NETWORK ENTRY AGREEMENT

Between

NORTHERN GAS NETWORKS LIMITED

And

xxxxxxxxxxxxxxxxxxxxx

In respect of

Proposed Biomethane Production / Entry Facility at

xxxxxxxxxxxxxx

CONTENTS

THIS AGREEMENT is made the day of

BETWEEN:

1. **Northern Gas Networks Limited**, (registered in England and Wales under number 05167070), whose registered office is at 1100 Century Way, Colton, Leeds, LS15 8TU ("**NGN**"); and

2. **xxxxxxxxxxxxxxxx**n its capacity as the operator of the Delivery Facility (the "**DFO**").

RECITALS:

A. The DFO is the operator of the Delivery Facility.

B. NGN is the owner and operator of the Entry Facility and a Gas Transporter pursuant to the Gas Act.

C. The Network Code provides that the specification, entry pressure, point of delivery and basis of measurement of Gas delivered to the System at a System Entry Point will, and certain other matters may, be set out in Network Entry Provisions forming part of a Network Entry Agreement between NGN and the operator of a Connected Delivery Facility and refers to Local Operating Procedures that will be agreed between them.

D. The Parties wish to agree procedures and terms with regard to the provision of Gas flow related information to each other in respect of the System Entry Point so as to facilitate the safe and efficient operation of the Delivery Facility, the Entry Facility and the System.

E. NGN and the DFO wish to enter into this Agreement, which shall be the Network Entry Agreement relating to the System Entry Point for the purposes of the Network Code.

NOW IT IS HEREBY AGREED:

1. Definitions and Interpretation

1.1. In this Agreement the following words and expressions shall, unless the context requires otherwise, have the following meanings:

"**Actual Flow Rate**" at any time shall mean the total instantaneous volumetric flow rate, in the form of Gas, expressed in MSCM/D that is being delivered at the System Entry Point;

"**Affiliate**" shall mean any holding company or subsidiary of a Party or any company which is a subsidiary of any holding company of a Party and the expressions "holding company" and "subsidiary" shall have the meanings respectively attributed to them by section 1159 of the Companies Act 2006 as amended;

"**Agent**" shall mean the representative duly appointed by System Users to be responsible for the apportionment of Gas between them immediately downstream of the System Entry Point;

"**Agreement**" shall mean this agreement, being a Network Entry Agreement, and the Schedules attached hereto, as may be amended by written agreement of the Duly Authorised Representatives of the Parties hereto, from time to time;

"**bar**" shall mean a of pressure exactly equal to 100,000 Pascal;

"**barg**" shall mean bar gauge;

"**bara**" shall mean bar absolute;

"**Competent Authority**" means the Gas and Electricity Markets Authority, or any local, national or supra national agency, authority, department, inspectorate, minister, ministry, court, tribunal or official or public or statutory person (whether autonomous or not) of, the United Kingdom (or the government thereof) or of the European Union which has jurisdiction over NGN or the DFO or the subject matter of this Agreement;

"**Confidential Information"** has the meaning given in Clause 6.2;

"**Connected Delivery Facility**" shall have the meaning specified in Section I of the Network Code;

"**D-1 Gas Day**" shall mean the Day before the Gas Day;

"**D Gas Day**" shall mean the Gas Day;

"**D+1 Gas Day**" shall mean the Day after the Gas Day;

"**Daily Flow Notification**" or "**DFN**" shall be the notification given by facsimile (or other agreed means) by the DFO to NGN in respect of a Gas Day showing the daily notifications in paragraph 2.2 of 0 and substantially in the form of Attachment A to Schedule 6;

"**Day**" shall mean the period from 06.00 hours on one day to 06.00 hours on the following day;

"**Delivery Agreement**" shall mean an agreement made between the DFO and another person for the delivery of gas into and receipt of gas from the Delivery Facility;

"**Delivery Facility**" shall mean the biomethane generating plant operated by the DFO at the Howdon Site from which Gas may be tendered for delivery at the System Entry Point and, for the avoidance of doubt, is a Connected Delivery Facility. The Delivery Facility is more particularly described in paragraph 1 of Schedule 9;

"**DFO Representative**" shall be the person notified in writing by the DFO from time to time to NGN as its representative for the provision and receipt of information in accordance with the Local Operating Procedures set out in Schedule 6;

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

"**Duly Authorised Representative**" shall mean any of those employees of a Party whose names have been notified in writing to the other Party as having authority to bind the Party

in circumstances where its agreement is required hereunder and, until otherwise notified, shall in the case of NGN be such person who from time to time shall occupy the position of Commercial Manager .and in the case of the DFO, shall be such person who from time to time shall occupy the position of Managing Director (MD) For the avoidance of doubt, the Duly Authorised Representative will not be the DFO Representative or the NGN Shift Representative;

"**Emergency Shut Down Condition**" shall mean any condition requiring NGN acting reasonably and prudently, in accordance with the relevant emergency procedures, to cease forthwith to accept Gas at the System Entry Point in the interest of preventing possible damage to the System or the injury or death of any person;

