Draft – 24 November 2021

AMENDMENT AND RESTATEMENT AGREEMENT

relating to the

INTERCONNECTION AGREEMENT

(UK-CONTINENT INTERCONNECTOR)

between

NATIONAL GRID GAS PLC

and

INTERCONNECTOR ~~(UK)~~ LIMITED

(previously known as Interconnector (UK) Limited)

ANNEX A – Network Entry Provisions

Contents

ANNEX A-1

GENERAL

1. **Scope**

This Annex A sets out provisions applying in respect of the Interconnection Point as a SEP and the delivery of gas (offtaken from the ~~IUK~~Interconnector System) to the National Grid Gas System.

2. **Interpretation**

2.1 In this Annex A the following terms shall have the following meanings:

"**Entry Gas**": gas delivered or tendered for delivery to the National Grid Gas System at the SEP;

"**Gas Entry Conditions**": the Gas Entry Conditions contained in Annex A-2;

"**Network Entry Provisions**": the Network Entry Provisions set out in paragraph 3.

3. **Network Entry Provisions**

3.1 For the purposes of the Uniform Network Code, the Network Entry Provisions applicable in respect of the SEP shall be as set out in this paragraph 3.

3.2 The Connected Delivery Facility is the ~~IUK~~Interconnector System as described in Appendix 1 to Annex C (Measurement Provisions).

3.3 The Individual System Entry Points comprised in the SEP are as described in Appendix 1 to Annex C (Measurement Provisions).

3.4 The Gas Entry Conditions are as specified in Annex A-2, subject as provided in paragraphs 4 and 5.

3.5 The Measurement Provisions are as specified in Annex C (Measurement Provisions) (insofar as applicable to measurement of flows of gas into the National Grid Gas System at the SEP).

3.6 The points of delivery at the SEP comprise the points marked 'Y' in the diagram in Appendix 1 to Annex C (Measurement Provisions).

3.7 Any other provision of this Agreement, insofar as (i) relating to the delivery of gas to the National Grid Gas System at the SEP, and (ii) falling within the permitted scope of Network Entry provisions pursuant to Uniform Network Code Section I 2.3.3 of the Transportation Principal Document, shall be a Network Entry Provision.

4. **Change in Legal Requirements**

Where after the date of this Agreement there is a change in any Legal Requirement relating to the composition or other characteristics of gas delivered to or conveyed by the National Grid Gas System, either Operator may require that both Operators shall discuss the amendment of the Gas Entry Conditions in accordance with ~~Clause~~clause 7 (Amendment Process) of this Agreement, so as to enable such Operator and this Agreement to comply with such changed Legal Requirement.

5. **Change of Flow Direction**

If the composition of gas ('**entry non-compliant gas**') being offtaken from the National Grid Gas System at the CSEP is such that such gas would not comply with any of the Gas Entry Conditions, and subsequently the direction of flow of gas in the ~~IUK~~Interconnector System is to be reversed so that such gas will be delivered to the National Grid Gas System at the SEP:

(a) ~~IUK~~Interconnector shall give notice to National Grid Gas thereof not less than 1 hour before delivery of gas to the National Grid Gas System at the SEP is to commence;

(b) the Operators shall, having regard to the reasonable requirements of each Operator, agree a programme for the redelivery to the National Grid Gas System of the quantity (the '**allowed quantity**') of such entry non-compliant gas which was so offtaken. The allowed quantity shall be adequate to allow the redelivery of the quantity of such entry non-compliant gas as was delivered from the National Grid Gas System to the ~~IUK~~Interconnector System;

(c) for the period of redelivery, in accordance with such programme, to the National Grid Gas System at the SEP of the gas which was offtaken from the National Grid Gas System at the CSEP, in a quantity not exceeding the allowed quantity, the Gas Entry Conditions shall be relaxed so as to be equal to the values of the relevant characteristics of the entry non-compliant gas which was originally offtaken from the National Grid Gas System.

ANNEX A-2

GAS ENTRY CONDITIONS

1. Composition

The composition of Entry Gas shall be within the limits set out in Table A below:

TABLE A

Characteristic	Unit	Minimum	Maximum
Gross Calorific Value[1]	MJ/Nm³	38.9	44.6
Wobbe Index[1]	MJ/Nm³	49.75	54.19
Temperature	°C	1.0	38.0
Hydrocarbon Dewpoint	°C from 1 to 69 barg	n/a	-2.0
Water Dewpoint	°C ~~from 1 to~~ at 69 barg	n/a	-10.0
Oxygen Content	ppm vol	n/a	1000.0
Carbon Dioxide	mol%	n/a	2.5
Hydrogen Sulphide (including COS)	ppm vol	n/a	3.3
Total Sulphur	mg/Nm³	n/a	30
Incomplete Combustion Factor	n/a	n/a	0.48
Soot index	n/a	n/a	0.6
Inert gases (including Carbon Dioxide and Nitrogen)	mol%	n/a	n/a

Nitrogen	mol%	n/a	n/a
Hydrogen	ppm vol	n/a	1000.0

Note:

1. Reference temperatures – 0°C for volume and 25°C for combustion.

The above Table A uses expressions and abbreviations which have meanings assigned to them in the Gas Safety (Management) Regulations 1996, schedule 3, and will be subject to future modification in accordance with ~~Clause~~clause 7 (Amendment Process) of the Agreement to ensure compliance with any relevant statutory gas requirement.

Either Operator may request the limits in Table A above in relation to Nitrogen and inert gases to be revised in accordance with ~~Clause~~clause 7 (Amendment Process) of the Agreement.

2. **Contaminants**

Entry Gas shall not contain any solid or liquid material which would interfere with the integrity or operation of the National Grid Gas System or any pipeline connected to such system or any appliance which a consumer might reasonably be expected to have connected to the National Grid Gas System.

~~3. **Odour**~~

~~Entry Gas shall have no odour which might cause National Grid Gas to contravene the Legal Requirement or gas industry practice not to distribute any gas which does not possess a distinctive and characteristic odour.~~

~~4.~~3. **Pressure**

The pressure of Entry Gas shall not exceed 69 barg.

ANNEX B – Network Exit Provisions

Contents

ANNEX B-1: GENERAL AND INTERPRETATION

1. **Scope**

This Annex B sets out provisions applying in respect of the CSEP and the offtake of gas from the National Grid Gas System for delivery to the ~~IUK~~Interconnector System.

2. **Interpretation**

2.1 In this Annex B~~-1~~ the following terms shall have the following meanings:

"**Applicable Offtake Requirements**": the 'Applicable Offtake Requirements' (in accordance with the Uniform Network Code) in relation to Exit Gas;

"**Exit Flow Day**": a Gas Day during which gas flows from the National Grid Gas System to the ~~IUK~~Interconnector System at the Interconnection Point;

"**Exit Gas**": gas offtaken from or made available by National Grid Gas for offtake from the National Grid Gas System at the CSEP;

"**Feeder**": any of the pipelines forming part of that part of the National Grid Gas System by means of which gas delivered to the National Grid Gas System at the System Entry Points at Bacton is transported away from those System Entry Points or (on an Exit Flow Day) gas is transported from the King's Lynn Compressors to Bacton for offtake from the National Grid Gas System at the CSEP; and Feeders 2, 3, 4, 5 and ~~5~~27 are the Feeders identified as such in Annex C (Measurement Provisions), Appendix 1;

"**King's Lynn Compressors**": the gas compressors including the associated pipework and equipment forming part of the National Grid Gas System and installed on Feeders 2 ~~and~~, 4 and 27 at ~~Kings~~King's Lynn which have been modified so as to be capable of compressing gas for transportation to Bacton;

~~"**King's Lynn Flow to CSEP**": at any time on an Exit Flow Day, the rate (in mcmh) determined as A – B~~

~~where:~~

~~A is the rate of offtake at the CSEP (ascertained at the point marked 'A' on the diagram in Annex C (Measurement Provisions), Appendix 1);~~

~~B is the aggregate rate at which gas delivered to the National Grid Gas System at the System Entry Points (other than the Interconnection Point) at Bacton flows from~~

~~Feeder 2 to the CSEP (ascertained at the point marked 'B' on the diagram in Annex C (Measurement Provisions), Appendix 1);~~

"**Output Nominations**": has the meaning given in the Uniform Network Code;

"**Reasonable Measures**": has the meaning given to that expression in paragraph 5.1 of this Annex B-1; and

"**Total King's Lynn Flow**": means the ~~sum of:~~

~~(i) the King's Lynn Flow to CSEP, and~~

~~the~~ rate (in mcmh) at which gas ~~(having flowed in Feeders 2 and 4~~is flowing through the King's Lynn Compressors~~) is flowing to Feeders 3 and 5 (ascertained at the point marked 'C' on the diagram in Annex C (Measurement Provisions), Appendix 1).~~.

2.2 Unless expressly otherwise provided, references in this Annex B to rates of offtake, delivery or flow of gas are to the instantaneous rate (expressed in MW or mcmh) of such offtake, delivery or flow from, to or in the National Grid Gas System, and a reference to rate of offtake is to such rate of offtake, in aggregate by all National Grid Gas Shippers, from the National Grid Gas System at the CSEP.

2.3 Unless expressly otherwise provided, any reference to a Section of the Uniform Network Code in this Annex B, is a reference to a Section of the Transportation Principal Document of the Uniform Network Code.

~~3. **Intentionally deleted**~~

~~4.~~3. **Certain Network Exit Provisions**

~~4.1~~3.1 For the purposes of Section J4.3.1 (a) of the Uniform Network Code, the points of offtake at the CSEP comprise the points marked 'X' shown in sheet 1 of the diagram in Annex C (Measurement Provisions), Appendix 1.

~~4.2~~3.2 For the purposes of Sections J4.3.3(a) and (c) of the Uniform Network Code:

(a) the provisions of Annex C (Measurement Provisions) as to the measurement of flow (and determination of volume) and the determination of Gross Calorific Value of gas offtaken shall apply;

(b) Annex C (Measurement Provisions) specifies or refers to the measurement equipment which is (and is required to be) installed at the CSEP.

~~4.3~~3.3 For the purposes of Section J4.3.1(f) of the Uniform Network Code:

(a) and in particular having regard to Section L4.3.2(a) of the Uniform Network Code, the allowable number of Gas Days of Programmed Maintenance shall be 5 in any one Planned Maintenance Period and 15 in any three consecutive Planned Maintenance Periods, provided that in respect of any Planned Maintenance Period in which pipeline inspection pursuant to paragraph (c) is undertaken, the allowed number of Gas Days shall be 15 in that Planned Maintenance Period and 25 in any three consecutive Planned Maintenance Periods of which that period is one;

(b) notwithstanding clause 12.1, where National Grid Gas is carrying out Programmed Maintenance, National Grid Gas will endeavour to ensure that the availability of gas for offtake from the National Grid Gas System at the CSEP is not reduced by more than is reasonably necessary for ~~or results from~~ the carrying out of such maintenance, and in particular is not wholly discontinued unless the total suspension of availability of gas for offtake from the National Grid Gas System is necessary to enable National Grid Gas to comply with a Legal Requirement, or otherwise is not practically avoidable;

(c) for the purposes of Section L4.4.1 of the Uniform Network Code, where National Grid Gas intends to undertake pipeline inspection which would require particular rates of offtake at the CSEP, it is a requirement that National Grid Gas Shippers cooperate so far as is practicable with any reasonable requirement of National Grid Gas as to the rate of offtake of gas from the National Grid Gas System at the CSEP.

~~4.4~~3.4 For the purposes of Section Q1.8. of the Uniform Network Code, the Local Operating Procedures shall apply.

~~5.~~4. **Reasonable Measures**

~~5.1~~4.1 References in the context of any requirement in this Annex B to National Grid Gas taking "**Reasonable Measures**" are references to National Grid Gas taking all such operational and technical measures which National Grid Gas, acting as a Reasonable and Prudent Operator, might reasonably be expected to take in order to secure compliance with such requirements.

~~5.2~~4.2 Where any provision of this Annex B requires National Grid Gas to take Reasonable Measures:

(a) National Grid Gas shall not thereby be required to take any measures, which would or which might reasonably be expected to:

(i) prejudice the physical or operational security of the National Grid Gas System;

~~(ii)~~ require reinforcement of the National Grid Gas System or modification or installation of any additional plant or equipment to the National Grid Gas System, which (in any such case) National Grid Gas would not have been required to undertake in order to comply with its obligations pursuant to the National Grid Gas Transporter Licence except~~:~~

~~(1) in relation to National Grid Gas's obligations under paragraph 2.2 of Annex B-3, where National Grid Gas decides to undertake reinforcement to meet its obligations; or~~

~~(iii)~~(ii) where the Operators have agreed that IUK shall bear the cost of such reinforcement, modification or installation;

~~(iv)~~(iii) prevent National Grid Gas from performing or result in breach of any of its obligations under the Uniform Network Code or under any other arrangement for the conveyance of gas which was in existence or had been agreed to prior to 1st March 1996, or from complying with any Legal Requirement;

~~(v)~~(iv) require National Grid Gas to incur any cost (other than a cost for which National Grid Gas is to be compensated by IUK under the provisions of this Agreement) of a kind or amount which it would not be reasonable to expect the Authority to allow in full (in accordance with the National Grid Gas licence as a gas transported under the Gas Act) in establishing the restrictions in respect of the charges made by National Grid Gas for transportation services;

(b) in taking Reasonable Measures:

(i) National Grid Gas shall utilise any compression at King's Lynn and such other plant and equipment comprised in the National Grid Gas System which would be necessary to allow King's Lynn to operate and which is deemed by National Grid Gas to be available at the relevant time, but such compressors (and other plant and equipment comprised in the National Grid Gas System) will not be expected to operate beyond its actual capability at any time;

(ii) National Grid Gas shall be entitled to rely on Exit Flow Profiles in relation to the CSEP and such information as is provided to it by National Grid Gas Shippers, Delivery Facility Operators and others as to the flows and quality of gas flows at other System Entry Points.

~~5.3~~4.3 In the event of any dispute arising between the Operators as to whether or not National Grid Gas shall have taken Reasonable Measures, the matter shall be referred to an Expert in accordance with the provisions of clause 13 (Resolution of Disputes).

ANNEX B-2: QUALITY

1. General

1.1 ~~In consideration of IUK agreeing to make payments to National Grid Gas in accordance with paragraph 6,~~ National Grid Gas agrees that the Applicable Offtake Requirements for the purposes of the Uniform Network Code shall be in accordance with paragraphs 2~~, 3~~ and ~~5~~3 of this Annex B-2 which shall constitute a Special Offtake Arrangement for the purposes of the Uniform Network Code.

1.2 ~~In accordance with clause 2.2, and notwithstanding that IUK has agreed to make payments to National Grid Gas pursuant to paragraph 6, nothing~~Nothing in this Annex B-2 shall take effect as a warranty or undertaking of National Grid Gas to ~~IUK~~Interconnector in respect of the specification of gas made available for offtake from the National Grid Gas System at the CSEP nor make National Grid Gas liable to ~~IUK~~Interconnector for any failure of the gas made available for offtake to comply with the Applicable Offtake Requirements.

~~1.3 For the avoidance of doubt, nothing in paragraph 1.2 of this Annex B-2 shall have the effect of limiting the liability of National Grid Gas to (i) National Grid Gas Shippers under the Uniform Network Code; or (ii) IUK under any other agreement between IUK and National Grid Gas or (iii) National Grid Gas Shippers under any other agreement between National Grid Gas Shippers and National Grid Gas.~~

~~1.4 National Grid Gas shall not be required, in taking Reasonable Measures for the purposes of this Annex B-2, to take any Operational Balancing Step which (but for the requirements of this Annex B-2) National Grid Gas would not otherwise take, if:~~

~~(i) in National Grid Gas's reasonable opinion it would not be appropriate for it to take such measures unless a modification of the Uniform Network Code or the operational guidelines established by National Grid Gas pursuant to Special Condition 8A of the National Grid Gas Transporter Licence were made to contemplate the taking of such measures, or otherwise the sanction of the Authority to the taking of such measures were obtained, and~~

~~(ii) such modification has not been made or sanction been given.~~

~~1.5~~1.3 ~~IUK~~Interconnector shall monitor the quality of Exit Gas pursuant to Annex C (Measurement Provisions), and shall notify National Grid Gas as soon as possible if ~~IUK~~Interconnector becomes aware (pursuant to such monitoring) that Exit Gas or any characteristic of Exit Gas is

for the time being not in compliance with the requirements in paragraph 2 below, giving details of the prevailing value of the relevant characteristic.

~~1.6 IUK may, not more than once in any six month period, provide to National Grid Gas details of its future forecasts of Gross Calorific Value and Wobbe Index of Exit Gas and the assumptions on which such forecasts are based. National Grid Gas shall review such assumptions and, to the extent it is not restricted or prevented from so doing by confidentiality or other obligations, it shall advise IUK of any material errors in any of such assumptions of which National Grid Gas is aware at that time. For the avoidance of doubt National Grid Gas shall be under no obligation to verify any forecasts made by IUK. National Grid Gas shall have no liability in respect of any advice given or omitted to be given by it in respect of this paragraph 1.6.~~

2. **Applicable Offtake Requirements**

2.1 Subject to ~~paragraphs~~paragraph 3~~, 5 and 6~~ of this Annex B-2, the Applicable Offtake Requirements are that, at the point of offtake from the National Grid Gas System:

(a) the characteristics of Exit Gas shall be within the limits in Table A below;

(b) Exit Gas shall not contain any liquid material which would interfere with the integrity or operation of the ~~IUK~~Interconnector System or any appliance which is an appliance of a description and type which a consumer might reasonably be expected to have connected to the National Grid Gas System; and

(c) Exit Gas shall have no added odorant.

