangements in that facility; and
- (b) where National Grid NTS has entered into Operating Margins Gas Delivery Arrangements in respect of that Operating Margins Facility, the weighted average cost of gas utilised by National Grid NTS for Operating Margins Purposes pursuant to those Operating Margins Gas Delivery Arrangements from that facility.

- 4.2.2 In this paragraph 4 "**National Grid NTS (Margins)**" means National Grid NTS acting for Operating Margins Purposes.

- 4.2.3 For the purposes of:

- (a) paragraph 4.2.1(a), the Operating Margins WACOG shall be calculated:
 - (i) so as to take account of the costs set out in paragraph 4.2.4 (and where such costs are incurred by National Grid NTS (Margins) in connection with injection on a Day into more than one Operating Margins Facility, allocating such costs in proportion to the quantities of gas injected into each such Operating Margins Facility); and
 - (ii) on the basis that any reduction (by withdrawal or Storage Gas Transfer) in the amount of gas-in-storage held by National Grid NTS (Margins) shall be valued at Operating Margins WACOG at the time of such reduction;
- (b) paragraph 4.2.1(b), the Operating Margins WACOG shall be calculated in accordance with the principles set out in the relevant Operating Margins Statement.

- 4.2.4 The relevant costs of National Grid NTS (Margins) are the following amounts:

- (a) the quantity of the relevant Carry-Over Margins Gas multiplied by the Operating Margins WACOG and the quantity of relevant Carry-Across Gas (in respect of which the relevant Storage Facility is the deficit facility) multiplied by the Operating Margins WACOG in respect of the surplus Storage Facility, in each case as at the last Day of such Storage Year;
 - (b) the amounts which have accrued due from National Grid NTS (Margins) pursuant to the Margins Gas Procurement Arrangements in respect of:
 - (i) quantities of gas delivered to the Total System; and
 - (ii) Acquiring Trade Nominations (irrespective of whether such amounts have been paid or have become due for payment by National Grid NTS (Margins));
 - (c) the amounts which have accrued due from National Grid NTS (Margins) in respect of any Storage Gas Transfers (including Winter Storage Gas Transfers) made in favour of National Grid NTS (Margins);
 - (d) the amounts payable by National Grid NTS (Margins) by way of Transportation Charges (in respect of the delivery of gas to the NTS at System Entry Points and the offtake of gas from the NTS at Storage Connection Points for injection to Operating Margins Facilities), determined on a daily basis;
 - (e) amounts incurred by National Grid NTS (Margins) by way of Balancing Charges payable to National Grid NTS;
 - (f) the amounts paid or payable by National Grid NTS (Margins) by way of injection charges in respect of injection on relevant Days into the relevant Operating Margins Facility;
 - (g) amounts payable by National Grid NTS (Margins) (or National Grid NTS (Margins) share of amounts payable by National Grid NTS) by way of fees to a User Agent appointed by it in accordance with Section E2.2; and
 - (h) the amounts paid or payable by National Grid NTS (Margins) by way of withdrawal charges in respect of withdrawal on relevant Days of Carry-Across Gas from a surplus Operating Margins Facility in relation to which the relevant Operating Margins Facility is the deficit Operating Margins Facility.
- 4.2.5 Where the amount of any cost under paragraph 4.2.4 is not known at any time at which Operating Margins WACOG is calculated, National Grid NTS will use an estimate of such amount.
- 4.2.6 For the purposes of this paragraph 4 "**Net Margins WACOG**" is:
- (a) where National Grid NTS has entered into Operating Margins Capacity Arrangements, Operating Margins WACOG calculated in accordance with this paragraph 4.2 but on the basis that the amounts under paragraphs 4.2.4(d) and (f) are excluded from such calculation, and that in respect of amounts under paragraphs 4.2.4(b) and (c) an appropriate deduction shall be made to remove amounts reflected in the value of the gas or gas-in-storage acquired for Operating Margins Purposes attributable to Transportation Charges and injection charges at the rates applicable at the start of the relevant Storage Year;

and

- (b) where National Grid NTS has entered into Operating Margins Gas Delivery Arrangements, the amount determined in accordance with the principles set out in the relevant Operating Margins Statement.

4.2.7 In determining Operating Margins WACOG in respect of a surplus or a deficit Operating Margins Facility, gas withdrawn or injected as Carry-Across Gas shall be treated as having been withdrawn from or (as the case may be) injected to such facility on the Day such withdrawal or injection occurs.