"**End of Day Volume**" shall mean the total volume of Gas, in MSCM, delivered at the System Entry Point during the Gas Day;

"**End of Day Energy Quantity**" shall mean the total quantity of energy of Gas, in kWh, delivered at the System Entry Point during the Gas Day;

"**Entry Facility**" shall mean the NGN facilities at which Gas may be received into the System at the Howdon Site. The Entry Facility is more particularly described schedule 9;

"**Exact Hour**" shall mean the time in full hours and no minutes (e.g. 15.00 hours is an Exact Hour);

"**Expected End of Day Volumetric Quantity**" shall mean the total volume of Gas, in MSCM, reasonably estimated by the DFO to be delivered at the System Entry Point by the end of the Gas Day;

"**Expected Flow Rate**" in respect of any Gas Day shall mean the total instantaneous volumetric estimated flow rate for each remaining hour of such Gas Day expressed in MSCM/D that the DFO expects in its reasonable opinion will be delivered at the System Entry Point;

"**Gas**" is as defined in the Network Code;

"**Gas Act**" shall mean the Gas Act 1986 and any regulations issued thereunder, as such Gas Act and regulations are amended or supplemented from time to time;

"**Gas Day**" is as defined in the Network Code;

"**Gas Entry Conditions**" shall mean in respect of the System Entry Point the limits and other requirements as to the composition, pressure, temperature and other characteristics of Gas delivered or tendered for delivery at the System Entry Point as set out in paragraph 1 of Schedule 4;

"**Gas Transporter**" shall mean a holder of a gas transporter licence granted (or treated as granted) under section 7(2) of the Gas Act, together with any successor or assignee thereof;

"Howdon Site" shall mean the biomethane facility at the Howdon site, Northumberland Dock Road, Wallsend, Tyne and Wear, NE28 0QD;

"**Individual System Entry Point**" shall mean a point on the System at which gas can flow into the System;

"**Joule**" shall mean a joule as defined in ISO 1000-1981(E);

"**kWh**" shall mean a kiloWatt hour or three million six hundred thousand (3,600,000) Joules;

"**Legal Requirement**" shall mean any Act of Parliament, regulation, licence or Directive of a Competent Authority;

"**Local Operating Procedures**" shall mean the procedures set out in Schedule 6, as amended from time to time;

"**Measurement Provisions**" shall mean those procedures, methods and standards in place in respect of the measurement and determination of the volume, calorific value, quantity and delivery characteristics of Gas delivered or tendered for delivery at the System Entry Point as set out in Schedule 5;

"**m^3**" shall mean that amount of Gas that, at Standard Temperature and Standard Pressure and being free of water vapour, occupies one cubic metre;

"**mg**" shall mean a unit of mass equal to one thousandth of a gram;

"**Megajoules**" shall mean one million (1,000,000) Joules;

"MFR" is the Maximum Flow Rate as detailed in Schedule 2;

"**MJ**" shall mean one million (1,000,000) Joules;

"**MMJ**" shall mean millions of Megajoules;

"**MMJD**" shall mean millions of Megajoules per Gas Day;

"**MJ/SCM**" shall mean Megajoules per Standard Cubic Metre;

"**MJ/m^3**" shall mean Megajoules per Standard Cubic Metre;

"**MSCM**" shall mean millions of Standard Cubic Metres;

"**MSCM/D**" shall mean millions of Standard Cubic Metres per Day;

"**mole**" shall mean the amount of pure substance containing the same number of chemical units as there are atoms in exactly 12 grams of carbon-12 (i.e., 6.023×10^{23}).

"**Network Code**" shall mean the document prepared by NGN pursuant to its gas

transporter's licence governing transportation arrangements for Gas on the System dated 1st March 1996, as may be modified and supplemented from time to time, including any replacement thereof;

"**Network Emergency Coordinator**" shall mean the person who is, from time to time, the network emergency coordinator in respect of the System in accordance with the Gas Safety (Management) Regulations 1996;

"**Network Entry Agreement**" shall mean this Agreement;

"**Network Entry Provisions**" are the terms and conditions which specify the requirements in respect of the delivery of Gas to the System at the System Entry Point including, inter alia, the Gas Entry Conditions, the Measurement Provisions and the points of delivery set out in Schedule 4;

"**NGN Shift Representative**" shall be the person or post notified by NGN from time to time to the DFO as its representative for the provision and receipt of information in accordance with the Local Operating Procedures;

"**Parties**" shall mean the companies or persons as are from time to time party to this Agreement and "**Party**" shall be construed accordingly;

"**Permitted Range**" shall mean the range specified in the table set out in paragraph 2.8 of Schedule 5;

"**Reasonable and Prudent Operator**" shall mean a person acting, in good faith, to perform its contractual obligations and, in so doing and in the general conduct of its undertaking, exercising that degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced operator engaged in the same type of undertaking under the same or similar circumstances;