TABLE A

Characteristic	Unit	Minimum	Maximum
Gross Calorific Value[1]	MJ/Nm³	38.9	44.6
Wobbe Index[1]	MJ/Nm³	49.75	54.19
Temperature	°C	1.0	~~28~~38.0
Hydrocarbon Dewpoint	°C from 1 to 69 barg	n/a	-2.0
Water Dewpoint	°C ~~from 1 to~~ at 69 barg	n/a	-10.0
Oxygen Content	ppm vol	n/a	1000.0
Carbon Dioxide	mol%	n/a	2.5
Hydrogen Sulphide (including COS)	ppm vol	n/a	3.3
Total Sulphur	mg/Nm³	n/a	30
Incomplete Combustion Factor	n/a	n/a	0.48
Soot index	n/a	n/a	0.6
Inert gases (including Carbon Dioxide and Nitrogen)	mol%	n/a	n/a
Nitrogen	mol%	n/a	n/a
Hydrogen	ppm vol	n/a	1000.0

Note:

1. Reference temperatures – 0°C for volume and 25°C for combustion

2.2 The characteristics of gas made available for offtake from the National Grid Gas System at the CSEP will be determined in accordance with Annex C (Measurement Provisions).

2.3 The above Table A uses expressions and abbreviations which have meanings assigned to them in the Gas Safety (Management) Regulations 1996, schedule 3, and will be subject to future modification in accordance with clause 7 (Amendment Process) to ensure compliance with any relevant statutory gas requirement.

2.4 Either Operator may request the limits in Table A above in relation to Nitrogen and inert gases to be revised in accordance with clause 7 (Amendment Process).

2.5 In order to minimise the level of solid material (if any) contained in the Exit Gas, National Grid Gas and ~~IUK~~Interconnector shall each comply with any velocity control protocol which may be agreed between the Operators from time to time. To the extent that Exit Gas does contain any solid material, National Grid Gas and ~~IUK~~Interconnector agree to co-operate with each other to ensure the safe disposal of such material.

~~3.~~ **Carbon Dioxide~~Reasonable Measures~~**

3. ~~**Subject to paragraph 3.2,**~~

3.1 National Grid Gas shall take all Reasonable Measures but shall not be required to take measures beyond Reasonable Measures to secure ~~the compliance of Exit Gas with the Qualified Requirements;~~ that Exit Gas complies with the requirements in Table A as to Carbon Dioxide content; and accordingly, for the purposes of the Uniform Network Code, the Applicable Offtake Requirements shall be deemed to be relaxed (and Exit Gas shall not be considered as not complying therewith) to the extent that National Grid Gas is unable to secure, by taking such Reasonable Measures, that Exit Gas complies with ~~the Qualified Requirements~~the requirements in Table A as to Carbon Dioxide content.

~~3.2 For the purposes of this paragraph 3, the "**Qualified Requirements**" are:~~

~~(i) the requirements in Table A in paragraph 2 as to temperature and Carbon Dioxide; and~~

~~(ii) the requirements in paragraph 2.1(c) as to odour.~~

~~4. **Gross Calorific Value/Wobbe Index**~~

~~4.1 National Grid Gas will take Reasonable Measures (subject to and in accordance with paragraph 3) to secure that, notwithstanding that the minimum limit in respect of Gross Calorific Value of Exit Gas is 38.9 MJ/Nm³, the Gross Calorific Value of Exit Gas is not less than 39.4 MJ/Nm³.~~

~~5. **Carbon Dioxide**~~

~~5.1 The Applicable Offtake Requirement in relation to Carbon Dioxide shall not apply to the extent that at any time, pursuant to any Legal Requirement, National Grid Gas is required to permit or is not entitled to refuse the delivery of gas to the National Grid Gas System at System Entry Points having a Carbon Dioxide content exceeding that which is permitted under the Network Entry Provisions applicable (pursuant to Section I1.6 or otherwise) at 1st January 1997 at such System Entry Point.~~

3.2 For the avoidance of doubt~~,~~:

(a) it will not be feasible to secure such compliance~~for National Grid Gas to secure that Exit Gas complies with the requirements in Table A as to Carbon Dioxide content~~ where insufficient gas of the requisite quality to enable National Grid Gas to arrange blending is being or (at the appropriate time) has been delivered to the National Grid Gas System.

~~(a)~~(b) this paragraph 3 is without prejudice to paragraph 9.2 of the Local Operating Procedures.

~~6. **Payment by IUK**~~

~~6.1 Payments made by IUK to National Grid Gas pursuant to Annex B-3 relate in part to the costs of operating the Kings Lynn Compressors for the purposes of enabling National Grid Gas to comply with the requirements of this Annex B-2.~~

~~7. **Intentionally deleted**~~

~~8. **Hydrocarbon Dewpoint**~~

~~8.1 National Grid Gas shall be deemed not to have taken all Reasonable Measures to secure that Exit Gas complies with the requirements in Table A as to Hydrocarbon Dewpoint content where, notwithstanding that sufficient gas of the requisite quality to enable National Grid Gas to arrange blending is being or (at the appropriate time) has been delivered to the National Grid Gas System, such blending is not achieved.~~

~~8.2 In using Reasonable Measures to secure that Exit Gas complies with the requirements in Table A as to Hydrocarbon Dewpoint content National Grid Gas shall (subject to there being sufficient gas of the requisite quality) carry out blending having due regard to measurement uncertainties.~~

ANNEX B-3: EXIT PRESSURE

1. General

1.1 In consideration of ~~IUK~~Interconnector agreeing to make payments to National Grid Gas in accordance with ~~paragraphs 6 and 7~~the Pressure Service Charges Agreement, National Grid Gas agrees that the Applicable Offtake Pressure for the purposes of the Uniform Network Code shall be in accordance with paragraphs 2, 3 and 4.

1.2 ~~In accordance with clause 2.2, and notwithstanding that IUK has agreed to make payments to National Grid Gas pursuant to paragraphs 6 and 7, nothing~~Nothing in this Annex B-3 shall take effect as a warranty or undertaking of National Grid Gas to ~~IUK~~Interconnector in respect of the pressure of gas made available for offtake from the National Grid Gas System at the CSEP nor make National Grid Gas liable to ~~IUK~~Interconnector for any failure of the gas made available for offtake to comply with the Applicable Offtake Pressure.

~~1.3 For the avoidance of doubt, nothing in paragraph 1.2 of this Annex B-3 shall have the effect of limiting the liability of National Grid Gas to (i) National Grid Gas Shippers under the Uniform Network Code; (ii) IUK under any other agreement between IUK and National Grid Gas or any Affiliate of National Grid Gas; or (iii) National Grid Gas Shippers under any other agreement between National Grid Gas Shippers and National Grid Gas or any Affiliate of National Grid Gas.~~

~~1.4 This Annex B-3 is without prejudice to the provisions of Section J2.1.5 of the Uniform Network Code.~~

~~1.5 In this Annex B-3 a reference to the pressure at which it is feasible for National Grid Gas to make Exit Gas available is a reference to the pressure at which it is feasible for National Grid Gas to do so by taking Reasonable Measures.~~

~~1.6~~1.3 ~~IUK~~Interconnector may from time to time advise National Grid Gas of a basis for operating the National Grid Gas System which (in ~~IUK's~~Interconnector's opinion) will minimise the amounts which ~~IUK~~Interconnector is liable to pay to National Grid Gas pursuant to ~~paragraphs 6 and 7~~the Pressure Service Charges Agreement; and National Grid Gas agrees, but without any binding obligation to do so (and so that ~~paragraphs 6 and 7~~the terms of the Pressure Service Charges Agreement shall apply irrespective of whether National Grid Gas has done so), to take reasonable account of any such advice.

~~1.7~~1.4 Notwithstanding the other provisions of this Agreement, the Operators shall cooperate with each other with a view to securing that, notwithstanding any fluctuation in the pressure or rate of flow of Exit Gas, the quantity shown in the prevailing Exit Flow Profile is offtaken from the National Grid Gas System at the CSEP, provided that this shall not require ~~IUK~~Interconnector or National Grid Gas to incur any significant cost or to be in breach of any material provision of the Transportation Arrangements; and for the avoidance of doubt where such quantity is so offtaken National Grid Gas shall not be taken to have failed to make gas available at the Applicable Offtake Pressure.

2. **Applicable Offtake Pressure**

2.1 Subject to paragraphs 3 and 4, the Applicable Offtake Pressure shall be the Normal Offtake Pressure.

2.2 The "**Normal Offtake Pressure**" is a pressure of 45 barg or ~~such higher~~ a pressure higher than 45 barg~~,~~ not exceeding 55 barg, as ~~IUK~~ Interconnector may require by notice to National Grid Gas specifying such higher pressure and given not later than 16:00 hours on Gas Day D-1.

~~2.2~~2.3 Where Interconnector requires a pressure higher than 45 barg in accordance with paragraph 2.2 Interconnector shall be liable to make payment to National Grid Gas of the applicable charges in accordance with the Pressure Service Charges Agreement.

3. **Enhanced ~~pressure~~Pressure**

3.1 ~~IUK~~Interconnector may request that for any Gas Day that the Applicable Offtake Pressure should be a higher pressure than the Normal Offtake Pressure up to 68 barg (an "**Enhanced Pressure**"), by notice to National Grid Gas specifying the requested pressure and given not earlier than 09:00 hours nor later than ~~16~~17:00 hours on Gas Day D-1 in respect of which the request is made for Gas Day D.

3.2 National Grid Gas will reply to ~~IUK~~Interconnector, within 3 hours after receiving a request under paragraph 3.1, stating:

(a) whether it is feasible for National Grid Gas to make Exit Gas available, until the end of the relevant Gas Day, at the requested pressure;

(b) where it is not feasible for National Grid Gas to do so, whether it is feasible for National Grid Gas to make Exit Gas available, until the end of the relevant Gas Day, at any other pressure, higher than the Normal Offtake Pressure;

(c) where it is feasible for National Grid Gas to make Exit Gas available at a higher pressure ~~("**enhanced pressure")~~ in accordance with paragraph (a) or (b), the time on the relevant Gas Day with effect from which Exit Gas can be made available at such ~~e~~Enhanced ~~p~~Pressure~~;~~.

~~(d) whether IUK will be liable for amounts pursuant to paragraph 7.1(ii) in respect of such enhanced pressure.~~

3.3 Where pursuant to paragraph 3.2(a) or (b) National Grid Gas states that it is feasible for it to make Exit Gas available at an ~~e~~Enhanced ~~p~~Pressure, IUK, Interconnector may confirm its request by notice (which shall not purport to vary the contents of National Grid Gas's statement) to National Grid Gas given not later than 2 hours after National Grid Gas's reply under paragraph 3.2, in which case:

~~(i)~~(a) subject to paragraph 4, with effect from the start time and until the end of the relevant Gas Day the Applicable Offtake Pressure shall be the enhanced pressure;

~~(ii)~~(b) ~~IUK~~Interconnector shall be liable to make payment to National Grid Gas of the applicable charges in accordance with ~~paragraph 7~~the Pressure Service Charges Agreement.

4. **Exceptions**

4.1 The Applicable Offtake Pressure shall not be the Normal Offtake Pressure, or any enhanced pressure established under paragraph 3, and shall be such lesser pressure at which (in the relevant circumstances) it is feasible for National Grid Gas to make gas available for offtake at the CSEP, in any of the following circumstances:

(a) where at any time on a Gas Day the Total King's Lynn Flow exceeds 42,000 MW Variable;

(b) where for any reason, whether or not constituting a Force Majeure Event for National Grid Gas, one of the King's Lynn Compressors is not fully operational at the relevant time unless National Grid Gas has not acted as a Reasonable and Prudent Operator to secure the operation and maintenance of such Compressor;

(c) where at any time on any Gas Day, there is an unplanned reduction in the prevailing rate at which gas is being delivered to the National Grid Gas System at System Entry Points in aggregate, as a result of which National Grid Gas experiences operational difficulties in achieving the Normal Offtake Pressure;

(d) where the rate of offtake (in mcmh) of Exit Gas exceeds the rate properly provided for in the prevailing Exit Flow Profile.

4.2 Where any of the foregoing circumstances apply, National Grid Gas will:

~~(i)~~(a) inform ~~IUK~~Interconnector, as soon as reasonably practicable after the occurrence or commencement of such circumstances, of the reduced Applicable Offtake Pressure;

~~(ii)~~(b) provide to ~~IUK~~Interconnector, no later than the Exit Close-out Date, reasonable details (including measurement data) of such circumstances.

5. **Late Requested Pressure Increases**

If after ~~16~~17:00 hours on ~~the~~ Gas Day D-1,~~immediately preceding the Gas Day in respect of which a request is made, IUK~~ Interconnector requests ~~National Grid Gas~~ that the pressure of Exit Gas on Gas Day D should be higher than the Applicable Offtake Pressure, (whether or not IUK has requested a pressure of up to 55 barg under paragraph 2.2 or a higher pressure under paragraph 3~~,~~) National Grid Gas will use reasonable endeavours to accommodate such request for increases in pressure to the extent that it can do so by utilising the King's Lynn Compressors and so that in accordance with the Uniform Network Code National Grid Gas shall have no liability to National Grid Gas Shippers in respect thereof.

ANNEX B-4

FLOW ~~PROFILES,~~ RATE ~~CHANGES, ETC~~RULES

1. General

1.1 The quantities in which and rates at which gas is offtaken from the National Grid Gas System at the CSEP, and changes in such quantities and rates, shall be limited in accordance with this Annex B-4.

1.2 This Annex B-4 applies only in respect of Exit Flow Days.

1.3 ~~IUK~~Interconnector will not be liable to National Grid Gas in respect of any failure of ~~IUK~~Interconnector to operate the ~~IUK~~Interconnector Facilities and ~~IUK~~Interconnector System in accordance with paragraph 6, but (without prejudice to any entitlement of National Grid Gas under Section J of the Uniform Network Code) in the event of any such failure:

(a) National Grid Gas shall be entitled (but not obliged) to take any operational step available to it to ensure that the requirements of this Annex B-4 are complied with in respect of the rate of offtake;

(b) if the security of the National Grid Gas System is materially prejudiced or threatened as a result of such failure, National Grid Gas may take any available step to discontinue the flow of gas at the CSEP.

1.4 ~~To~~With the intent that revisions in the Exit Flow Profile are made only by reason of a change in the quantities of gas which Shippers intend to be offtaken from the National Grid Gas System at the CSEP on a Gas Day, it is agreed that ~~IUK~~Interconnector will not require ~~IUK~~Interconnector Shippers, and National Grid Gas will not require National Grid Gas Shippers, to nominate (pursuant to the Transportation Arrangements) rates or profiles of flow of Exit Gas.

1.5 (a) ~~IUK~~Interconnector acknowledges that National Grid Gas:

(i) will not compare any Exit Flow Profile with any Output Nominations or Renominations in respect of the CSEP, and will disregard such Nominations in applying the provisions of this Annex B-4; and

~~(ii) may (but will not be obliged to) provide to National Grid Gas Shippers or their agent a copy of each Exit Flow Profile or revision thereof; and~~

~~(iii)~~(ii) ~~will~~may notify to National Grid Gas Shippers or their agent (if appointed) any ~~Curtailment Notice~~flow related notices given to ~~IUK~~Interconnector.

~~(b)~~ National Grid Gas acknowledges that ~~IUK:~~

~~(i)~~ Interconnector may ~~(but will not be obliged to) provide to IUK Shippers or their agent a copy of each Exit Flow Profile or revision thereof; and~~

~~(ii)~~(b) ~~will~~ notify to ~~IUK~~Interconnector Shippers or their agent (if appointed) any ~~Curtailment Notice~~flow related notices received from National Grid Gas.

1.6 For the purposes of this Annex B-4:

~~(a) Intentionally deleted.~~

(a) "**Agreed Target Quantity**" has the meaning given in paragraph 1.1 of Annex F;

(b) "**Change Lead Time**" has the meaning given in paragraph 2.5;

~~(c) "**Curtailment Notice**" has the meaning given in paragraph 5.6;~~

~~(d)~~(c) "**Exit Flow Profile**" means a ~~statement in the form (in electronic format) in Appendix A,~~profile showing ~~the quantity of gas (taking account of paragraph 6.2) to be offtaken, and (~~for each hour~~)~~ the rate of offtake of gas~~,~~ from the National Grid Gas System at the CSEP during a Gas Day~~; and "**Day Ahead Exit Flow** comprised in an Offtake~~ Profile~~" (which is also an Exit Flow Profile) is defined in paragraph 2.1(a);~~ Notice;

~~(e)~~(d) "**Exit Flow Rate**" means the instantaneous rate of offtake of gas at the CSEP (other than during a Ramp Period), shown or to be shown in an Exit Flow Profile, expressed in MW;

~~(f) "**Final Preceding Day Rate**" means the Prevailing Exit Flow Rate applying at the end of Gas Day D-1, as shown in the Exit Flow Profile in force at the end of Gas Day D-1;~~

~~(g)~~(e) "**Flow Rate Change Time**" means the time (being the start of the Ramp Period) with effect from which a revision in the Exit Flow Rate becomes effective;

~~(h) "**FMS**" has the meaning given to it in Annex C (Measurement Provisions);~~

~~(i) "**Initial Exit Flow Rate**" means the Exit Flow Rate applying at the start of a Gas Day;~~

(f) "**Offtake Profile Notice**" means a notice from Interconnector to National Grid Gas in the form in Appendix A, that sets out:

(i) the Gas Day to which it relates;

(ii) the Exit Flow Profile; and

(iii) the Agreed Target Quantity.

~~(j)~~(g) "**Prevailing Exit Flow Rate**" at any time means the Exit Flow Rate prevailing at or immediately before such time;

~~(k) "**Primary Meters**" has the meaning given to it in Annex C (Measurement Provisions);~~

~~(l)~~(h) "**Relevant Exit Flow Rate**" is, subject to paragraph 2.6, the Exit Flow Rate for the Flow Rate Change Time as specified in the Exit Flow Profile prevailing immediately prior to the submission of a revised Exit Flow Profile pursuant to paragraph 2.3; and in relation to any change (whether an increase or a decrease) in the Exit Flow Rate:

(i) "**Ramp Rate**" means the instantaneous rate of change (in MW/minute) of the rate of offtake; and

(ii) "**Ramp Period**" is the period of time over which (on the basis of the Ramp Rate permitted in paragraph ~~6~~3.2) such change occurs.