4.2.8 The amounts (if any) paid by National Grid NTS for Operating Margins Purposes pursuant to any Storage Gas Transfer under paragraph 3.5 and/or paragraph 3.6, and/or paragraph 3.8 will count in determining Operating Margins WACOG in accordance with paragraph 4.2.

4.3 Daily Margins Recovery Amount

4.3.1 The "**Daily Margins Recovery Amount**" in respect of each Day is Eligible Margins Costs less Eligible Margins Revenues.

4.3.2 "**Eligible Margins Costs**" in respect of a Day is the sum of:

- (a) the amount of gas withdrawn, or delivered to National Grid NTS, from each Operating Margins Facility on the Day for Operating Margins Purposes multiplied by Net Margins WACOG; and
- (b) the amount of any Balancing Charges payable by National Grid NTS (Margins) in respect of the Day.

4.3.3 "**Eligible Margins Revenues**" in respect of a Day on which Operating Margins were utilised is the amount of the Daily Imbalance Charge payable to National Grid NTS (Margins) in respect of the Day (and reflecting the imbalance resulting from the delivery of gas to the Total System for Operating Margins Requirements and anything done under the Margins Gas Procurement Arrangements).

4.3.4 The withdrawal of gas from a surplus Operating Margins Facility as Carry-Across Gas shall not be treated as utilisation of such gas for Operating Margins Purposes, and such gas shall not be treated as withdrawn for Operating Margins Purposes for the purposes of paragraphs 4.3.1.

4.4 Closing Margins Adjustment Charge

4.4.1 For the avoidance of doubt, this paragraph 4.4 applies only to Operating Margins Capacity Arrangements.

4.4.2 The amounts (if any) received by National Grid NTS for Operating Margins Purposes pursuant to any Storage Gas Transfer under paragraph 3.5 and/or paragraph 3.6, and/or paragraph 3.8 or tender in respect of Residual Surplus Gas pursuant to paragraphs 3.5 and 3.7, less certain amounts incurred by National Grid NTS in connection with the procurement and injection of gas for Operating Margins Purposes, will be refunded to Users in accordance with paragraph 4.4.

- 4.4.3 Following each Storage Year the difference between:
- (a) the aggregate (for each Operating Margins Facility for Operating Margins Purposes) of the quantities of gas subject to Residual Gas Transfers (as Residual Surplus Gas) under paragraph 4.4.2 multiplied by Operating Margins WACOG for the relevant Operating Margins Facility (as at the end of the Storage Year following which such transfers are made); and
 - (b) the aggregate amounts received (in accordance with paragraph 4.4.2) by National Grid NTS (Margins) in respect of the Storage Gas Transfers or Residual Gas Transfers referred to in paragraph (a) less any amounts received (if any) pursuant to any adjustment under paragraph 3.7.2(f)(ii) to the bid prices payable by Users as a result of the Relevant System Manager or National Grid NTS on their behalf) incurring withdrawal charges or other costs in connection with Residual Gas Transfers.
- is payable to or recoverable from relevant Users in such Storage Year in accordance with this paragraph 4.4.
- 4.4.4 The amount under paragraph 4.4.3 is positive where the amount under paragraph (a) thereof exceeds that under paragraph (b), and otherwise is negative.
- 4.4.5 Following each Storage Year National Grid NTS (Margins) shall pay to each relevant User, or (as the case may be) each relevant User shall pay to National Grid NTS (Margins), a charge (the "**Closing Margins Adjustment Charge**") calculated as the amount under paragraph 4.4.3 divided by the sum of all relevant Users' relevant UDQIs and relevant UDQOs for such Storage Year, multiplied by the sum of the relevant User's relevant UDQIs and relevant UDQOs for such Storage Year.
- 4.4.6 For the purposes of this paragraph 4.4 relevant User, relevant UDQI and relevant UDQO have the same meanings as in Section F4.1.2.
- 4.4.7 National Grid NTS (Margins) will as soon as reasonably practicable in the following Storage Year determine the Closing Margins Adjustment Charges.
- 4.4.8 The Closing Margins Adjustment Charges shall be invoiced and are payable in accordance with Section S.
- 4.4.9 It is acknowledged (without prejudice to the determination of Operating Margins WACOG in each Storage Facility) that it is not necessary to account for Carry-Across Gas in determining the Closing Margins Adjustment Charge as such gas will continue to be held by National Grid NTS (Margins) Operating Margins WACOG for Operating Margins Purposes.

5 CLASS A CONTINGENCIES

5.1 Class A Contingencies

- 5.1.1 During the period of a Class A Contingency, any nominations and renominations for the purposes of Section K shall be submitted in accordance with the relevant Contingency Procedures.