"**Standard Cubic Metre**" shall mean that amount of Gas that, at Standard Temperature and Standard Pressure and being free of water vapour, occupies one cubic metre;

"**Standard Pressure**" shall mean one decimal zero one three two five (1.01325) bar;

"**Standard Temperature**" shall mean fifteen degrees Celsius (15^{o}C);

"**System**" shall mean the pipeline system operated by NGN for the conveyance of Gas through which is authorised by the licence granted to NGN as a Gas Transporter;

"**System Capacity**" has the meaning given in the Network Code;

"**System Entry Point**" shall mean the point on the System comprising the one Individual System Entry Point located on the incomer pipeline from the Delivery Facility to the Entry Facility as indicated on the diagram set out in Schedule 1;

"**System Users**" shall mean the companies licensed under Section 7A of the Gas Act that are party to the Network Code and from time to time delivering Gas into the Entry Facility at

the System Entry Point;

"**Terajoules**" shall mean one million (1,000,000) Megajoules;

"**TJ/day**" shall mean Terrajoules per Day;

"**Tolerances**" shall mean (unless otherwise agreed between the Parties Duly Authorised Representatives from time to time): those stated within the document as plus or minus values. These values are subject to revision dependant on future network supplies.

"**Transportation Arrangement**" means an arrangement made by NGN with any person for the transportation of Gas in the System from the System Entry Point and a reference to a Transportation Arrangement shall include the Network Code;

"**TFA**" shall be the advice given by facsimile (or other agreed means) by NGN to the DFO whenever:

a) the Expected Flow Rate notified by the DFO or the Actual Flow Rate will not, in NGN's reasonable opinion, be able to be accommodated by the System;
b) gas tendered for delivery at the System Entry Point does not, in NGN's reasonable opinion, comply with the Gas Entry Conditions;

and shall be as described in paragraph 4.3 of Schedule 6 and substantially in the form set out in Attachment B to Schedule 6; and

"**Validation**" shall mean validation of the gas quality and metering system, which requires each installed component of the Measurement Equipment to be checked to ensure that it is operating in the manner required by the design specification.

1.2. The Clause, paragraph and other headings in this Agreement are for convenience only and shall not affect its interpretation or construction.
1.3. Any reference in this Agreement to the singular shall (save where the context requires otherwise) include a reference to the plural (and vice versa).
1.4. Reference in this Agreement to any statute, statutory instrument or statutory provision includes any amendment, re-enactment or supplement thereto.
1.5. References to an Appendix shall, unless the context requires otherwise, include the Schedules thereto.

2. Scope and Application

2.1. This Agreement comprises the main body hereof and the documents contained in Schedules 1 to 9 attached hereto. In the case of any conflict, the provisions of the main body hereof shall prevail over the provisions of the documents contained in Schedules 1 to 9 attached hereto.

2.2. Without prejudice to any other agreement (including any Delivery Agreement or Transportation Arrangement) between the Parties, nothing in this Agreement shall:

a) impose any obligation or confer any entitlement on the DFO to deliver Gas to the System, or as to the rates, quantities, pressure and quality of Gas so delivered; nor

b) make any provision of any Transportation Arrangement or Delivery Agreement binding as between NGN and the DFO nor is any provision of this Agreement deemed to amend or vary any such Transportation Arrangement or Delivery Agreement.

2.3. Without prejudice to any other agreement (including any Delivery Agreement or Transportation Arrangement) between the Parties, this Agreement shall not require NGN or the DFO to increase the flow rate capacity of any part of the System or (as the case may be) Delivery Facility, or to take any other step with a view to it being feasible to accept the delivery of Gas into the System from the Delivery Facility at the System Entry Point in any quantities or at any rate, nor to accept an application by any System User for any particular System Capacity or capacity in the Delivery Facility.

2.4. Save as expressly provided otherwise in this Agreement, each Party will perform its duties under this Agreement in accordance with the standard of a Reasonable and Prudent Operator.

2.5. Subject to clause 3 and the rights of termination and/or disconnection as set out in this Network Entry Agreement and/or pursuant to the Network Code, the DFO is entitled to have its Delivery Facility connected to the Entry Facility and the System.

3. Conditions Precedent

3.1. This Agreement shall be conditional upon and shall not take effect until fulfilment of the following conditions precedent:

a) The DFO can illustrate that is possesses the necessary licenses and/or permits or relevant exceptions from the necessary licences and/or permits to introduce/convey Gas to the System Entry Point
b) The DFO has appointed a System User to input Gas into the System
c) The completion (to the satisfaction of NGN) of any risk assessments required by NGN of any potential impact upon the System, NGN employees, the general public and end users and their Gas appliances of Gas being conveyed from the Delivery Facility to the Entry Facility pursuant to NGN's GQ8 and Safe Control of Operations (SCO) processes.
d) The successful installation and commissioning of the measurement and analysis equipment as set out in Schedule 5.
e) The successful connection of the Delivery Facility to the Entry Facility in accordance with an agreed contract to be based on NGN's standard terms of business.