2. ~~**Exit Flow**~~**Offtake Profile Notices**

2.1 ~~IUK~~Interconnector shall provide to National Grid Gas not later than 17:00 hours on Gas Day D-1 an ~~Exit Flow~~initial Offtake Profile ~~(the "**Day Ahead Exit Flow Profile**")~~Notice in relation to Gas Day D.

~~(b) IUK may provide to National Grid Gas replacement Day Ahead Exit Flow Profiles provided the same are delivered to National Grid Gas not later than 03:00 hours on Gas Day D-1 and provided also that not more than two such replacement Day Ahead Exit Flow Profiles may be submitted in any hour.~~

2.2 If ~~IUK~~Interconnector fails to submit ~~a Day Ahead Exit Flow~~an initial Offtake Profile Notice in accordance with paragraph 2.1~~(a),~~ it shall be deemed to have submitted a flat Exit Flow Profile of zero.

2.3 At any time after 04:00 hours on Gas Day D-1 and during Gas Day D, ~~IUK~~Interconnector may provide to National Grid Gas, not less than 30 minutes before the earliest Change Lead Time starts, a revised ~~Exit Flow~~Offtake Profile Notice showing one or more revised Exit Flow Rates, each of such revised Exit Flow Rates being with effect from a time (on the hour) not earlier than the expiry of the Change Lead Time for that revised Exit Flow Rate.

~~2.4 Intentionally blank.~~

~~2.5~~2.4 Subject to paragraph [2.6~~,~~], the "Change Lead Time" for any revised Exit Flow Rate is, in respect of that Exit Flow Rate, a period of at least:

(i) 1 hour for an increase or decrease in the Relevant Exit Flow Rate of not more than 475 MW;

(ii) 2 hours for an increase or decrease in the Relevant Exit Flow Rate of more than 475 MW but not more than 1425 MW;

(iii) 3 hours for an increase or decrease in the Relevant Exit Flow Rate of more than 1425 MW but not more than 1900 MW;

(iv) 4 hours for an increase or decrease in the Relevant Exit Flow Rate of more than 1900 MW but not more than 2850 MW;

(v) 5 hours for an increase or decrease in the Relevant Exit Flow Rate of more than 2850 MW but not more than 3325 MW;

(vi) 6 hours for an increase or decrease in the Relevant Exit Flow Rate of more than 3325 MW but not more than 7125 MW;

(vii) 8 hours for an increase or decrease in the Relevant Exit Flow Rate of more than 7125 MW,

in each case before the Flow Rate Change Time; but (without prejudice to the foregoing) ~~IUK~~Interconnector shall ensure that as much notice as is reasonably practicable is given to National Grid Gas of any change in the Exit Flow Rate.

~~2.6 For the purposes of paragraph 2.5, in determining the amount of the increase or decrease in the Relevant Exit Flow Rate, there shall be included all previously notified revisions which are to take effect at or prior to the relevant Flow Rate Change Time.~~

2.5 For these purposes a relevant cumulative increase is the aggregate increase in rate of offtake under any two or more connected changes of the rate of flow. Two changes are connected where notice of the second-notified change is required (in accordance with paragraph 2.4) to be given before the first-notified change has occurred.

~~2.7~~2.6 If:

(i) IUK requests National Grid Gas to accept a revision of the ~~Exit Flow~~Offtake Profile Notice upon less notice than is required pursuant to ~~paragraphs~~paragraph 2.3 ~~to~~and paragraph 2.~~6;~~4, and;

(ii) National Grid Gas determines that it is feasible (in accordance with the Uniform Network Code), consistently with the expectation in Section J4.5.7 (construed mutatis mutandis), for National Grid Gas to make gas available for offtake in accordance with such revised profile,

then ~~IUK may revise the Exit Flow~~National Grid Gas will accept such Offtake Profile ~~in accordance with such request~~Notice.

~~2.8~~ [If, upon a request pursuant to paragraph 2.~~7~~6(i), National Grid Gas determines (pursuant to paragraph 2.~~7~~6(ii)) that it is not feasible to make gas available for offtake in accordance with such request~~:~~

~~(a)~~ National Grid Gas will, in so far as ~~soon as reasonably practicable but not later than~~time allows between such request and the start of the Change Lead Time, ~~reject the request by giving notice to IUK and National Grid Gas Shippers or their agent (if appointed); and~~

~~(b)~~2.7 ~~such notice will (but without obliging~~ endeavour to work collaboratively with Interconnector to agree an amended revised Offtake Profile Notice such that National Grid Gas ~~to accept any further request, and without prejudice to any requirements of paragraph 4) notify IUK and~~determines that it is feasible (in accordance with the Uniform Network Code), consistently with the expectation in Section J4.5.7 (construed mutatis mutandis), for National Grid Gas ~~Shippers or their agent (if appointed) whether in National Grid Gas's determination it would be feasible~~ to make gas available for offtake in accordance with such revised profile, provided that National Grid may, in its discretion, elect, at ~~the Exit Flow Rate requested but upon notice other than that requested.~~any time, to reject any such request by Interconnector giving notice to Interconnector.]

~~2.9~~2.8 An Exit Flow Profile shall show~~,~~ in relation to a change in the rate of offtake (at the start of the Gas Day or within the Gas Day) the Ramp Period and the change in rate on the basis of the permitted Ramp Rate in accordance with paragraph ~~6~~3.2~~.~~

~~2.10~~2.9 ~~An Exit Flow Profile~~ The maximum instantaneous offtake rate at the CSEP shall not ~~specify an Exit Flow Rate which exceeds~~exceed 28,000 MW Variable, unless National Grid Gas, acting through its Gas National Control Centre operations staff, expressly agree a higher Exit Flow Rate, provided that National Grid Gas will only agree this higher Exit Flow Rate where National Grid Gas considers that it is, and will remain, compliant with its statutory obligation in relation to the safe and efficient operation of the National Grid Gas System.

The Maximum Network Exit Point Offtake Rate (as defined in the Network Code) ("**MNEPOR**") at the CESP is 672,000,000 kWh/d.

~~2.11~~2.10 Subject to paragraphs 2.~~7, 5.1 and 5.14, a statement which purports to be~~6, an ~~Exit Flow~~Offtake Profile ~~but~~Notice which is not in the form in Appendix ~~A~~ G-1 Schedule C or is not provided in accordance with the requirements of this Annex, or which at any time provides for a rate of offtake (at any time of the Gas Day) which is not in compliance with any requirement ~~(including without limitation paragraph 2.10)~~ of this Annex as to the Exit Flow Rate, will not be valid or take effect as an ~~Exit Flow~~Offtake Profile Notice; and where it receives such a ~~statement~~notice National Grid Gas will notify ~~IUK~~Interconnector of such invalidity and, where appropriate, will advise ~~of the reasons for such invalidity (which notification for the avoidance of doubt shall not be a Curtailment Notice).~~why it is invalid.

~~2.12~~2.11 Where an ~~Exit Flow~~Offtake Profile Notice has been submitted earlier than required under this Annex, a further ~~Exit Flow~~Offtake Profile Notice may be submitted to take effect at the same Flow Rate Change Time (whether to correct any invalidity in accordance with paragraph 2.~~11~~8 in the earlier profile or to reflect a change in circumstances), ~~subject to and~~ in accordance with ~~the other provisions of~~ this Annex, which will replace the earlier ~~such~~ Exit Flow Profile; provided that not more than two such replacement Exit Flow Profiles may be submitted in any hour (commencing on the hour).

~~3. **Exit Flow Rate**~~

~~3.1 The Exit Flow Rate as shown in a Day Ahead Exit Flow Profile may increase or decrease during the course of a Gas Day but only provided that, without prejudice to all other provisions of this Agreement, all of the following are satisfied:~~

~~(i) the maximum amount of any such increase or decrease is 2850 MW or (if greater) twenty per cent. (20%) of the then Prevailing Exit Flow Rate;~~

~~(ii) the Prevailing Exit Flow Rate immediately prior to any increase or decrease has remained at a uniform rate for at least the immediately preceding two hours; and~~

~~(iii) for the avoidance of doubt, the requirements of paragraphs 2.9, 2.10 and 4 are at all times complied with.~~

~~3.2 For the avoidance of doubt, the Exit Flow Rate as shown in an Exit Flow Profile other than a Day Ahead Exit Flow Profile may increase or decrease during the course of a Gas Day but only provided that, without prejudice to all other provisions of this Agreement, the requirements of paragraphs 2.3 to 2.6 inclusive (subject to paragraphs 2.7 and 2.8), 2.9, 2.10 and 4 are at all times complied with.~~

~~4. **Exit Flow Rate Limits**~~

2.12 ~~Subject~~If, pursuant to paragraph ~~5.1, the Initial Exit Flow Rate in any~~ 2.6 or 2.8 National Grid Gas has rejected an Offtake Profile Notice, Interconnector may submit a revised Offtake Profile Notice in accordance with such notification.

~~4.1~~2.13 If an Offtake Profile Notice is rejected, it shall have no effect and, subject to paragraph 2.2, the Exit Flow Profile ~~shall not:~~prevailing before such request shall continue in force.

~~(i) differ by more than 4750 MW from either the actual Final Preceding Day Rate or the forecast Final Preceding Day Rate (as indicated by the Exit Flow Profile for Gas Day D-1 which is prevailing at, or at any time after, the time when any relevant Day Ahead Exit Flow Profile or other Exit Flow Profile is submitted) except that in the event that both the actual and the forecast Final Preceding Day Rate is less than 2375 MW, the Initial Exit Flow Rate may be any amount between and including 0 and 7125 MW; or~~

~~(ii) be less than zero.~~

~~4.2 Subject to paragraph 5.1, the Exit Flow Rate in any Exit Flow Profile during the course of a Gas Day shall not:~~

~~(i) differ from the Initial Exit Flow Rate by more than 7125 MW; or~~

~~(ii) be less than zero.~~

~~5. **Flow rate flexibility and curtailment**~~

~~5.1 If either:~~

~~(i) IUK requests~~Without prejudice to the preceding provisions of this paragraph 2, Interconnector may when requesting National Grid Gas to accept a Day Ahead Exit

Flow Profile~~, or a revision of an Exit Flow Profile, which does not comply with the requirements of paragraph 4.1(i) or (as the case may be) 4.2(i); and~~

~~(ii) National Grid Gas determines that it is feasible (in accordance with the Uniform Network Code), consistently with the expectation in Section J4.5.7 (construed mutatis mutandis), for National Grid Gas to make gas available for offtake in accordance with such profile or revised profile;~~

~~or if~~

~~(iii)~~2.14 ~~IUK submits an Exit Flow Profile which initially~~ request discontinuous flow in respect of the Gas Day that satisfies the ~~requirements of paragraph 4.1(i) but which later (as a consequence of Exit Flow Rate changes on Gas Day D-1) ceases to satisfy such requirements; and~~following requirements:

(a) the Agreed Target Quantity is less than 5200 MW; and

(b) the quantity to be flowed in respect of any one hour on the relevant Gas Day does not exceed 217 MW.

2.15 Where following a request by Interconnector pursuant to paragraph 2.12:

~~(iv)~~(a) National Grid Gas determines that it is feasible (in accordance with the Uniform Network Code~~),~~) consistently with the expectation ~~in~~at Section J4.5.7 (construed mutatis mutandis), for National Grid Gas to make gas available for offtake in accordance with ~~such profile,~~the discontinuous flow profile specified by Interconnector then, National Grid Gas may accept such Offtake Profile Notice; or.

~~then in each case, subject to paragraph 5.3, IUK may provide or maintain such Exit Flow Profile or revise such Exit Flow Profile in accordance with the provisions thereof.~~

~~5.2 If, pursuant to paragraph 5.1(i) or (iii)~~ National Grid Gas determines ~~(pursuant to paragraph 5.1(ii) or (iv))~~ that it is not feasible to make gas available for offtake in accordance with such ~~profile:~~

~~(a)~~ discontinuous flow request National Grid Gas will reject the ~~profile~~request by giving ~~a Curtailment Notice to IUK and National Grid Gas Shippers or their agent (if appointed);~~

(b) in the case of a Day Ahead Exit Flow Profile or any other Exit Flow Profile which is to commence at the start of the Gas Day:

(i) National Grid Gas shall use reasonable endeavours to notify IUK (but without obliging National Grid Gas to accept the same) of any alternative Exit Flow Profile(s) which, at the time of such notification, would be acceptable to National Grid Gas provided it was submitted to National Grid Gas in accordance with the other provisions of this Agreement (including, without limitation, those as to the time of submission of such Exit Flow Profile);

(ii) IUK may submit an alternative Exit Flow Profile in accordance with such notification; and

(iii) in the event that, pursuant to paragraphs 5.2(b)(i) and (ii), an alternative Exit Flow Profile is either not submitted by IUK or is submitted but is not acceptable to National Grid Gas, the Exit Flow Rates on the Exit Flow Profile rejected by National Grid Gas pursuant to paragraph 5.2(a) shall, for the entire Gas Day, be increased or decreased by such amount in MW as National Grid Gas may determine to be necessary to ensure that such profile fully satisfies the requirements of paragraph 4; and such amended Exit Flow Profile shall be treated for the purposes of this Agreement as if it was submitted by IUK, shall be binding on IUK, and National Grid Gas shall have no liability whatsoever in respect of the same; and

(c) in the case of a requested revision to any other Exit Flow Profile, the Exit Flow Profile prevailing before such request shall continue in force.

5.3 Where National Grid Gas has accepted or confirmed a Day Ahead Exit Flow Profile or a revised Exit Flow Profile for an increased Exit Flow Rate in each case pursuant to paragraph 5.1, National Grid Gas may at any subsequent time, by giving a Curtailment Notice, require IUK to revise the Exit Flow Profile by reducing the Exit Flow Rate for the whole or any part or parts of that profile, with effect not later than a time (on the hour) specified by National Grid Gas (the "**curtailment time**", being at the end of the relevant Ramp Period), and by an amount not less than the amount determined in accordance with paragraph 5.4.

5.4 The amount of the reduction specified by National Grid Gas shall be such that the revised Exit Flow Rate would be not less than the greatest Exit Flow Rate which IUK might have specified

in the Exit Flow Profile for the relevant time or times without infringing the requirements of paragraph 4.

5.5 If (upon National Grid Gas's giving a Curtailment Notice) IUK fails to provide a revised Exit Flow Profile to National Grid Gas in accordance with paragraph 5.3, the prevailing Exit Flow Profile shall be deemed to have been revised in accordance with National Grid Gas's notice under that paragraph; and if IUK fails to comply with paragraph 6.1 in relation thereto, National Grid Gas may take operational steps in accordance with paragraph 1.3.

5.6 For the purposes of this Annex B-4 a "**Curtailment Notice**" is a notice given by National Grid Gas to IUK and National Grid Gas Shippers or their agent (if appointed):

(i) of rejection pursuant to paragraph 5.2(a) of an Exit Flow Profile which does not comply with the requirements of paragraph 4.1(i) or 4.2(i);

(ii) requiring revision pursuant to paragraph 5.2(a) of an Exit Flow Profile which does not comply with the requirements of paragraph 4.1(ii) or 4.2(ii);

(iii) requiring a reduction of the Exit Flow Rate pursuant to clause 11.3.

5.7 Not used.

5.8 A Curtailment Notice shall specify the subparagraph of paragraph 5.6 under which it is given.

5.9 A Curtailment Notice under paragraph 5.6(i) shall be given:

(i) in connection with any Day Ahead Exit Flow Profile submitted prior to 17:00 hours on Gas Day D-1, as early as reasonably practicable, but (subject to paragraph 5.9(a)(ii) below) not later than 21:00 hours on Gas Day D-1;

(ii) in connection with any other Day Ahead Exit Flow Profile (including, without limitation, a Day Ahead Exit Flow Profile submitted whether before or after 17:00 hours on Gas Day D-1, which initially satisfied the requirements of paragraph 4.1(i) but which later (as a consequence of Exit Flow Rate changes on Gas Day D-1) ceased to satisfy such requirements), as early as reasonably practicable, but not later than 03:00 hours on Gas Day D-1;

(iii) in connection with a revised Exit Flow Profile (not being a Day Ahead Exit Flow Profile), as early as reasonably practicable and not later than the start of the Change Lead Time.