4. Implementation of Local Operating Procedures

4.1. The Parties agree that, with effect from 06.00 hours on the Day following the date hereof (or as otherwise agreed between the Parties in writing), the Local Operating Procedures shall apply between the Parties. The Parties shall keep under review, and (as may be appropriate for reasons of safety or prudent operation) from time to time revise, the prevailing Local Operating Procedures, provided that no revision shall be effective unless signed by duly authorised representatives on behalf of each of the Parties.

4.2. Each Party shall provide information to the other in accordance with, and otherwise comply with, the Local Operating Procedures.

5. Duration

5.1. This Agreement shall continue in full force and effect unless and until terminated by agreement in writing between the Parties' Duly Authorised Representatives or pursuant to Clause 5.3.

5.2. Subject to Clause 5.3 , if at any time after the date of this Agreement either Party wishes to terminate this Agreement, then the Parties hereby agree to meet in good faith to discuss and agree all matters pertaining to a termination of this Agreement, including the timing thereof.

5.3. The DFO shall be entitled to terminate this Agreement upon giving not less than eighteen (18) months prior notice to NGN. Following the giving of such notice, the Parties hereby agree to meet in good faith to discuss and agree all matters pertaining to such termination of this Agreement. NGN shall be entitled to notify System Users that the DFO has given notice to terminate this Agreement and to advise System Users of the date of such notice and the date on which such termination will take effect.

5.4. Upon termination of this Agreement or the Delivery Facility otherwise ceasing to be connected to the Entry Facility, each Party shall be responsible for the costs of any decommissioning and disassembly or removal of their own facilities.

6. Confidentiality and Use of Information

6.1. The provision of information by NGN to the DFO pursuant to this Agreement shall be made in good faith by NGN but without any liability for or warranty as to the accuracy or completeness of such information. If the DFO acts upon information provided by NGN, the DFO shall do so at its own risk.

6.2. Each Party warrants to the other that all information that it provides to that party pursuant to this Agreement shall to the best of its knowledge and belief be complete and accurate in all material respects and in providing such information the disclosing party shall act in good faith and as a Reasonable and Prudent Operator. The disclosing party acknowledges that the receiving party shall be entitled to act in reliance upon such information.

6.3. For the purposes of this Agreement, in relation to a Party "Confidential Information" means the terms of this Agreement and any information disclosed to that Party by the other (whether orally or in writing or in some other permanent form) in connection with this Agreement, which at the relevant time:

a) has not already been, or could not already have been, lawfully acquired by the Party to whom the disclosure is made; or

b) is not already in the public domain (other than as a result of a breach of the terms of this Clause 6).

6.4. Except with the prior written consent of the other Party, and subject to Clauses 6.5 and 6.7, each Party shall keep confidential, and shall not disclose to any third party or use other than for a purpose connected with this Agreement, all Confidential Information. In the event of a breach of any provision of this Cause 6, the provisions of Clause 7.2 or 7.3 (as the case may be) shall apply.

6.5. A Party may disclose Confidential Information:

a) to that Party's legal counsel, other professional consultant or adviser, insurer, accountant, underwriter or provider of finance or financial support, or their legal counsel and advisers, provided that such disclosure is solely to assist the purpose for which such person was engaged, or to any expert appointed pursuant to Schedule 7;

b) if required and to the extent required by any Legal Requirement, or by a Competent Authority, or by the rules of any recognised stock exchange upon which the share capital or debt of the Party making the disclosure is or is proposed to be from time to time listed or dealt in;

c) to any of its Affiliates;

d) to directors and employees of that Party and of its Affiliates, to the extent required for the proper performance of their work;

e) to any bona fide intended assignees of a Party's interests under this Agreement;

f) in respect only of the contents of the Local Operating Procedures attached in Schedule 6 (with the exception of the contents of Attachment C to Schedule 6 thereto) and the Network Entry Provisions attached in Schedule 4 to any System User; and

g) in the case of NGN, in respect only of the End of Day Energy Quantity and any revisions thereto and the calculated calorific value figures provided by the DFO pursuant of Schedule 4, to any Agent of System Users and in addition to System Users, provided that NGN notifies or has notified such System User's Agent and the System Users that the DFO accepts no liability for the data and it is used entirely at their own risk.

6.6. Except as otherwise provided in this Clause 6.6, a Party shall ensure that any person to which it discloses information pursuant to Clause 6.5 (other than Clause 6.5(b)) undertakes to hold such Confidential Information subject to confidentiality obligations equivalent to those set out in Clause 6.4 (excluding legal counsel). Where NGN discloses information pursuant to Clause 6.5(h), it shall ensure that any person to which it discloses information pursuant to Clause 6.5(h) undertakes to hold such Confidential Information subject to the confidentiality obligations specified in the relevant Transportation Arrangement.

6.7. The foregoing obligations with regard to Confidential Information shall remain in effect for three (3) years after this Agreement is terminated or expires.