~~5.10 A Curtailment Notice under paragraph 5.6(ii):~~

~~(a) shall be given not less than 5 hours before the curtailment time; and~~

~~(b) shall specify the curtailment time, the reduced Exit Flow Rate required by such notice, and the estimated period (which shall not bind National Grid Gas) for which such reduced Exit Flow Rate is required;.~~

~~5.11 Where National Grid Gas has given a Curtailment Notice under paragraphs 5.6(ii), as soon as reasonably practicable after National Grid Gas determines that the requirement for the reduced Exit Flow Rate no longer applies or will at a certain time cease to apply, National Grid Gas will so notify IUK and National Grid Gas Shippers or their agent (if appointed), specifying the time (where later than the time of such notification) with effect from which such requirement will cease to apply.~~

~~5.12 There shall be no minimum period of notice required for a Curtailment Notice under paragraph 5.6(iii); and IUK shall provide a Day Ahead Exit Flow Profile or (as the case may be) revise the prevailing Exit Flow Profile in compliance with any such Curtailment Notice, provided that the requirements of paragraphs 4.1(i) and 4.2(i) shall not apply in respect of an Exit Flow Profile submitted in compliance with such a Curtailment Notice.~~

~~5.13 Not used.~~

~~5.14 Without prejudice to the preceding provisions of this paragraph 5, provided that each of the requirements of paragraph 5.15 are satisfied, IUK may when requesting National Grid Gas to accept a Day Ahead Exit Flow Profile request that the Exit Flow Rate be at a rate other than in accordance with paragraph 3.1(i) or (ii) and where IUK makes such a request it shall notify National Grid Gas of the rate to apply in respect of each hour in the Gas Day.~~

~~5.15 The requirements referred to in paragraph 5.14 are that:~~

~~(i) the Initial Exit Flow Rate is less than 5200 MW;~~

~~(ii) the quantity to be flowed in respect of any one hour on the relevant Gas Day does not exceed 217 MW; and~~

~~(iii) meter readings from the FMS Primary Meters may be obtained instantaneously by National Grid Gas at its operational control facilities located at Warwick, Warwickshire.~~

~~5.16 Where following a request by IUK pursuant to paragraph 5.14 National Grid Gas determines that it is feasible (in accordance with the Uniform Network Code) consistently with the expectation at Section J4.5.7 (construed mutatis mutandis), for National Grid Gas to make gas available for offtake in accordance with the profile specified by IUK then, subject to paragraph 5.18, IUK may provide a Day Ahead Exit Flow Profile for which the rate for each hour of the Gas Day is the rate specified by IUK.~~

~~5.17 If, upon a request pursuant to paragraph 5.14, National Grid Gas determines (pursuant to paragraph 5.16) that it is not feasible to make gas available for offtake in accordance with such request National Grid Gas will reject the request by giving notice to IUK and National Grid Gas Shippers or their agent (if appointed) (which notice for the avoidance of doubt shall not be a Curtailment Notice).~~

~~5.18 Where IUK has provided a Day Ahead Exit Flow Profile pursuant to paragraph 5.14 which National Grid Gas has accepted, National Grid Gas may at any subsequent time require IUK to revise the Exit Flow Rate for the whole or any part or parts of that profile such that with effect from the time (on the hour, such time being not earlier than two hours after the giving of such notice) specified by National Grid Gas the Exit Flow Rate is in compliance with paragraphs 3.1(i) and (ii) (which notification for the avoidance of doubt shall not be a Curtailment Notice).~~

~~5.19(b) Where following a request by National Grid Gas pursuant to paragraph 5.18, IUK fails to submit to National Grid Gas a revised Exit Flow Profile showing an Exit Flow Rate which complies with paragraphs 3.1(i) and (ii), it shall be deemed to have submitted an Exit Flow Profile showing (from the time specified by National Grid Gas) a flat Exit Flow Rate of zero or (if greater) the lowest Exit Flow Rate permissible under paragraph 3; and if IUK fails to comply with paragraph 6.1 in relation thereto, National Grid Gas may take operational steps in accordance with paragraph 1.3~~to Interconnector.

~~6.~~3. **Rates of exit flows**

~~6.1~~3.1 Subject to and consistently with paragraph ~~6~~3.2, ~~IUK~~Interconnector will operate the ~~IUK~~Interconnector Facilities and the ~~IUK~~Interconnector System so as to ensure that the rate of offtake is as nearly as is practicable equal to the Exit Flow Rate determined pursuant to the provisions of this Annex B-4.

~~6.2~~3.2 Where a change in the rate of offtake is to be made (by reason of a revision in the Exit Flow Rate at the start of or during the Gas Day), ~~IUK~~Interconnector shall operate the ~~IUK~~Interconnector Facilities and the ~~IUK~~Interconnector System with a view to ensuring that

the Ramp Rate does not at any time exceed an instantaneous rate of change of 150 MW/minute or such other rate of offtake as expressly agreed between ~~IUK~~Interconnector and National Grid Gas (acting through its Gas National Control Centre operations staff) from time to time, provided that National Grid Gas will only agree this higher rate of offtake where National Grid Gas considers that it is, and will remain, compliant with its statutory obligations in relation to the safe and efficient operation of the National Grid Gas System.

~~6.3~~3.3 A change in Exit Flow Rate pursuant to paragraph ~~6~~3.2 shall not commence earlier than the start of the Gas Day or (as the case may be) the relevant Flow Rate Change Time, and shall be assumed to occur at the greatest Ramp Rate permitted under paragraph ~~6~~3.2.

~~**APPENDIX A**~~

~~**Form of Exit Flow Profile**~~

~~From: Interconnector (UK) Ltd.~~

~~Fax No.~~

~~Exit Flow Profile Bacton Interconnector Offtake~~

~~To: National Grid Gas Fax No.~~

~~Grid Operations Controller~~

~~System Control~~

~~Warwick~~

~~Re: Bacton interconnector gas flow information for Gas Day~~ _____

~~Time Hour commencing~~	~~Aggregate Offtake Flowrate~~
~~0500~~	
~~0600~~	
~~0700~~	
~~0800~~	
~~0900~~	
~~1000~~	
~~1100~~	
~~1200~~	
~~1300~~	
~~1400~~	

~~1500~~	
~~1600~~	
~~1700~~	
~~1800~~	
~~1900~~	
~~2000~~	
~~2100~~	
~~2200~~	
~~2300~~	
~~2359~~	
~~0100~~	
~~(25 hr day)~~	
~~0200~~	
~~0300~~	
~~0400~~	
~~TOTAL~~ ~~E.O.D~~	

~~Assumed C.V. = MJ/m3~~

~~Prepared by: _____~~
~~Date: _____~~
~~Time: _____~~
~~Issue No. _____~~

ANNEX C – Measurement Provisions

Part 1

Interconnection Point metering

1. **Definitions**

In this Annex:

"~~**Connection Point** **Fiscal Metering System**~~" ~~or "**FMS**"~~ means the metering system immediately upstream of the System Entry Point at which all ~~natural~~ gas shall be measured or analysed in accordance with the terms of this Agreement, prior to entry into the National Grid Gas System;

"**Permitted Range**" means the percentage range (for any characteristic) specified in Table 1 in Annex C, Part 4 (which in relation to energy flow is expressed as a percentage of maximum volumetric flow);

~~"**Primary Meters**~~"**Flow Measurement Equipment**" means the meters and equipment for measuring volumes of gas installed at the Interconnection Point as shown in Appendix 1;

"**Gas Analysis Equipment**" means the measurement equipment for measuring quality of gas installed at the Interconnection Point as shown in Appendix 1.

2. **General**

2.1 The quantity and quality of gas offtaken from or delivered to the National Grid Gas System at the Interconnection Point shall be determined by the ~~Primary Meters~~Flow Measurement Equipment and the Gas Analysis Equipment.

2.2 ~~IUK~~Interconnector shall be responsible for installing, calibrating, operating, maintaining and repairing the ~~Primary Meters~~Flow Measurement Equipment and Gas Analysis Equipment.

2.3 The ~~FMS~~Fiscal Metering Ssystem measures flow rates and gas qualities for the transfer of gas from National Grid Gas to ~~IUK~~Interconnector (forward flow) and from ~~IUK~~Interconnector to National Grid Gas (reverse flow), and in particular:

(a) flow rates are measured through six parallel streams incorporating orifice plate meters~~.~~ designed, built and maintained to comply with the requirements of ISO 5167. Five streams are sufficient to meet maximum flow rates; a minimum of one stream is

therefore available at any time for contingency use and to facilitate the validation of the metering systems;

(b) each stream is equipped with pressure, differential pressure and temperature instrumentation and flow conditioner plates constructed in accordance with ISO 5167;

(c) orifice plates can be removed during scheduled shutdown periods for cleaning and calibration and an inspection should be undertaken on impulse pipework to check for liquid contaminant. Photographic evidence should be taken for inspection by both parties and any excessive contamination should be analysed. An assessment of any impacts of measurement accuracy shall be provided to National Grid;

(d) gas composition is monitored by two gas chromatographs and dedicated moisture, hydrogen and oxygen analysers. The two gas chromatographs sample the gas at regular alternate intervals~~.~~ and are subject to ISO 10723 performance evaluations on a periodic basis. In the event of unavailability of one instrument, the other will continue sampling at half the overall frequency; and

(e) an independent organisation carries out regular inspections of the metering and gas quality equipment, witnessed by the Operators, to confirm conformity with the appropriate standards.

3. **Accuracy**

3.1 The total uncertainty in the measurements of the energy flow and gas quality characteristics by the ~~Primary Meters~~Flow Measurement Equipment and the Gas Analysis Equipment at the Interconnection Point shall in all steady-state flow conditions be within the Permitted Range.

3.2 The methods specified in ISO 5167-~~1:2003 and ISO 5168:2005~~1and ISO 5168 or other approved guide in uncertainty in measurement (GUM) method shall be used for the determination of uncertainties in the measurement of volume flow rates in the calculation of the total uncertainty in the measurement of energy flow rates referred to in paragraph 3.1. ~~Both Operators acknowledge that the Primary Meters and the Gas Analysis Equipment do not comply with ISO 5167-2:2003 paragraph 6.3.3.3* Notwithstanding this, the Primary Meters and Gas Analysis Equipment achieve the energy measurement uncertainty required by National Grid Gas.~~

~~* Due to a physical restriction the approach piping to the Primary Meters and Gas Analysis Equipment is 12-mm shorter than prescribed in paragraph 6.3.3.3 of ISO 5167-2:2003.~~

3.3 The methods specified in accordance with the approved validation procedures, to be agreed between National Grid Gas and ~~IUK~~Interconnector shall be used for the determination of uncertainties in the measurement of the gas quality characteristics referred to in paragraph 3.1.

~~4. Verification~~

4. Validation of Flow Measurement Equipment

4.1 National Grid Gas may request that the ~~Primary Meters~~Flow Measurement Equipment be ~~verified~~validated at any time in which case any such ~~verification~~validation shall be carried out as soon as reasonably practicable. Subject to paragraph 4.2 the costs and expense of such ~~verification~~validation, and any adjustment or replacement of the components of the ~~Primary Meters~~measurement equipment made as a result of any ~~verification~~validation made pursuant to this paragraph 4.1 shall if the ~~Primary Meters are~~measurement equipment is found to read within the Permitted Range be paid by National Grid Gas and in any other case by ~~IUK~~Interconnector.

4.2 National Grid Gas may request that the ~~Primary Meters~~Flow Measurement Equipment be verified if the previous ~~verification~~validation took place more than one (1) month previously and any ~~verification~~validation pursuant to this paragraph 4.2 shall be carried out as soon as reasonably practicable. ~~IUK~~Interconnector shall bear the costs and expenses of such ~~verification~~validation and any adjustment or replacement of the components of the ~~Primary Meters~~Flow Measurement Equipment made as a result thereof.

4.3 Subject to paragraph 4.6 ~~IUK~~Interconnector may at its own expense undertake ~~verification~~validation of the ~~Primary Meters~~Flow Measurement Equipment and may adjust or replace the components of the ~~Primary Meters~~Flow Measurement Equipment also at its own expense at any time. Validation of the Flow Measurement Equipment on all meter streams should occur no less frequently than once every 12 months.

4.4 Immediately following ~~verification~~validation pursuant to paragraph 4.1, 4.2 or 4.3 the individual components of the ~~Primary Meters~~Flow Measurement Equipment shall be adjusted or replaced as necessary so that the ~~Primary Meters~~Flow Measurement Equipment read centrally within the Permitted Range. Each individual component of the ~~Primary Meters~~Flow Measurement Equipment shall read within its recommended tolerance.

4.5 Where the ~~Primary Meters are~~Flow Measurement Equipment is found when so verified to read outside the Permitted Range then:

(a) the ~~Primary Meters~~Flow Measurement Equipment shall be assumed to have read outside the Permitted Range during the latter half of the period since last ~~verified~~validated and found to be within the Permitted Range or, if later, since last adjusted to read within the Permitted Range (except in the case where it is proved that the ~~Primary Meters have~~Flow Measurement Equipment has begun to read outside the Permitted Range on some other date or during such other period as agreed by National Grid Gas and ~~IUK~~Interconnector);

(b) for the purposes of paragraph (c), the quantities read as delivered to or offtaken from the National Grid Gas System on each Gas Day during the period when the ~~Primary Meters are~~Flow Measurement Equipment is assumed to have read outside the Permitted Range shall be adjusted by an amount as agreed by National Grid Gas corresponding to the amount by which the ~~Primary Meters were~~Flow Measurement Equipment was found on ~~verification~~validation to read outside the Permitted Range; and

(c) the amount by which the quantity determined to have been delivered to or offtaken from the National Grid Gas System on any Gas Day differs from the quantity originally determined to have been delivered to or offtaken from that System on that Gas Day shall be accounted for in accordance with Annex F paragraph 8.

4.6 Any ~~verification~~validation pursuant to this paragraph 4 shall be conducted by ~~IUK~~Interconnector and ~~IUK~~Interconnector shall give reasonable advance notice of such ~~verification~~validation to National Grid Gas who shall be entitled to be present. ~~IUK~~Interconnector shall provide a ~~verification~~validation report that includes all test results carried out on the measurement equipment to National Grid Gas within fourteen (14) days of any ~~verification~~validation stating the results of such ~~verification~~validation.

4.7 The results of any ~~verification~~validation conducted by ~~IUK~~Interconnector shall be binding on ~~IUK~~Interconnector and National Grid Gas (and on all National Grid Gas Shippers and ~~IUK~~Interconnector Shippers), unless National Grid Gas shall within fourteen (14) days after receiving the ~~verification~~validation report specified in paragraph 4.6 give notice to ~~IUK~~Interconnector that it disputes the accuracy of such ~~verification~~validation. National Grid Gas shall not be entitled to dispute the accuracy of such ~~verification~~validation solely on the grounds that it did not attend such ~~verification~~validation.

4.8 At the request of either ~~IUK~~Interconnector or National Grid Gas, ~~IUK~~Interconnector and National Grid Gas shall meet and discuss and endeavour to settle any dispute or failure to agree arising from the application of the provisions of this paragraph 4 and if within thirty (30) days after such request they shall have been unable to agree the matter may be referred to an Expert for determination in accordance with clause 13 (Dispute Resolution) (at the request of either ~~IUK~~Interconnector or National Grid Gas).

5. **Calibration of Gas Analysis Equipment**

The on-stream Gas Analysis Equipment shall be calibrated in accordance with ~~the approved validation procedures~~ISO 10723 (or any replacement of ISO 10723) performance evaluation at appropriate intervals ~~with~~with Standard Gas prepared by gravimetric means or traceable by recognised procedure to an appropriate gravimetrically prepared standard mixture and containing, as a minimum, nitrogen, carbon dioxide, methane, ethane, propane and butane. However, hydrocarbons heavier than butane should not be calculated from the butane content alone and so the Gas Analysis Equipment must allow the responses of hydrocarbons heavier than butane, with the Standard Gas also containing appropriate amounts of the heavier hydrocarbons.

6. **Inspection Rights**

National Grid Gas shall have the right, upon giving reasonable notice to ~~IUK~~Interconnector, to inspect ~~IUK's~~Interconnector's measurement equipment and the charts and other measurements or test data, but the reading calibration and adjustment of the ~~Primary Meters~~Flow Measurement Equipment and/or Gas Analysis Equipment and the changing of any charts shall be carried out by ~~IUK~~Interconnector who shall preserve all original test data, charts and other similar records for a period of three (3) years and shall make a copy thereof available to National Grid Gas upon request.

7. **Gross Calorific Value**

The Gross Calorific Value of the gas offtaken from or delivered to the National Grid Gas System at the Interconnection Point shall be determined by the Gas Analysis Equipment.

8. **Modifications**

Where an Operator proposes to modify the ~~Primary Meters and~~Flow Measurement Equipment and/or Gas Analysis Equipment, the provisions of clause 9 (Modification and inspection of Connection Facilities) shall apply.

9. **Valves**

9.1 The Operators agree that valve numbers 3077, 3079 and 3081 are owned and operated by National Grid Gas.

9.2 National Grid Gas shall as soon as reasonably practicable advise ~~IUK~~Interconnector of, and keep ~~IUK~~Interconnector updated in relation to, any maintenance works which National Grid Gas proposes to carry out in relation to valve numbers 3077, 3079 and 3081. National Grid Gas shall ensure that ~~IUK~~Interconnector shall have access to the National Grid Gas Facilities to witness any maintenance works to be carried out in relation to the valves and to observe the operation of such valves.

9.3 If National Grid Gas proposes to make a modification to valve numbers 3077, 3079 and/or 3081, the provisions of clause 9 (Modification and inspection of Connection Facilities) shall apply.

9.4 ~~IUK~~Interconnector shall have the right to access, at all reasonable times during normal business hours and upon reasonable notice, to all maintenance records and certificates kept by National Grid Gas in relation to valve numbers 3077, 3079 and 3081.

Part 2

King's Lynn metering

1. Definitions and general

1.1 In this Annex "**King's Lynn Meters**" means the meters and equipment for measuring volumes of gas installed by National Grid Gas at the King's Lynn Compressors.

1.2 The quantity of gas offtaken from the National Grid Gas System and consumed within the gas generators at King's Lynn shall (where required for the purposes of Annex B-3) be determined by the King's Lynn Meters.

1.3 National Grid Gas shall be responsible for installing, calibrating, operating, maintaining and repairing the King's Lynn Meters.

2. **Accuracy**

2.1 The total uncertainty in the measurements of the energy flow by the King's Lynn Meters at King's Lynn shall in all steady-state flow conditions be within the Permitted Range.

2.2 The methods specified in ISO ~~5167-1:1991 and~~5167 and ISO ~~5168:1978 shall~~5168 shall be used for the determination of uncertainties in the measurement of volume flow rates in the calculation of the total uncertainty in the measurement of energy flow rates referred to in paragraph 2.1.

~~3. Verification~~

3. ~~IUK~~**Validation**

3.1 Interconnector may request that the King's Lynn Meters be ~~verified~~validated at any time in which case any such ~~verification~~validation shall be carried out as soon as reasonably practicable. Subject to paragraph 3.2 the costs and expense of such ~~verification~~validation, and any adjustment or replacement of the components of the King's Lynn Meters made as a result of any ~~verification~~validation made pursuant to this paragraph 3.1 shall if the King's Lynn Meters are found to read within the Permitted Range be paid by ~~IUK~~Interconnector and in any other case by National Grid Gas.