7. Limitation of Liability

7.1. Save as provided in Clauses 7.2, 7.3 and 11.3, each Party hereby agrees that it shall have no liability to the other Party nor any recourse against the other Party, whether in contract, in tort (including negligence) breach of statutory duty or otherwise arising out of or in connection with the subject matter of this Agreement. Without prejudice to the foregoing:

a) the DFO shall not be liable to NGN in respect of any failure of Gas delivered to the System Entry Point to comply with the Gas Entry Conditions (on the basis that the System User(s) shall be liable to NGN for any such infringement pursuant to the Network Code);

b) NGN shall not be liable to the DFO in respect of any failure of NGN to accept (for whatever reason) gas tendered for delivery at the System Entry Point;

c) each of NGN and the DFO agrees that it shall have no liability to the other nor any recourse against the other whether in contract, in tort (including negligence), breach of duty (whether statutory or otherwise) or otherwise arising out of or in connection with the Local Operating Procedures or any part thereof; and

d) neither Party will be liable to the other for any failure to comply with any of the terms and conditions contained in the Network Entry Provisions.

7.2. If NGN breaches its obligations under Clause 6, its liability to the DFO shall be limited in aggregate to one hundred thousand pounds sterling (£100,000) in respect of all claims made by the DFO for each period of twelve (12) months during the term of this Agreement (the first such period commencing on the date of this Agreement).

7.3. If the DFO breaches its obligations under Clause 6, its liability to NGN shall be limited in aggregate to one hundred thousand pounds sterling (£100,000) in respect of all claims made by NGN for each period of twelve (12) months during the term of this Agreement (the first such period commencing on the date of this Agreement).

7.4. Nothing in this Agreement shall exclude or limit the liability of either Party in respect of death or injury caused by its negligence.

8. Network Entry Provisions

8.1. The Network Entry Provisions applicable in respect of the System Entry Point shall be as set out in Schedule 4. The DFO recognises and acknowledges that the Network Entry Provisions are designed to protect the System and to ensure that NGN can safely transport Gas within the System in compliance with its safety case, and other legislative and contractual requirements. The DFO shall be required to fully comply with the Network Entry Provisions at all times and persistent and/or material failure to do so shall constitute a material breach of this Agreement entitling NGN to terminate the Agreement with immediate effect.

8.2. Subject to Clause 8.3, the Network Entry Provisions shall not be amended except by written agreement of the Duly Authorised Representatives of the Parties. The DFO acknowledges that NGN will not be able to agree to any change to the Network Entry Provisions until after NGN has followed the process set out in the Network Code, and has obtained the necessary consents or approvals. For the avoidance of doubt, the obtaining of such necessary consents or approvals will not oblige either Party to agree to any such change in the Network Entry Provisions.

8.3. Where any Party identifies a new or changed Legal Requirement (being a Legal Requirement coming into effect on or after the date of this Agreement) relating to the flow composition or other characteristics of Gas processed by the Delivery Facility or delivered to or conveyed by the System that in its opinion have not been complied with in this Agreement, then Duly Authorised Representatives of the Parties will meet as soon as reasonably practicable in good faith in order to discuss and seek to agree any written amendments which may be required to this Agreement in order to comply with such Legal Requirement.

8.4. The DFO will provide written notice to NGN of any proposed change at the Delivery Facility that may impact upon the composition of the Gas and/or the requirements for monitoring and analysis at the Delivery Facility and Entry Facility. Following assessment of the proposed change, where required the Parties shall meet as soon as reasonably practicable in good faith in order to discuss and seek to agree any written amendments which may be required to this Agreement.

8.5. The Parties shall comply with the provisions of Schedule 2.

9. Accession and Retirement

9.1. In the event that the DFO proposes to transfer the operation of the Delivery Facility, the DFO shall use reasonable endeavours to procure that the transferee accedes to this Agreement.

9.2. Subject to Clause 9.1, NGN is authorised to enter into an agreement in the form contained in Schedule 8 with any applicant that has applied to NGN to become a Party (in its capacity as the DFO) and provided NGN with the following details:

a) its name;

b) the legal nature of the applicant and, where the applicant is not a company incorporated under the Companies Act 1985 (as amended), such further information concerning the constitution of the applicant as NGN may reasonably require;

c) the address and telephone and facsimile numbers of the applicant, and the individual(s) for whose attention such notices are to be marked, for the purposes of notices under this Agreement; and

d) where the applicant is not a company incorporated under the Companies Act 1985 (as amended), an address for service of process on its behalf in any proceedings.

9.3. On the "Accession Date" as defined in any agreement entered into between NGN and the applicant pursuant to Clause 9.2, the applicant shall become a Party to this Agreement and shall be subject to the rights and obligations of the DFO under this Agreement.

9.4. In the event that the DFO intends to cease being the operator of the Delivery Facility, it shall notify NGN at least fourteen (14) days prior to such cessation, specifying the date on which such cessation will occur.

9.5. In the event that the DFO serves a notice pursuant to Clause 9.4 it shall cease to be a Party on the date specified in such notice as being the date on which it will cease to be the operator of the Delivery Facility.