3.2 ~~IUK~~Interconnector may request that the King's Lynn Meters be ~~verified~~validated if the previous ~~verification~~validation took place more than three (3) months previously and any ~~verification~~validation pursuant to this paragraph 3.2 shall be carried out as soon as reasonably practicable. National Grid Gas shall bear the costs and expenses of such ~~verification~~validation

and any adjustment or replacement of the components of the King's Lynn Meters made as a result thereof.

3.3 Subject to paragraph 3.5 National Grid Gas may at its own expense undertake ~~verification~~validation of the King's Lynn Meters and may adjust or replace the components of the King's Lynn Meters also at its own expense at any time.

3.4 Immediately following ~~verification~~validation pursuant to paragraph 3.1, 3.2 or 3.3 the individual components of the King's Lynn Meters shall be adjusted or replaced as necessary so that the King's Lynn Meters read centrally within the Permitted Range. Each individual component of the King's Lynn Meters shall read within its recommended tolerance.

3.5 Where the King's Lynn Meters are found when so ~~verified~~validated to read outside the Permitted Range then:

(a) the King's Lynn Meters shall be assumed to have read outside the Permitted Range during the latter half of the period since last ~~verified~~validated and found to be within the Permitted Range or, if later, since last adjusted to read within the Permitted Range (except in the case where it is proved that the King's Lynn Meters have begun to read outside the Permitted Range on some other date or during such other period as agreed by National Grid Gas);

(b) an appropriate adjustment shall be made, as required, in respect of the amounts paid or payable by ~~IUK~~Interconnector to National Grid Gas pursuant to paragraph 6 of Annex B-3 the period when the King's Lynn Meters are assumed to have read outside the Permitted Range, on the basis of an amount corresponding to the amount by which the King's Lynn Meters were found on ~~verification~~validation to read outside the Permitted Range.

3.6 Any ~~verification~~validation pursuant to this paragraph 3 shall be conducted by National Grid Gas and National Grid Gas shall give reasonable advance notice of such ~~verification~~validation to ~~IUK~~Interconnector who shall be entitled to be present. National Grid Gas shall provide a ~~verification~~validation report to ~~IUK~~Interconnector within fourteen (14) days of any ~~verification~~validation stating the results of such ~~verification~~validation.

3.7 The results of any ~~verification~~validation conducted by National Grid Gas shall be binding on National Grid Gas and ~~IUK~~Interconnector, unless ~~IUK~~Interconnector shall within fourteen (14) days after receiving the ~~verification~~validation report specified in paragraph 3.6 give notice to National Grid Gas that it disputes the accuracy of such ~~verification. IUK~~validation.

Interconnector shall not be entitled to dispute the accuracy of such ~~verification~~validation solely on the grounds that such party did not attend such ~~verification~~validation.

3.8 At the request of either National Grid Gas or ~~IUK~~Interconnector, National Grid Gas and ~~IUK~~Interconnector shall meet and discuss and endeavour to settle any dispute or failure to agree arising from the application of the provisions of this paragraph 3 and if within thirty (30) days after such request they shall have been unable to agree the matter may be referred to an Expert for determination in accordance with clause 13 (Dispute Resolution) (at the request of either National Grid Gas or ~~IUK~~Interconnector).

4. **Inspection rights**

~~IUK~~Interconnector shall have the right, upon giving reasonable notice to National Grid Gas, to inspect the National Grid Gas measurement equipment and the charts and other measurements or test data of National Grid Gas, but the reading calibration and adjustment of the King's Lynn Meters and the changing of any charts shall be carried out by National Grid Gas who shall preserve all original test data, charts and other similar records for a period of three (3) years and shall make a copy thereof available to ~~IUK~~Interconnector upon request.

5. **Calorific Value**

The calorific value of the gas offtaken at King's Lynn shall be determined in accordance with the Uniform Network Code.

6. **Modifications**

Where an Operator proposes to modify the King's Lynn Meters, the provisions of clause 9 (Modification and inspection of Connection Facilities) shall apply.

Part 3

Measurement Failure

1. If during any part of any Gas Day the ~~Primary Meters~~Flow Measurement Equipment, King's Lynn Meters or the Gas Analysis Equipment are not adequately operational, the quantity and quality of gas delivered to, or as the case may be offtaken from, the National Grid Gas System at the Interconnection Point during such time will be deemed to be such quantity and quality as may be agreed between ~~IUK~~Interconnector and National Grid Gas, in both cases acting reasonably and using alternative measurements for the derivation of such quantity and quality of gas where possible.

2. For ~~Primary Meter~~Flow Measurement Equipment and King's Lynn Meter failure, recourse to the relevant orifice differential pressures, meter pressure, meter temperature and GCV or calorific value should be made to manually determine flow through the meter.

3. For Gas Analysis Equipment failure, spot samples should be taken and analysed at an approved laboratory with sufficient frequency to monitor properly changes in operating conditions. The method and equipment used and installed for taking samples shall be subject to approval by National Grid Gas and ~~IUK~~Interconnector.

Part 4

Metering Accuracy

1. The accuracy of the ~~Primary Meters~~Flow Measurement Equipment, King's Lynn Meters and Gas Analysis Equipment is described in Table 1. Concerning Interconnection Point and Fuel Gas energy flow rate, it is expressed in relation to the maximum rate of gas flow that the meters may accommodate.

TABLE 1 - MEASUREMENT ACCURACIES

Characteristic	Unit	Measurement Range	Accuracy
~~Primary Meters~~Flow Measurement Equipment Volume Flow Rate	Nm^3/hour	86,765 to 4,000,000	+/-0.96%
~~Primary Meters~~Flow Measurement Equipment Energy Flow Rate	MJ/hour	3,375,139 to 180,000,000	+/-1.0%
King's Lynn Gas Volume Flow Rate	Sm^3/hour	0 to 2,333,333	+/-5.0%
King's Lynn Gas Energy Flow Rate	MJ/hour	0 to 104,066,666	+/-5.0%
Offtake Pressure ~~Primary Meters~~Flow Measurement Equipment	barg	0 to 80	+/-0.16
Gross Calorific Value	MJ/Nm^3 MJ/Sm^3	36.9 to 47.5 35.0 to 45.0	+/-0.05 +/-0.05
Wobbe Index	MJ/Nm^3 MJ/Sm^3	47.5 to 56.2 45.0 to 53.3	+/-0.06 +/-0.06
Offtake Temperature	°C	-10 to 45	+/-0.25
Hydrocarbon Dewpoint	°C		
Water Dewpoint	°C	-50 to 15	+/-2.0
Oxygen	ppm vol	<5000	0 to 25 ppm range at 10 ppm, +/-2.0. 25 to 5000 ppm range at 2000 ppm, +/-50.0

Carbon Dioxide	mol%	0.05 to 8.0	At 2mol% and below, +/-0.02 absolute. At above 2mol%, +/-0.05 absolute
Hydrogen Sulphide (including COS)	ppm vol	<10	+/-0.5
Total Sulphur	ppm vol	<60	+/-0.8
Incomplete Combustion Factor		-2.2 to 1.75	+/-0.03
Soot Index		0.49 to 0.65	+/-0.002
Inert Gases (including Carbon Dioxide and Nitrogen)1			
Nitrogen	mol%	0.2 to 12.0	At 5mol% and below, +/-0.01 absolute. At above 5mol%, +/-0.02 absolute.
Hydrogen	ppm vol	<5000	At 100 ppm and below, +/-2.0. At above 100 ppm, +/-5% relative.

2. Dedicated fiscal standard flow calculators are used to determine flow rates at normal conditions (0°C, 1.01325 BarA) in accordance with the formulae given in BS EN ISO 5167.

3. Gas quality (Gross Calorific Value, Wobbe Index, etc.) calculations based on the chromatograph data are carried out in accordance with BS EN ISO 6976.

4. Calculations and procedures for the evaluation of uncertainties are carried out in accordance with ISO 5168.

[1] mol% range and accuracy is a combination of the Nitrogen and Carbon Dioxide data in the Table.

Part 5

Notification of quantities at CSEP and SEP

1. ~~IUK~~Interconnector shall notify to National Grid Gas each Gas Day:

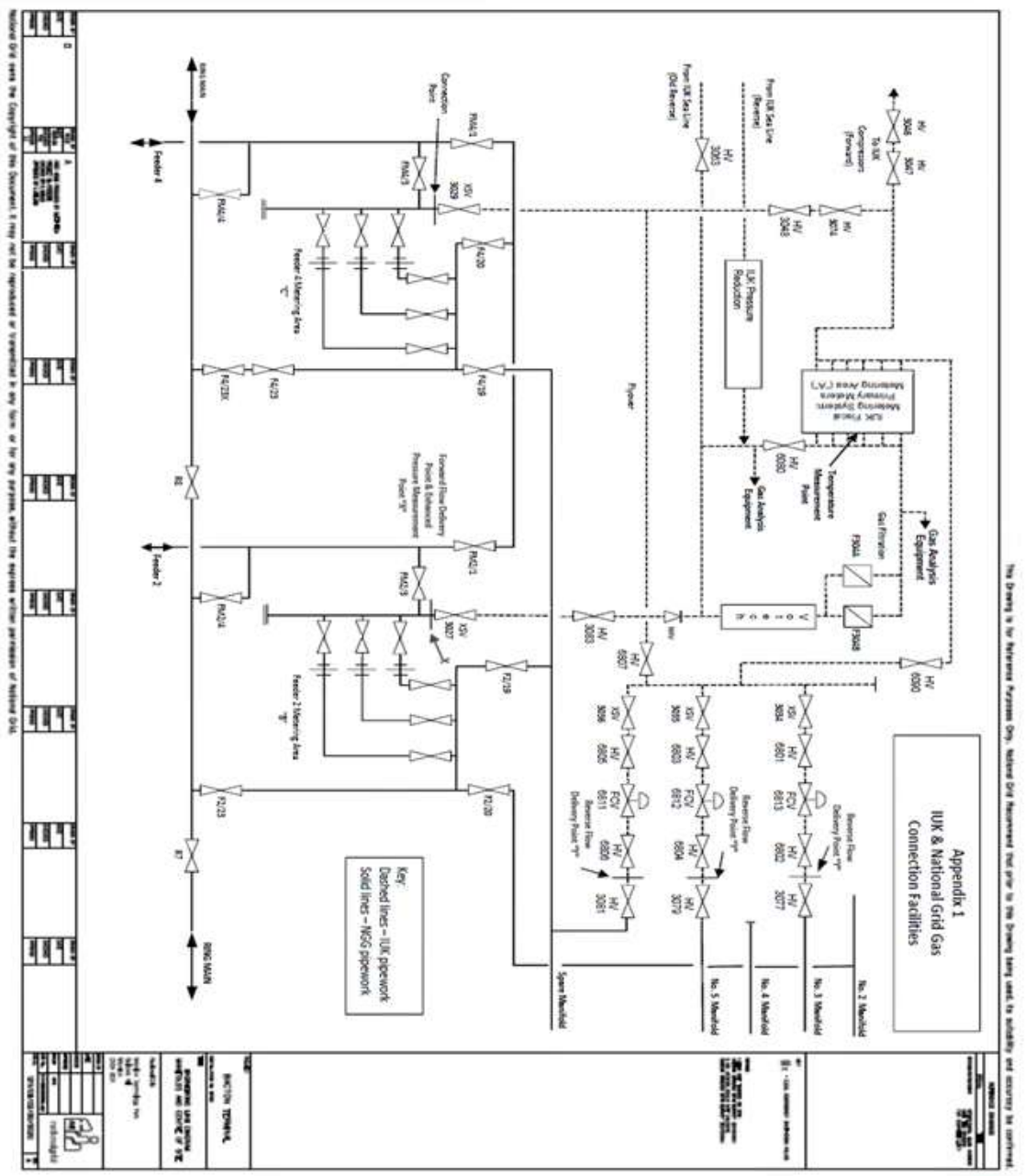
   (a) the net aggregate quantity of gas measured (in accordance with Part 1) as flowing at the Interconnection Point;

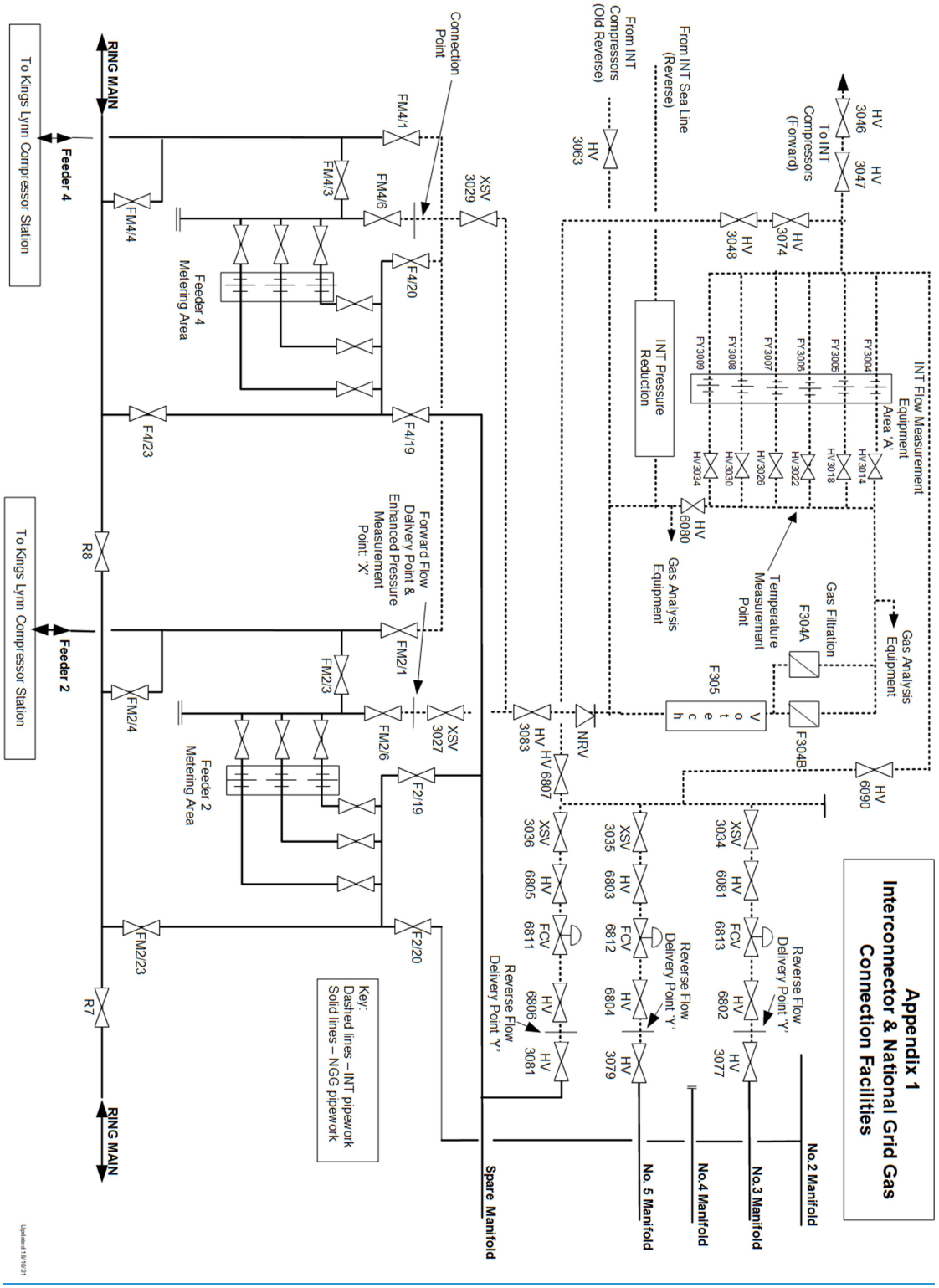
   (b) where there were physical flows of gas (at different times of the Gas Day) both at the CSEP out of, and at the SEP into, the National Grid Gas System, the aggregated measured quantities of each such gas flow

   and, at the request of National Grid Gas, ~~IUK~~Interconnector will on Gas Day D+1, notify to National Grid Gas the quantities of gas deemed to have flowed out of the National Grid Gas System for the relevant periods of Gas Day D as defined by National Grid Gas.

Appendix 1

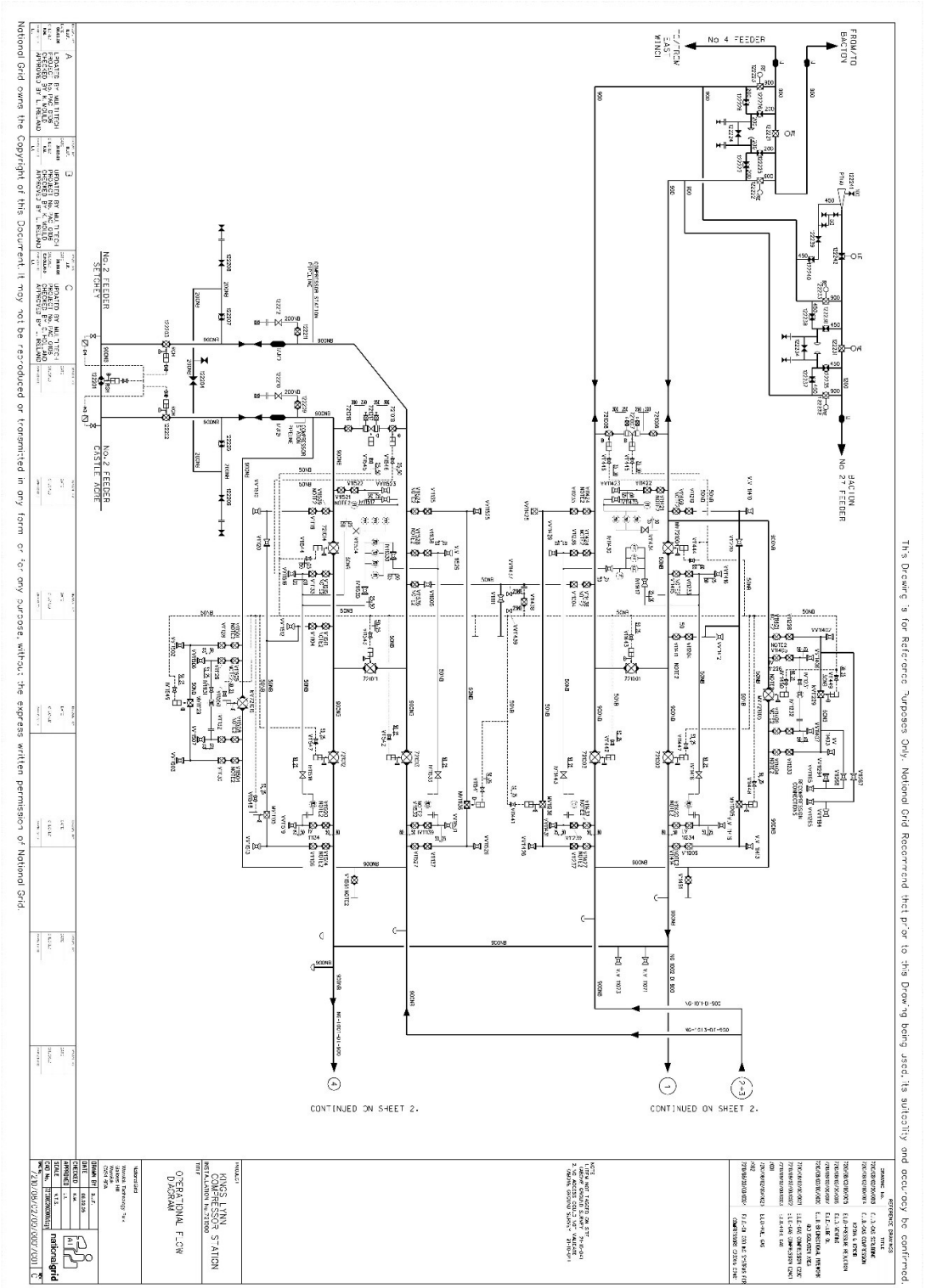
~~IUK~~Interconnector / National Grid Gas Connection Facilities

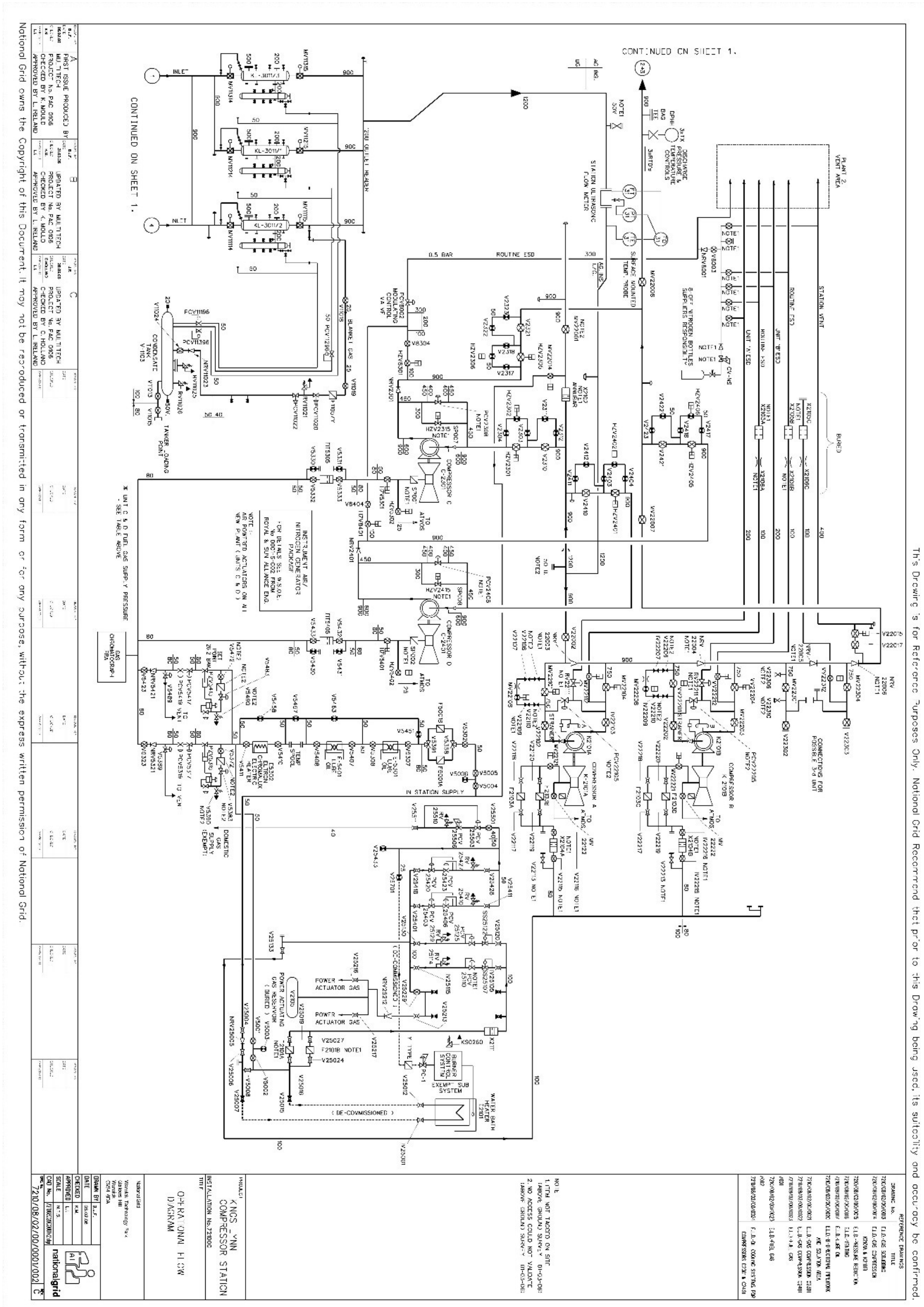



Appendix 1
Interconnector & National Grid Gas
Connection Facilities
RING MAIN
To Kings Lynn Compressor Station
Feeder 4
Feeder 2
Connection Point
From INT Sea Line (Reverse)
From INT Compressors (Old Reverse)
To INT Compressors (Forward)
INT Flow Measurement Equipment Area 'A'
INT Pressure Reduction
Gas Analysis Equipment
Gas Filtration
Temperature Measurement Point
Forward Flow Delivery Point & Enhanced Pressure Measurement Point 'X'
Feeder 4 Metering Area
Feeder 2 Metering Area
Reverse Flow Delivery Point 'Y'
No.2 Manifold
No.3 Manifold
No.4 Manifold
No. 5 Manifold
Spare Manifold
Key:
Dashed lines – INT pipework
Solid lines – NGG pipework
Updated 19/10/21

Appendix 2

Kings Lynn Compressors

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Appendix 3

TECHNICAL INTERPRETATION

1. Defined terms

The following technical terms are used with the following meanings in this Agreement:

"**bar**": the bar as defined in ISO 1000-1981(e);

"**barg**": bar gauge;

"**calorific value**": the meaning given in the Uniform Network Code;

"**degree Celsius**" and "**C**": the particular interval between the temperature in Kelvin and the temperature 273.15 Kelvin as defined in ISO 1000-1981(E);

"**gauge**": when used in relation to pressure, the pressure in excess of 1 standard atmosphere where 1 standard atmosphere is 1.01325 bar;

"**Gross Calorific Value**" or "**GCV**": that number of Megajoules produced by the complete combustion at a constant absolute pressure of one decimal zero one three two five (1.01325) bar of one (1) Normal Cubic Metre of natural gas at twenty five (25) degrees Celsius with excess air at the same temperature and pressure as the natural gas when the products of combustion are cooled to twenty five (25) degrees Celsius and when the water formed by combustion is condensed to the liquid state and the products of combustion contain the same total mass of water vapour as the natural gas and air before combustion; and for the avoidance of doubt GCV shall be REAL as defined in ISO 6976-1:1983(E);

"**hour**": the hour as defined in ISO 1000-1981(E);

"**Joule**"; the joule as defined in ISO 1000-1981(E);

"**kWh**": 3,600,000 Joules;

"**MCM**" or "**mcm**": 1,000,000 Cubic Metres;

"**mcmh**": mcm per hour;

"**Megajoule**" or "**MJ**": 1,000,000 Joules;

"**metre**": the meter as defined in ISO 1000-1981(E);

"**MMJ**": millions of Megajoules;

"**MWhr**": 3,600 Megajoules per Gas Day;

"**MJ/Nm³**" : Megajoules per Normal Cubic Metre;

"**MJ/Sm³**": Megajoules per Standard Cubic Metre;

"**MW**": 1,000,000 Watts;

"**MWh**": 1,000 kWh;

"**Normal Cubic Metre**" or "**Nm³**": the volume of gas which occupies a cubic metre measured at a pressure of 1.01325 bar at a temperature of 0°C;

"**pascal**": the pascal as defined in ISO 1000-1981(E);

"**ppm**": parts per million by volume;

"**Relative Density**": shall mean the mass of a volume of dry gas divided by the mass (expressed in the same units) of an equal volume of dry standard air as defined in ISO 6976-1983(E) both such gases being at the reference temperature and an absolute pressure of 1.01325 bar; and Relative Density (REAL) shall for the avoidance of doubt be REAL as defined in ISO 6976-1:1983(E);

"**second**": the second as defined in ISO 1000-1981(E);

"**Standard Cubic Metre**" or "**Sm³**": when applied to gas, that amount of gas which at a temperature of 15°C and an absolute pressure of 1.01325 bar and being free of water vapour occupies one 1 cubic metre;

"**Watt**": 1 Joule per second;

"**Wobbe Index**": when applied to gas, the Gross Calorific Value divided by the square root of the Relative Density.

~~2. **Not used.**~~

~~3.~~2. **MW Variable**

Where any provision of this Agreement refers to any amount in "**MW Variable**", such amount has been derived from an amount in Cubic Metres at an assumed Gross Calorific Value of 38.9 MJ/Nm³; and where on any Gas Day the average Gross Calorific Value of gas offtaken from or delivered to the National Grid Gas System at the Interconnection Point differs materially from

such assumed value the MW amount referred to in such provision shall be adjusted accordingly.

ANNEX D – Capacity and Optimisation

1. **Definitions**

1.1 In this Annex the following terms shall have the following meanings:

Allocated IP Capacity means firm capacity at the Interconnection Point that is or has been allocated to a Shipper pursuant to an Operator's Transportation Arrangements;

Auction means an auction of Available IP Capacity which is conducted by the Platform Operator as contemplated in this Annex and the CAM Code;

Auction Calendar has the meaning given to that term in the CAM Code;

Auction Premium means the amount by which the Clearing Price in a Bundled Capacity Auction exceeds the Starting Price;

Available IP Capacity means firm capacity at the Interconnection Point that the Operators determine, having regard to the requirements of the CAM Code, is available to be offered to Shippers (whether as Bundled Available Capacity or Unbundled Available Capacity);

Bundled Allocated Capacity means Allocated IP Capacity which consists of corresponding entry and exit capacity at both sides of the Interconnection Point and Unbundled Allocated Capacity shall be construed accordingly;

Bundled Available Capacity means Available IP Capacity which consists of corresponding entry and exit capacity at both sides of the Interconnection Point and Unbundled Available Capacity shall be construed accordingly;

Bundled Capacity Auction means an Auction of Bundled Available Capacity;

Clearing Price means the price at which Available IP Capacity is sold in accordance with an Auction;

~~**Common Services** has the meaning given to that term in the Standard Form TSO Services Contract;~~

GTCs means the standard terms and conditions that apply for all platform usage contracts between Shippers and PRISMA;

Linked Auction has the meaning given to 'linked Auctions' in Section B (Capacity) of the European Interconnection Document to the Uniform Network Code;

Platform Operator means PRISMA or another operator of a capacity booking platform who is appointed by the Operators in the manner provided, and for the purposes envisaged, in this Annex;

Platform Rules and Systems means, for so long as PRISMA is the Platform Operator, the Standard Form TSO Services Contract and the GTCs, and for so long as an operator other than PRISMA is the Platform Operator, the rules, arrangements and systems that are applied by that other operator in performing the functions contemplated in this Annex;

PRISMA means PRISMA European Capacity Platform GmbH;

Services means the ~~Common Services and any other~~ services which PRISMA has agreed to provide to the Operators in its capacity as Platform Operator;

Standard Form TSO Services Contract means the standard form contract which PRISMA has or will enter into with each of its customers who are transmission system operators regarding the provision of services to those customers related to the PRISMA capacity booking platform for the allocation of transport capacities in gas transmission grids (as that contract may be modified from time to time); and

Starting Price means, for each Bundled Available Capacity product which is to be the subject of a Bundled Capacity Auction, the sum of reserve prices specified in respect of each element of such Bundled Available Capacity product by the Operators.

2. **General**

2.1 Having regard to the requirements of the CAM Code, this Annex D sets out certain arrangements between the Operators in connection with:

(a) Bundled Available Capacity and Bundled Allocated Capacity;

(b) interruptible capacity; and

(c) the calculation and maximisation of capacity at the Interconnection Point.

2.2 The amount of technical capacity at the Interconnection Point which is to be withheld from allocation in an Auction for an annual period is:

(a) for the first 5 gas years from the Auction date, the lesser of: (i) 10% of the technical capacity; and (ii) the Available IP Capacity; and

(b) for the remaining 10 gas years, the lesser of: (i) 20% of the technical capacity; and (ii) the Available IP Capacity.

3. **Bundled Capacity Auctions**

3.1 The CAM Code requires amongst other things that:

(a) Bundled Available Capacity is allocated in a single auction (and, in the case described in paragraph 3.4, in a Linked Auction); and

(b) auctions of Bundled Available Capacity are conducted in accordance with the Auction Calendar and otherwise in accordance with the CAM Code.

3.2 The Operators agree that it is their intention that the above-mentioned requirements of the CAM Code will be met through the arrangements described in this Annex.

3.3 The Operators further agree that in respect of each Auction:

(a) Available IP Capacity will be expressed in kWh/h;

(b) the price(s) of Available IP Capacity will be expressed in p/(kWh/h) per capacity period;

(c) that relates to Bundled Available Capacity:

(i) the Starting Price shall apply in respect of each Bundled Available Capacity product;

(ii) the Auction Premium shall be shared as agreed between the Operators from time to time and if no agreement is reached then one half (1/2) each; and

(d) that is conducted under the ascending clock auction algorithm:

(i) the large price step is to be the sum of large price steps specified by each Operator; and

(ii) the small price step is to be set such that five small price steps equal one large price step.

3.4 Where Available IP Capacity in the National Grid Gas System:

(a) may be held by Shippers in connection with the offtake or delivery of gas from or to the National Grid Gas System at both the Interconnection Point and at another point

of interconnection between the National Grid Gas System and another gas transmission system (the "Linked transmission system"); and

(b) (in relation to any Auction) the amount of that Available IP Capacity is less than the sum of the Available IP Capacity in the ~~IUK~~Interconnector System and the available capacity in the Linked transmission system,

then there shall be a Linked Auction.

3.5 If an Auction (the first Auction) under the ascending clock algorithm has not closed:

(a) where the next relevant Auction is under the ascending clock algorithm, by 17:00 hours on the 5th business day;

(b) where the next relevant Auction is under the uniform price algorithm, by 17:00 hours on the preceding business day,

before the information publication date for the next relevant Auction, then the Operators shall seek to agree next steps with respect to the Available IP Capacity that is the subject of the first Auction and in the absence of such agreement the first Auction shall be discontinued without closing where the next relevant Auction is the next Auction for Bundled Available Capacity.

~~3.6 The arrangements described in this Annex will commence on or after 1 November 2015, according to the Auction Calendar set out in the CAM Code.~~

~~3.7~~3.6 The Operators acknowledge that Sections B6.3.2, B6.3.3, B6.3.5, B6.3.6 and B7.2.2(f) of the European Interconnection Document to the Uniform Network Code do not apply in relation to the Interconnection Point.

4. **Platform Operator**

4.1 The Operators agree that:

(a) subject to the operation of paragraph 4.1(b) below, PRISMA is and shall remain the Platform Operator for the purposes of this Agreement;

(b) an Operator may only change the Platform Operator with the other Operator's prior written agreement to do so, such agreement not to be unreasonably withheld or delayed;

(c) nothing in this Agreement or otherwise shall require the Operators to enter into or incur any joint obligations or liabilities to PRISMA (or any other Platform Operator); and

(d) each Operator is severally responsible for any fees or other amounts payable to PRISMA (or any other Platform Operator) in connection with the arrangements described in paragraph 4.2 below.

4.2 Each Operator:

(a) confirms that it has entered into a Standard Form TSO Services Contract with PRISMA ~~pursuant to which, amongst other things, PRISMA agrees to provide the Common Services in accordance with and subject to the terms of the Standard Form TSO Services Contract~~; and

(b) shall, subject to the operation of paragraph 4.1(b), maintain in full force and effect the Standard Form TSO Services Contract for the duration of this Agreement.

4.3 Each Operator considers and intends that the Services shall include PRISMA:

(a) determining, based on the submissions made to it by the Operators as described at paragraph 4.4 below, how much of the Available IP Capacity is capable of being made available as Bundled Available Capacity (and therefore included in a Bundled Capacity Auction) and how much is to be made available as Unbundled Available Capacity;

(b) publishing information relating to forthcoming Auctions;

(c) holding Auctions, including receiving, validating, evaluating and, where appropriate, accepting Shipper bids made in respect of Available IP Capacity;

(d) notifying the results of each Auction to each Operator and to each of the Shippers who participated in that Auction;

(e) publishing Auction results; ~~and~~

(f) allocating Available IP Capacity to Shippers who have submitted successful bids; and

~~(f)~~(g) enabling transfers and surrenders of Allocated IP Capacity.