10. Assignment

10.1. Subject to Clauses 10.2 and 10.3, neither Party shall assign its rights and obligations under this Agreement in whole or in part without the prior written consent of the other Party whose consent shall not be unreasonably withheld or delayed.

10.2. The DFO shall be entitled to assign its rights and obligations under this Agreement in whole or in part without the prior written consent of NGN where the DFO also assigns the operation of the Delivery Facility to a third party. In this event, the DFO shall use reasonable endeavours to procure that such third party agrees with NGN to be bound by the terms of this Agreement.

10.3. NGN shall be entitled to assign its rights and obligations under this Agreement in whole or in part without the prior written consent of the DFO where NGN also assigns operation of that part of the System including the Entry Facility to a third party holding a Gas Transporter's licence for that part of the System including the Entry Facility. In this event, NGN shall use reasonable endeavours to procure that such third party agrees with the DFO to be bound by the terms of this Agreement.

11. Compatibility of the Delivery Facility and the Entry Facility

11.1. The provisions of paragraph 6 of Schedule 4 shall apply between the Parties.

11.2. If NGN proposes to modify the Entry Facility or the DFO proposes to modify the Delivery Facility, in each case such that the Entry Facility and the Delivery Facility would cease to be technically and operationally compatible following such modification, then the Party proposing the modification shall give the other Party as much advance notice of the same as is reasonably practicable. Following the giving of such notice, the Parties shall meet as soon as reasonably practicable to discuss in good faith the implications of the proposed modification on the Delivery Facility or Entry Facility (as the case may be).

11.3. Notwithstanding the foregoing, where by reason of any modification made or to be made by NGN to the Entry Facility or by the DFO to the Delivery Facility, the Entry Facility and the Delivery Facility cease or will cease to be technically and operationally compatible then in the case of modifications to the Entry Facility the DFO shall promptly modify the Delivery Facility and in the case of modifications to the Delivery Facility NGN shall promptly modify the Entry Facility so as to restore the compatibility between the Delivery Facility and the Entry Facility. The Party whose modifications have caused the incompatibility between the Delivery Facility and the Entry Facility shall reimburse the other Party for any expenditure reasonably incurred by the other Party in carrying out those modifications necessary to address the incompatibility that directly results from the initial modifications, except where such initial modifications are made in order to comply with any Legal Requirement which did not previously exist in relation to the Entry Facility or the Delivery

Facility (as the case may be).

11.4. For the avoidance of doubt:

a) NGN shall in no circumstances be liable for any modifications required to any plant, equipment or facilities upstream of the Delivery Facility;

b) the DFO shall in no circumstances be liable for any modifications required to any part of the System downstream of the Entry Facility;

c) NGN shall not be liable to pay the DFO any costs in respect of modifications to the Delivery Facility that arise as a result of any modifications to the System (other than the Entry Facility); and

d) the DFO shall not be liable to pay NGN any costs in respect of modifications to the Entry Facility that arise as a result of any modifications to any plant, equipment of facilities upstream of the Delivery Facility.

12. Notices

12.1. Any notice or other communication to be given by one Party to the other pursuant to the terms of this Agreement shall be personally delivered to the addressee or sent by prepaid recorded delivery post or facsimile and shall be deemed to have been given: (a) on the day when delivered if delivered by hand; (b) on the day when received in legible form if sent by facsimile (subject only to confirmation or satisfactory completion of such transmission to the correct number); or (c) when received if sent by post. Any notice or communication given by facsimile (other than routine notices and communications pursuant to the Local Operating Procedures in Schedule 6) shall be promptly confirmed by letter sent by prepaid recorded delivery or by hand but without prejudice to the validity of the original notice if received.

12.2. Unless otherwise specified and subject to the service of notices for the purposes of the Local Operating Procedures to the addresses set out in Attachment C to Schedule 6, the addresses to which notices and communications under and pursuant to this Agreement shall be sent shall be as follows:

a) If to NGN:

Northern Gas Networks Limited
Marked for the attention of: Legal Director & Company Secretary

Facsimile: 0113 397 5301

b) If to xxxxxxxxxxxxxxxxxxxx

13. Amendment

13.1. Any amendment to the terms of this Agreement (including for the avoidance of doubt the Appendices hereto) shall be agreed between the Parties' Duly Authorised Representatives in writing.

13.2. Where after the date of this Agreement there is any change in any Legal Requirement (or where there is a change in the interpretation of any Legal Requirement by a Competent Authority) relating to the composition or other characteristics of Gas delivered to the System, as a result of which any provision of this Agreement is not consistent with or does not enable either Party to comply with the applicable Legal Requirements, either Party may require that the relevant provision of this Agreement shall be amended so as to be consistent with or enable such compliance. Where either Party notifies the other of such a requirement, if the Parties have not agreed upon the appropriate amendment within a reasonable time after receipt of such notice, the matter shall be resolved in accordance with the dispute resolution procedure as laid out in Schedule 7.

13.3. Where after the date of this Agreement there is any modification to the Network Code as a result of which any provision of this Agreement is not consistent with or does not enable NGN to comply with the Network Code, NGN may require that the relevant provision of this Agreement shall be amended so as to be consistent with the Network Code or enable such compliance. Where NGN notifies the DFO of such a requirement, if the Parties have not agreed upon the appropriate amendment within a reasonable time after receipt of such notice, the matter shall be resolved in accordance with the dispute resolution procedure as laid out in Schedule 7.

14. Entirety of Agreement

14.1. The documents forming the Agreement shall be read as one and shall constitute the entire express agreement between the Parties with respect to the subject matter hereof and shall prevail and supersede all prior agreements, understandings, statements, representations, commitments, warranties and communications between the Parties hereto with respect to the subject matter hereof and no Party shall rely on or be bound by any of the foregoing not appearing in or incorporated by specific reference into the Agreement. Nothing in this Clause shall operate to exclude a Party's liability to the other for fraudulent misrepresentation.

15. Survival

15.1. The provisions of the Agreement which by their nature or from their context are intended to, or would naturally, continue to have effect after termination of the Agreement shall survive after termination.

16. Severability

16.1. If any term or provision in the Agreement shall be held to be illegal or unenforceable in whole or in part, under any enactment or rule of law, such term or provision or part shall to that extent be deemed not to form part of the Agreement but the validity and

enforceability of the remainder of the Agreement shall not be affected.

17. Third Party Rights

17.1. Subject to any rights which may accrue to any successor or permitted assign of the Parties, no provision of the Agreement shall or may be construed as creating any rights enforceable by a third party and all third party rights as may be implied by law are hereby excluded to the fullest extent permitted by law from the Agreement.

18. Governing Law

18.1. This Agreement shall be governed by and construed in accordance with English law and each Party agrees to submit to the exclusive jurisdiction of the English Courts as regards any claim or matter arising under this Agreement.

IN WITNESS of which the duly authorised representatives of the Parties have executed this Agreement on the day and year first above written.

SIGNED on behalf of: Northern Gas Networks Limited Signed:…… Name: Mike Ashworth Position: Legal Director and Company Secretary	SIGNED on behalf of: xxxxxxxxxxxxxxxxxx Signed:…… Name: Position:

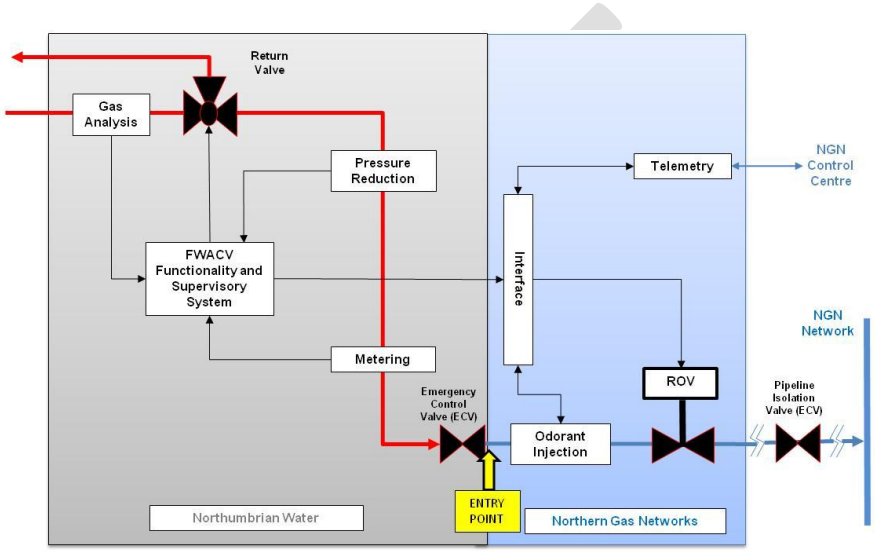
Schedule 1 - SYSTEM ENTRY POINT

The details of the relevant System Entry Point are set out below;

The point of entry into NGN's System will be at the Emergency Control Valve (ECV).

Grid Location: xxxxxxxxxxxxxxxxxxxxx

A schematic of the relevant System Entry Point is set out below (the reference to xxxxxxxxxxxxxxxxx is to the DFO and the reference to Northern Gas Networks is to NGN). The items shown to the immediate left or downstream of the System Entry Point together constitute the Delivery Facility and the items shown immediately right or upstream together constitute the Entry Facility:



Schedule 2 - CONTRACTUAL FLOW RATES

In accordance with Standard Special Licence Condition D12 of NGN's gas transporter licence the Maximum Flow Rate (MFR) available from time to time at the System Entry Point is set out in the tables below.

Table A: Contractual Flow Rates

	sm^3/hour
Maximum Flow Rate	xxxxxxxxx
Minimum Flow Rate*	Zero

Gas entry is uncertain during off peak low demand conditions therefore the NGN System may not be able to accept the maximum permitted flow during certain periods of the Gas Day. NGN will indicate whether or not the daily nominated flow rate and profile can be accommodated as soon as reasonably practicable after determining this. It is expected that both NGN and the DFO will work together to determine a greater understanding of possible entry rates at low demand conditions to maximise gas entry.