~~4.4 The Operators acknowledge and agree that as at 1 November 2015:~~

~~(a) IUK is not using PRISMA for transfers and surrenders of Allocated IP Capacity; and~~

~~(b) National Grid Gas is using PRISMA for transfers and surrenders of Allocated IP Capacity,~~

~~and if these arrangements are proposed to change for either Operator (the "**Affected Operator**"), the Affected Operator shall provide written notice in advance to the other Operator of the proposed change.~~

~~4.5~~4.4 If any incompatibility is found to exist between the Platform Rules and Systems and the provisions of this Agreement, the Operators shall discuss the matter with a view to agreeing whether to amend this Agreement in accordance with clause 7 (Amendment Process) and/or to seek a modification of the Platform Rules and Systems.

~~4.6~~4.5 Each Operator shall:

(a) in accordance with the Auction Calendar, send to the Platform Operator the information necessary to enable the Platform Operator to conduct Bundled Capacity Auctions, and to perform its other functions contemplated by this Annex; and

(b) where the Platform Rules and Systems allow or require that Operator to make choices, make such choices as are required to give effect to this Annex D.

5. **Voluntary bundling of Allocated IP Capacity**

5.1 The Operators acknowledge and agree that where a Shipper:

(a) is both an ~~IUK~~Interconnector Shipper and a National Grid Gas Shipper; and

(b) holds Unbundled Allocated Capacity in both Systems which is capable of being Bundled Allocated Capacity,

that Shipper may submit a request (a "**Bundling Request**") to both Operators in accordance with their respective Transportation Arrangements requesting that the Unbundled Allocated Capacity should become Bundled Allocated Capacity.

5.2 Upon receipt of a Bundling Request, the Operators shall comply with their respective obligations under the CAM Code in relation to that request.

5.3 The Operators further acknowledge and agree that:

(a) the European Interconnection Document to the Uniform Network Code, Section B6.4, prescribes rules (the "**NTS Voluntary Bundling Rules**") which are to apply to a Bundling Request made by a National Grid Gas Shipper to National Grid Gas;

(b) the NTS Voluntary Bundling Rules do not apply to nor bind ~~IUK~~Interconnector;

(c) if a Bundling Request is made by a National Grid Gas Shipper in accordance with the NTS Voluntary Bundling Rules, it shall be National Grid Gas's responsibility to seek (in writing and in a timely manner) any confirmation it may need from ~~IUK~~Interconnector to enable National Grid Gas to process that Bundling Request in accordance with the NTS Voluntary Bundling Rules; and

(d) subject to ~~IUK~~Interconnector having obtained any necessary confirmation from the relevant ~~IUK~~Interconnector Shipper that it may do so, ~~IUK~~Interconnector shall, within 10 business days of receiving from National Grid Gas a written request for confirmation made in accordance with paragraph 5.3(c) above, provide a written response to that request.

6. **Coordination of Interruptible Capacity**

6.1 The Operators agree that the minimum interruption lead times for interruptible capacity is 75 minutes before the hour from which such interruption is to be effective.

6.2 Each Operator shall inform the other Operator as soon as practicable after giving a notice of interruption.

7. **Capacity optimisation process / analysis in relation to Available IP Capacity**

7.1 Having regard to their obligations under Article 6 (Capacity calculation and maximisation) and Article 11(8) of the CAM Code, the Operators have agreed that they shall meet at least once a year sufficiently in advance of the date upon which they are required to give notice of the amount of Available IP Capacity (and any additional capacity) that is to be offered in the upcoming annual yearly capacity auction for the purposes of jointly analysing the technical capacities in each System.

7.2 The analysis shall include a detailed comparison between the Operators of:

(a) technical capacity in each System; and

(b) Available IP Capacity in each System.

7.3 Any differences shall be noted and quantified, and to the extent reasonably practicable, the reasons for differences should be identified and recorded. The analysis shall take account of assumptions made in the EU-wide 10 year development plan, existing national investment

plans, relevant obligations under the applicable national laws, and any relevant contractual obligations.

7.4 The Operators shall also assess relevant parameters, including but not limited to: pressure commitments, relevant supply and demand scenarios, and calorific values. Options for adjusting these parameters will be discussed and examined. The Operators shall also have regard to information that Shippers may provide with regard to expected future flows. In addition, the relevant Operator's regulatory regime and obligations will be considered as part of this process.

7.5 Following completion of the analysis, the Operators will identify any potential steps and actions that can be taken to increase Available IP Capacity, and hence increase the offer of Bundled Available Capacity. For any action to increase Available IP Capacity proposed, then the effects of that action shall be considered, and shall include but not be limited to:

(a) under what timetable can the proposed action be implemented;

(b) are there any increased costs associated with the proposed action, and does the regulatory regime(s) allow for recovery of those costs (especially if there are any cross-subsidies between the Operators);

(c) does the benefit justify the cost; and

(d) are there any impacts, benign or detrimental, on other points on either System and stakeholders (including terminal operators, Shippers, other TSOs).

ANNEX E – Nominations And Matching

1. Definitions

1.1 In this Annex the following terms shall have the following meanings:

"**Affected Operator**" has the meaning given in paragraph 6.1;

"**Confirmed Nomination Quantity**" means the quantity of natural gas determined by ~~IUK~~Interconnector for a particular hour in a Gas Day in respect of a matched Nomination or Renomination in accordance with paragraph 5.3.4;

"**Counterparty**" means:

(a) in respect of a NTS Nomination or NTS Renomination, the ~~IUK~~Interconnector Shipper receiving or delivering the quantity of natural gas to which that NTS Nomination or NTS Renomination relates; or

(b) in respect of an ~~IUK~~Interconnector Nomination or an ~~IUK~~Interconnector Renomination, the National Grid Gas Shipper receiving or delivering the quantity of natural gas to which that ~~IUK~~Interconnector Nomination or ~~IUK~~Interconnector Renomination relates,

and where such Counterparty may be the same entity as the National Grid Gas Shipper or the ~~IUK~~Interconnector Shipper that has submitted a Nomination or Renomination;

"**Daily CNQ**" means the aggregate of all Confirmed Nomination Quantities of a National Grid Gas Shipper for a particular Gas Day in respect of an NTS Nomination or NTS Renomination;

"**Double-Sided**" in respect of a Nomination or Renomination, means a Nomination or Renomination that is not Single-Sided;

"**Effective Hourly Quantity**" has the meaning given in paragraph 5.2;

"**Hourly Quantity**" means in respect of an ~~IUK~~Interconnector Nomination or ~~IUK~~Interconnector Renomination, the quantity of natural gas for a particular hour of a particular Gas Day as specified in such ~~IUK~~Interconnector Nomination or ~~IUK~~Interconnector Renomination;

"**ID Code**" means the identification code assigned by National Grid Gas to a National Grid Gas Shipper or by ~~IUK~~Interconnector to an ~~IUK~~Interconnector Shipper;

"**Initiating TSO**" has the meaning given to initiating transmission system operator in the Interoperability Code;

"~~IUK~~Interconnector **Nomination**" has the meaning given in paragraph 2.3~~.3~~;

"~~IUK~~"Interconnector **Nomination Deadline**" means 13:00 on Gas Day D-1;

"~~IUK~~"Interconnector **Renomination**" means a nomination which contains the information specified in paragraph ~~3~~2.4 and is submitted to ~~IUK~~Interconnector after the ~~IUK~~Interconnector Nomination Deadline but before the ~~IUK~~Interconnector Renomination Deadline (and shall include a nomination that revises a previously submitted ~~IUK~~Interconnector Nomination);

"~~IUK~~"Interconnector **Renomination Deadline**" means 02:00 hours on Gas Day D;

"**Matching Timetable**" means the timetable set out in paragraph 7;

"**Matching TSO**" has the meaning given to matching transmission system operator in the Interoperability Code;

"**Nomination**" means a NTS Nomination and/or an ~~IUK~~Interconnector Nomination;

"**Nomination Cycle**" means the 2 hour period commencing at 13:00 hours on Gas Day D-1;

"**Nomination Quantity**" means the quantity of natural gas specified in a Nomination or Renomination;

"**NTS Nomination**" has the meaning given in paragraph 3.1;

"**NTS Nomination Deadline**" means 13:00 hours on Gas Day D-1;

"**NTS Renomination**" means a nomination which contains the information specified in paragraph 3.2 and is submitted to National Grid Gas after the NTS Nomination Deadline but no earlier than 15:00 hours on Gas Day D-1 and no later than the NTS Renomination Deadline;

"**NTS Renomination Deadline**" means 02:00 hours on Gas Day D;

"**Processed ~~IUK~~Interconnector Nomination Quantity**" means the quantity of natural gas under an ~~IUK~~Interconnector Nomination or ~~IUK~~Interconnector Renomination (as the case may be) that ~~IUK~~Interconnector has determined for a particular hour in a particular Gas Day in accordance with the ~~IUK~~Interconnector Transportation Arrangements;

"**Processed NTS Nomination Quantity**" means the quantity of natural gas under a NTS Nomination or NTS Renomination (as the case may be) that National Grid Gas has determined for a particular Gas Day in accordance with the Uniform Network Code;

"**Renomination**" is a NTS Renomination and/or an ~~IUK~~Interconnector Renomination;

"**Renomination Cycle**" means the 2 hour period commencing on the hour following the submission of the Renomination;

"**Renomination Effective Time**" means the time that a Renomination is to become effective, being the later of:

(a) 05.00 on Gas Day D;

(b) the hour at the end of the Renomination Cycle, provided National Grid Gas provides the information required under Matching Activity 2 in accordance with the Matching Timetable set out in paragraph 7; or

(c) such later time requested by the relevant NGG Shipper or ~~IUK~~Interconnector Shipper (as applicable);

"**Resumption Notice**" means a notice given by the Affected Operator to the other Operator to the effect that an Exceptional Event has ceased or will, at a time specified in the notice, cease; and

"**Single-Sided**" in respect of a Nomination or a Renomination, means a single Nomination or Renomination that:

(a) is made by a person who is both a National Grid Gas Shipper and an ~~IUK~~Interconnector Shipper;

(b) is made by that person in its capacity as a National Grid Gas Shipper and to National Grid Gas in accordance with the Uniform Network Code; and

(c) shall take effect as both a NTS Nomination or a NTS Renomination and a corresponding ~~IUK~~Interconnector Nomination or an ~~IUK~~Interconnector Renomination.

~~**2. Transportation Arrangements (General)**~~

~~2.1 Each Operator considers that the provisions on Nominations and Renominations in its Transportation Arrangements will, at the Amendment Effective Date or as soon as reasonably~~

~~practicable thereafter, be consistent with this Annex E, and in particular that this Annex E accurately describes how National Grid Gas Shippers and IUK Shippers are required to submit Nominations and Renominations in accordance with the Transportation Arrangements.~~

~~2.2 The Operators agree that the provisions of Annex E are hereby given effect from 30 September 2015 for Gas Day 1 October 2015 onwards.~~

~~3.~~2. Nominations and Renominations

Nominations

~~3.1~~2.1 A nomination shall be a "**NTS Nomination**" if it:

(a) is submitted by a National Grid Gas Shipper to National Grid Gas in accordance with the Uniform Network Code by the NTS Nomination Deadline; and

(b) contains the information specified in paragraph ~~3~~2.2.

~~3.2~~2.2 A NTS Nomination shall specify:

(a) the ID Code of the National Grid Gas Shipper making the nomination;

(b) the ID Code of the ~~IUK~~Interconnector Shipper who is the Counterparty;

(c) the Gas Day (Gas Day D) to which the nomination relates;

(d) whether the nomination is for entry to or exit from the National Grid Gas System;

(e) the Nomination Quantity (which shall be a daily quantity); and

(f) whether it is a Single-Sided or Double-Sided nomination.

~~3.3~~2.3 A nomination shall be an "**~~IUK~~Interconnector Nomination**" if it:

(a) is submitted by an ~~IUK~~Interconnector Shipper to ~~IUK~~Interconnector in accordance with the ~~IUK~~Interconnector Transportation Arrangements by the ~~IUK~~Interconnector Nomination Deadline; and

(b) contains the information specified in paragraph ~~3~~2.4; or

(c) is submitted to National Grid Gas as provided in paragraph ~~4~~3.

~~3.4~~2.4 An ~~IUK~~Interconnector Nomination shall specify:

(a) the ID Code of the ~~IUK~~Interconnector Shipper making the nomination;

(b) the ID Code for the National Grid Gas Shipper who is the Counterparty;

(c) the Gas Day to which the nomination relates;

(d) whether the nomination is for entry to or exit from the ~~IUK~~Interconnector System; and

(e) the Nomination Quantity (which shall be an Hourly Quantity for each hour in the Gas Day).

~~3.5~~2.5 A National Grid Gas Shipper may submit a NTS Nomination by no later than the NTS Nomination Deadline.

~~3.6~~2.6 An ~~IUK~~Interconnector Shipper may submit an ~~IUK~~Interconnector Nomination by no later than the ~~IUK~~Interconnector Nomination Deadline.

~~3.7~~2.7 Where a National Grid Gas Shipper does not submit a NTS Nomination by the NTS Nomination Deadline, the relevant National Grid Gas Shipper shall be deemed to have submitted a NTS Nomination with a Nomination Quantity of zero (a "**Deemed NTS Nomination**"). A Deemed NTS Nomination shall not be subject to the process described in paragraph ~~5~~4.3 (Matching Process) and National Grid Gas shall not determine, nor communicate to ~~IUK~~Interconnector, a Processed NTS Nomination Quantity in respect of a Deemed NTS Nomination.

~~3.8~~2.8 Where an ~~IUK~~Interconnector Shipper does not submit an ~~IUK~~Interconnector Nomination by the ~~IUK~~Interconnector Nomination Deadline, no Nomination Quantity will be recorded for that ~~IUK~~Interconnector Shipper in respect of the relevant Gas Day.

Renominations

~~3.9~~2.9 A National Grid Gas Shipper may submit a NTS Renomination.

~~3.10~~2.10 An ~~IUK~~Interconnector Shipper may submit an ~~IUK~~Interconnector Renomination.

~~3.11~~2.11 A Renomination shall specify the Renomination Effective Time.

~~4.~~3. National Grid Gas as agent to receive Single-Sided Nominations

~~4.1~~3.1 ~~IUK~~Interconnector authorises National Grid Gas to act as agent for ~~IUK~~Interconnector for the purposes only of receiving and communicating Single-Sided Nominations and Single-Sided Renominations as provided in this Annex.

~~5.~~4. Matching of Nominations and Renominations

~~5.1~~4.1 Matching Roles

~~5.1.1~~4.1.1 National Grid Gas is the Initiating TSO and ~~IUK~~Interconnector is the Matching TSO.

~~5.1.2~~4.1.2 National Grid Gas as Initiating TSO shall in accordance with the Matching Timetable:

(a) communicate to ~~IUK~~Interconnector details of all Single-Sided Nominations and Single-Sided Renominations;

(b) determine the Processed NTS Nomination Quantities for each NTS Nomination and NTS Renomination; and

(c) communicate to ~~IUK~~Interconnector details of the determined Processed NTS Nomination Quantities (for both Single-Sided and Double-Sided Nominations and Renominations) (including adjusted Processed NTS Nomination Quantities under paragraph ~~6~~5.1) for such NTS Nominations and NTS Renominations.

~~5.1.3~~4.1.3 ~~IUK~~Interconnector as the Matching TSO shall communicate to National Grid Gas the information specified in paragraph ~~5~~4.3.5 in accordance with the Matching Timetable.

~~5.2~~4.2 Effective Hourly Quantities for NTS Nominations (or NTS Renominations)

~~5.2.1~~4.2.1 ~~IUK~~Interconnector shall calculate for each Processed NTS Nomination Quantity notified to it in accordance with this Annex:

(a) in the case of NTS Nominations, or NTS Renominations with a Renomination Effective Time of 05:00 hours for Gas Day D to which it relates, a quantity that is equal to the Processed NTS Nomination Quantity divided by the number of hours in Gas Day D; or

(b) in case of NTS Renominations, with an Renomination Effective Time later than 05:00 hours for Gas Day D to which the Renomination relates, a quantity that is equal to:

$$EHQ_N = \{ (PDQ_N - \sum_P CHQ_P) / H \}$$

where

PDQ_N is the Processed NTS Nomination Quantity (expressed as a daily quantity);

$\sum_P$ is the sum over hours in the Gas Day before the Renomination Effective Time;

CHQ_P is the Confirmed Hourly Quantity for each hour in the Gas Day before the Renomination Effective Time under the last NTS Renomination prevailing at such hour; and

H is number of hours remaining in Gas Day D from the Renomination Effective Time,

each quantity calculated under sub-clause (a) or (b) being an "**Effective Hourly Quantity**".

~~5.3~~4.3 **Matching Process**

~~5.3.1~~4.3.1 ~~IUK~~Interconnector, as Matching TSO, shall match Nominations and Renominations by:

(a) determining whether NTS Nominations (or NTS Renominations) and ~~IUK~~Interconnector Nominations (or ~~IUK~~Interconnector Renominations) are corresponding in accordance with paragraph ~~5~~4.3.2;

(b) for corresponding NTS Nominations (or NTS Renominations) and ~~IUK~~Interconnector Nominations (or ~~IUK~~Interconnector Renominations), determining the quantities for which they are matched in accordance with paragraph ~~5~~4.3.3 and then determining the Confirmed Nomination Quantity by processing the matched quantity in accordance with paragraph ~~5~~4.3.4; and

(c) communicating the Daily CNQ to National Grid Gas in accordance with paragraph ~~5~~4.3.5.

~~5.3.2~~4.3.2 A NTS Nomination (or NTS Renomination) and an ~~IUK~~Interconnector Nomination (or ~~IUK~~Interconnector Renomination) shall be determined as corresponding by ~~IUK~~Interconnector if:

(a) they relate to the same Gas Day;

(b) the ID Code of the Counterparty in a NTS Nomination (or NTS Renomination) matches the ID Code of the ~~IUK~~Interconnector Shipper that submits (or is deemed to have submitted pursuant to a Single-Sided Nomination or Single-Sided Renomination) the corresponding ~~IUK~~Interconnector Nomination (or ~~IUK~~Interconnector Renomination); and

(c) the ID Code of the Counterparty in an ~~IUK~~Interconnector Nomination (or ~~IUK~~Interconnector Renomination) matches the ID Code of the National Grid Gas Shipper that submits the corresponding NTS Nomination (or NTS Renomination).

~~5.3.3~~4.3.3 The quantity for which a corresponding NTS Nomination (or NTS Renomination) and ~~IUK~~Interconnector Nomination (or ~~IUK~~Interconnector Renomination) are matched, for each hour, is:

(a) if the Effective Hourly Quantity under the NTS Nomination (or NTS Renomination) is equal to the Hourly Quantity under the corresponding ~~IUK~~Interconnector Nomination (or ~~IUK~~Interconnector Renomination), the Hourly Quantity;

(b) if the Effective Hourly Quantity under the NTS Nomination (or NTS Renomination) is not equal to the Hourly Quantity under the corresponding ~~IUK~~Interconnector Nomination (or ~~IUK~~Interconnector Renomination), the Hourly Quantity, except:

(i) where an Operator has notified the other Operator of the occurrence of an Exceptional Event (and until the cessation of an Exceptional Event at the time stated in a Resumption Notice), in which case the matched quantity shall be determined from the lesser of the Effective Hourly Quantity and the Hourly Quantity; or

(ii) in the case of National Grid Gas, the occurrence of an emergency under its Transportation Arrangements (and until the cessation of an emergency at the time notified by National Grid Gas to ~~IUK~~Interconnector), in which case the matched quantity shall be determined from the lesser of the Effective Hourly Quantity and the Hourly Quantity.

~~5.3.4~~4.3.4 ~~IUK~~Interconnector shall determine the Confirmed Nomination Quantity by processing (in accordance with the ~~IUK~~Interconnector Transportation Arrangements) the quantity for which the corresponding Nominations (or Renominations) are matched under paragraph ~~5~~4.3.3.

~~5.3.5~~4.3.5 ~~IUK~~Interconnector shall communicate to National Grid Gas, in accordance with the Matching Timetable:

(a) the Processed ~~IUK~~Interconnector Nomination Quantity for each ~~IUK~~Interconnector Nomination and ~~IUK~~Interconnector Renomination; and

(b) the Daily CNQ.

~~5.3.6~~4.3.6 A Nomination (or Renomination) shall not be matched and Confirmed Nomination Quantities shall not be determined by ~~IUK~~Interconnector where ~~IUK~~Interconnector has not received the corresponding Counterparty information in relation to a Nomination (or Renomination).

~~6.~~5. Exceptional Events

~~6.1~~5.1 Where an Operator (the "**Affected Operator**") notifies the other Operator of the occurrence of an Exceptional Event on a Gas Day which requires the reduction of Confirmed Nomination Quantities or Daily CNQ (as applicable), the Affected Operator shall adjust:

(a) Processed NTS Nomination Quantities in accordance with the Uniform Network Code where it is National Grid Gas; or

(b) Processed ~~IUK~~Interconnector Nomination Quantities in accordance with ~~IUK~~Interconnector Transportation Arrangements where it is ~~IUK~~Interconnector.

~~6.2~~5.2 ~~IUK~~Interconnector shall apply the lesser rule as set out in paragraph ~~5~~4.3.3(b)(i) to determine revised matched quantities where an Exceptional Event is notified under paragraph 6.1 and from such revised matched quantities, determine revised Confirmed Nomination Quantities.

~~6.3~~5.3 Upon cessation of an Exceptional Event, the Affected Operator shall issue a Resumption Notice to the other Operator.

~~6.4~~5.4 National Grid Gas shall notify the National Grid Gas Shippers and ~~IUK~~Interconnector shall notify the ~~IUK~~Interconnector Shippers of the expected and actual end of the Exceptional Event.

~~7.~~6. Matching Timetable

Matching Activity		Deadline for Provision (Relative to Commencement of Nomination Cycle or Renomination Cycle)
1	National Grid Gas communicates Single-Sided Nominations and Single-Sided Renominations to ~~IUK~~Interconnector	Within 15 minutes
2	National Grid Gas communicates its Processed NTS Nomination Quantities to ~~IUK~~Interconnector	Within 45 minutes

3	~~IUK~~Interconnector communicates its Processed ~~IUK~~Interconnector Nomination Quantities and the Daily CNQ to National Grid Gas	Within 90 minutes

ANNEX F – Operational Balancing Account

1. DEFINITIONS AND INTEPRETATION

1.1 In this Annex, the following definitions apply:

"**Aggregate Confirmed Quantity (Forward Flow)**" shall mean the sum of the Confirmed Nomination Quantities of gas for offtake from the National Grid Gas System and delivery to the ~~IUK~~Interconnector System at the Interconnection Point on a Gas Day;

"**Aggregate Confirmed Quantity (Reverse Flow)**" shall mean the sum of the Confirmed Nomination Quantities of gas for offtake from the ~~IUK~~Interconnector System and delivery to the National Grid Gas System at the Interconnection Point on a Gas Day;

"**Aggregate Net Confirmed Quantity**" shall mean, having regard to paragraph 1.3, the difference between the Aggregate Confirmed Quantity (Forward Flow) on Gas Day D and the Aggregate Confirmed Quantity (Reverse Flow) on Gas Day D;

"**Agreed Target Quantity**" shall mean the quantity of gas, calculated in accordance with paragraphs 1.3 and 5.1, which the Operators agree is to flow at the Interconnection Point on Gas Day D;

"**Cumulative Steering Difference**" or "**CSD**" shall mean for 30 September 2015, zero, and for each subsequent Gas Day D shall mean the sum of: (i) the Cumulative Steering Difference for Gas Day D-1; (ii) the Steering Difference for Gas Day D; and (iii) any Cumulative Steering Difference Correction implemented on Gas Day D;

"**Cumulative Steering Difference Correction**" shall mean a quantity of gas which the Operators agree in accordance with paragraph 4.2 should be deducted from or added to the Aggregate Net Confirmed Quantity for the purposes of reducing the CSD;

"**Daily Metered Quantity**" shall mean the measured quantity of gas:

(a) offtaken from the National Grid Gas System and delivered to the ~~IUK~~Interconnector System (forward flow) on Gas Day D; and/or

(b) offtaken from the ~~IUK~~Interconnector System and delivered to the National Grid Gas System (reverse flow) on Gas Day D,

at the Interconnection Point;

"**Individual CSEP Reconciliation**" shall have the meaning in Section E of the Transportation Principle Document to the Uniform Network Code;

"**Proportional Allocation**" shall mean the allocation by ~~IUK~~Interconnector to ~~IUK~~Interconnector Shippers and by National Grid Gas to National Grid Gas Shippers of the quantities of gas in accordance with the allocation principles set out in paragraph 6.1(ii);

"**Steering Difference**" or "**SD**" shall mean, the difference between the Daily Metered Quantity at the end of Gas Day D and the Agreed Target Quantity for Gas Day D, and is:

(a) for forward flow:

(i) negative if the Daily Metered Quantity is greater than the Agreed Target Quantity; and

(ii) positive if the Daily Metered Quantity is less than the Agreed Target Quantity; and

(b) for reverse flow:

(i) positive if the Daily Metered Quantity is greater than the Agreed Target Quantity; and

(ii) negative if the Daily Metered Quantity is less than the Agreed Target Quantity; and

"**Steering Tolerance**" shall mean a tolerance on the Cumulative Steering Difference equal to 3.25 million kWh.

1.2 Terms used in this Annex which are defined in Annex E (Nominations and Matching) have the meanings given to them in that Annex.

1.3 The Aggregate Net Confirmed Quantity (and quantities from which it is derived) and Agreed Target Quantity are calculated following each Nomination Cycle or Renomination Cycle.

1.4 The SD and CSD for Gas Day D-1 shall be determined based on the Daily Metered Quantity for Gas Day D-1 (as communicated under paragraph 3.1) and paragraph 8 shall apply if any subsequent adjustment is made in respect of the Daily Metered Quantity.

2. FLOW CONTROL

2.1 The Operators agree that ~~IUK~~Interconnector is responsible for flow control at the Interconnection Point.

2.2 Subject to National Grid Gas complying with its obligations under this Agreement with respect to gas pressure (including those in Annex A (Network Entry Provisions) and Annex B (Network Exit Provisions)), ~~IUK~~Interconnector shall, on Gas Day D, use reasonable endeavours to steer a quantity of gas equal to the prevailing Agreed Target Quantity to ensure the Steering Difference is kept as close as possible to zero.

3. OBA MANAGEMENT

3.1 ~~IUK~~Interconnector shall communicate to National Grid Gas the Daily Metered Quantity, SD and the CSD in respect of Gas Day D-1 by 06:00 hours on Gas Day D.

3.2 If National Grid Gas considers that ~~IUK~~Interconnector has incorrectly calculated the SD and/or the CSD, National Grid Gas shall contact ~~IUK~~Interconnector and they shall discuss and agree on the correct values of the SD and CSD.

4. CUMULATIVE STEERING DIFFERENCE CORRECTIONS

4.1 The Operators shall cooperate to reduce the CSD in the event that the absolute value of the CSD for Gas Day D-1 ("**CSD D-1**") exceeds the Steering Tolerance.

4.2 In cooperating in accordance with paragraph 4.1, the Operators shall have regard to all the circumstances relevant to the CSD, to what is reasonably practicable for both Operators and to the following options in order of priority:

(a) the Operators may agree a Cumulative Steering Difference Correction for Gas Day D that is equal to the absolute value of CSD D-1;

(b) the Operators may agree a Cumulative Steering Difference Correction for Gas Day D that is equal to or greater than the value by which the absolute value of CSD D-1 exceeds the Steering Tolerance, provided that such Cumulative Steering Difference Correction shall not exceed the absolute value of CSD D-1;

(c) the Operators may agree to maintain the CSD outside the Steering Tolerance for Gas Day D and for any subsequent Gas Day; or

(d) the Operators may agree to implement Proportional Allocation in accordance with paragraph 6.2 for Gas Day D and for any subsequent Gas Day for which the CSD exceeds (or is expected to exceed) the Steering Tolerance.

4.3 Where the CSD is positive, a quantity of gas is owed to ~~IUK~~Interconnector by National Grid Gas, and where the CSD is negative, a quantity of gas is owed to National Grid Gas by ~~IUK~~Interconnector.

4.4 If for Gas Day D the absolute value of CSD D-1 does not exceed the Steering Tolerance, there shall be no Cumulative Steering Difference Correction unless the Operators otherwise agree.

4.5 A Cumulative Steering Difference Correction shall be reflected in the Offtake Profile Notice or Delivery Flow Notice issued by ~~IUK~~Interconnector at the time.

5. AGREED TARGET QUANTITY

5.1 The Agreed Target Quantity shall be the sum of the Aggregate Net Confirmed Quantity and the Cumulative Steering Difference Correction for that Gas Day.

5.2 The Agreed Target Quantity calculated following each Nomination Cycle or Renomination Cycle shall be reflected in the Offtake Profile Notice or Delivery Flow Notice issued by ~~IUK~~Interconnector at the time.

6. ALLOCATION PRINCIPLES

6.1 The Transportation Arrangements provide for the quantities of gas delivered and offtaken at the Interconnection Point to be allocated among each Operator's Shippers in respect of Gas Day D, based on the Confirmed Nomination Quantities, as follows:

~~(i)~~(a) except where paragraph 6.1(~~ii~~b) applies, the quantity allocated for Gas Day D to each Shipper active at the Interconnection Point on Gas Day D in each direction is equal to the sum of the Confirmed Nomination Quantities for that Shipper in that direction; and

~~(ii)~~(a) where the Operators have agreed to implement Proportional Allocation in accordance with paragraph 6.2 (and have complied with the notice requirements under paragraph 7):

(i) ~~(1)~~ in the case of ~~IUK~~Interconnector:

(A) ~~(A)~~ the quantity to be allocated for Gas Day D by ~~IUK~~Interconnector to each ~~IUK~~Interconnector Shipper active at the Interconnection Point in each direction shall be determined by ~~IUK~~Interconnector in accordance with the allocation rules in ~~IUK's~~Interconnector's Access Rules (and on National Grid Gas's request, ~~IUK~~Interconnector will inform National Grid Gas of such allocation rules);

(B) ~~(B)~~ ~~IUK~~Interconnector shall provide to National Grid Gas a statement ("**PA Statement**") no later than Gas Day D+1 for Gas Day D setting out, subject to paragraph 6.1(~~ii)(1~~b)(i)(C), the quantity allocated by ~~IUK~~Interconnector to each ~~IUK~~Interconnector Shipper active at the Interconnection Point in each direction; and

(C) ~~(C)~~ ~~IUK~~Interconnector shall ensure that the sum of: (i) the quantity allocated by ~~IUK~~Interconnector to each ~~IUK~~Interconnector Shipper active at the Interconnection Point for Gas Day D; and (ii) the Cumulative Steering Difference Correction for Gas Day D (if any) shall equal the Daily Metered Quantity; and

(ii) ~~(2)~~ in the case of National Grid Gas:

(A) ~~(A)~~ National Grid Gas shall use the PA Statement to allocate for Gas Day D quantities to National Grid Gas Shippers active at the Interconnection Point on Gas Day D; and

(B) ~~(B)~~ if ~~IUK~~Interconnector does not provide to National Grid Gas the PA Statement for Gas Day D as required under paragraph 6.1(~~ii)(1~~b)(i)(B) by Gas Day D+5, the quantity to be allocated for Gas Day D by National Grid Gas to each National Grid Gas Shipper active at the Interconnection Point on Gas Day D in each direction shall be determined in accordance with the alternative allocation rules in National Grid Gas's Transportation Arrangements.

6.2 The Operators may agree to implement Proportional Allocation for Gas Day D in accordance with paragraph 4.2 if on Gas Day D:

6.2.1 in the case of National Grid Gas, an emergency has occurred in accordance with its Transportation Arrangements; and/or

6.2.2 an Exceptional Event has occurred in relation to either the ~~IUK~~Interconnector System or National Grid Gas System,

which affected the ability of National Grid Gas or ~~IUK~~Interconnector (the "**Affected Operator**"), as appropriate, to deliver gas to or accept gas for delivery from the Interconnection Point on Gas Day D and which, in the reasonable opinion of the Affected Operator, occurred too late in Gas Day D to be resolved using the constraint management tools available to that Operator before the end of Gas Day D; and

6.2.3 the Operators have notified their respective Shippers active at the Interconnection Point on Gas Day D by 12:00 on Gas Day D+1 that Proportional Allocation will apply.

6.3 In the event of Proportional Allocation for Gas Day D, the Steering Difference for Gas Day D shall be deemed to be zero.

7. PROPORTIONAL ALLOCATION REQUEST NOTICE ("PARN")

7.1 A PARN shall be used by an Affected Operator in order to request that the other Operator should allocate on a proportional basis as described in paragraph 6.1(ii) for the Gas Day indicated on the PARN.

7.2 The PARN shall be valid and timely if the Affected Operator requesting Proportional Allocation has sent the notice to the other Operator at the latest by 10:00 hours on Gas Day D+1 and if the criteria set out in paragraph 6.2 have been met.

8. ADJUSTMENTS OF DAILY METERED QUANTITY

8.1 The Daily Metered Quantity in respect of a Gas Day or Gas Days may be revised pursuant to the arrangements in Annex C (Measurement Provisions).

8.2 In the event that a revision is made to the Daily Metered Quantity for Gas Day D:

~~(i)~~(a) on any Gas Day up to and including Gas Day D+5, the amount by which the Daily Metered Quantity for Gas Day D is revised shall be taken into account in calculating the Cumulative Steering Difference for Gas Day D+1 (and for subsequent Gas Days as appropriate); or

~~(ii)~~(b) on any Gas Day after Gas Day D+5, in respect of a physical flow out of the National Grid Gas System at the Interconnection Point, the amount by which the Daily Metered Quantity for Gas Day D is revised shall be subject to Individual CSEP Reconciliation in

accordance with Section E of the Transportation Principle Document to the Uniform Network Code; or

~~(iii)~~(c) on any Gas Day after Gas Day D+5, in respect of gas flow into the National Grid Gas System at the Interconnection Point: no adjustment shall be taken into account in calculating the Cumulative Steering Difference for Gas Day D+1 (and for subsequent Gas Days, as appropriate); and there shall be no Individual CSEP Reconciliation in accordance with Section E of the Transportation Principle Document to the Uniform Network Code.

9. ERROR CORRECTION

9.1 Subject to paragraph 9.3, if a Shipper notifies an Operator or an Operator otherwise becomes aware that there has (or may have) been an error in the implementation of the nomination and matching provisions of its Transportation Arrangements or Annex E (Nominations and Matching) or this Annex F (Operational Balancing Account) and that error has (or may have) resulted in an error in the determination of: (1) the Processed ~~IUK~~Interconnector Nomination Quantity or the Processed NTS Nomination Quantity or (2) the Confirmed Nomination Quantity in respect of a Nomination or (as the case may be) quantities to be allocated (pursuant to such a Nomination) to a Shipper:

(a) that Operator (A) shall so notify the other Operator (B) providing details of the potential error and the Shipper and Nomination affected by it;

(b) Operator B shall notify the Counterparty of the potential error;

(c) Operator A shall investigate the potential error (where appropriate, in consultation with Operator B, the Shipper and/or the Counterparty);

(d) if it is confirmed that there was an error, the Operators shall determine, and notify to the Shipper and Counterparty, of the redeterminations that would be needed to correct the error; and

(e) if both the Shipper and the Counterparty accept (by notice to their respective Operator) the proposed correction notified under paragraph (d), the Operators shall give effect to such correction by redetermining (for the purposes of their respective Transportation Arrangements) the Confirmed Nomination Quantities or (as the case may be) quantities allocated for the Shipper and Counterparty.

9.2 If the correction of an error gives rise to a change in the calculation of the Steering Difference for the relevant Gas Day, the amount of the change shall be added to (or subtracted from) the Cumulative Steering Difference for the Gas Day on which the error was corrected.

9.3 No correction of an error in relation to Gas Day D shall be made under this paragraph 9 later than Gas Day D+5.