On the D-1 Gas Day the Parties shall discuss the actual flow rate that will be available based on the predicted flow availability for the D Gas Day which takes into account predicted demand and weather.

Within the D Gas Day to the extent that NGN becomes aware that the System is not capable of accepting the nominated D-1 Gas Day flow rate NGN shall notify the DFO (by way of a TFA) as soon as reasonably practicable of the flow rate which is capable of being accepted into the System,

Contractual minimum flow rate is zero, however the operating range of the fiscal standard metering system and/or the minimum dosing rate of the odorisation system set out within the agreed design specification may require a minimum flow rate greater than zero.

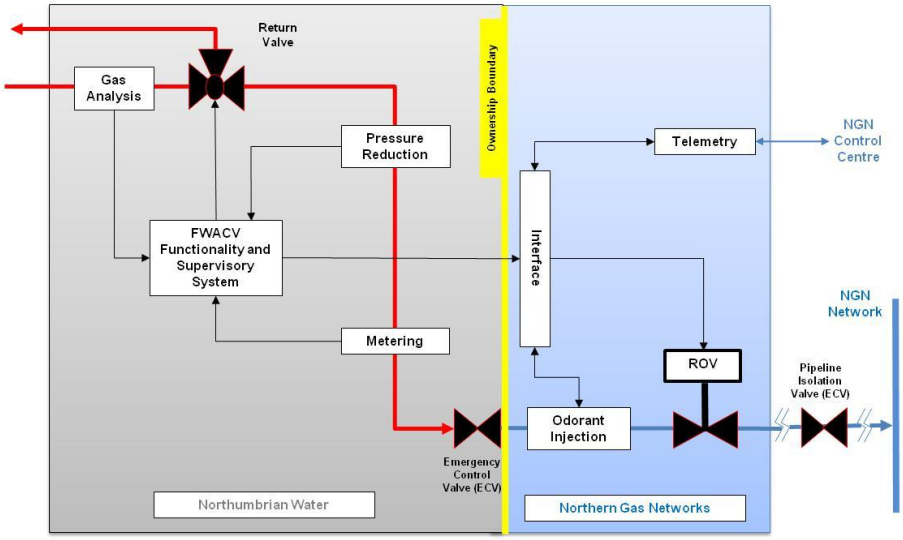
The MFR available to the DFO as set out in Table A is based on normal operating conditions. The actual MFR available at the relevant System Entry Point will be dependent upon prevailing network conditions at any particular time. For example at periods of low demand it may not be possible to enter any flow from the DFO into the relevant System Entry Point however NGN will take reasonable steps to notify the DFO in this situation.

The details set out in Table A are not intended to represent any offer or obligation on the part of NGN to make available any particular quantity of System Capacity at any point.

Schedule 3 - PLANT, EQUIPMENT AND OWNERSHIP

The Plant & Equipment installed at the relevant Delivery Facility, Entry Facility and System Entry Point are set out below, which is the same drawing detailed in schedule 1. The reference to Northumbrian Water Limited is to the DFO and the reference to Northern Gas Networks is to NGN. The items shown to the immediate left or downstream of the System Entry Point together constitute the Delivery Facility and the items shown immediately right or upstream together constitute the Entry Facility:

The equipment reflects the specification agreed by NGN and the DFO for the relevant System Entry Point. The Equipment meets the requirements of Schedule 4 – Network Entry Conditions and Schedule 5 – Measurement Provisions.



Schedule 4 - NETWORK ENTRY PROVISIONS

1. Connected Delivery Facility and Individual System Entry Point(s)

1.1 The Connected Delivery Facility is the Delivery Facility as defined in this Agreement.

1.2 The System Entry Point is shown in the drawing attached in Schedule 1.

2. Gas Entry Conditions

2.1 These Gas Entry Conditions shall apply at the System Entry Point.

2.2 NOT USED

2.3 Gas tendered for delivery by System Users to the System at the System Entry Point shall not contain any solid, liquid or gaseous material which would interfere with the integrity or operation of the System or any pipeline connected to such System or any appliance which a consumer might reasonably be expected to have connected to the System. In addition, all gas delivered to the System at the System Entry Point shall be in accordance with the following values (as may be amended from time to time in accordance with NGN's GQ8 risk assessment process or any changes to any Legal Requirements including without limitation schedule 3 of the Gas Safety (Management) Regulations 1996):

(a)	Hydrogen Sulphide	not more than 5mg/m^3, (3.3ppm).
(b)	Total Sulphur	not more than 50mg/m^3.
(c)	Hydrogen Content	not more than 0.1% (molar), (1,000ppm).
(d)	Oxygen Content[1]	not more than 1.0% (molar).
(e)	Hydrocarbon Dewpoint	not more than minus two degrees Celsius (-2°C) at any pressure up to the delivery pressure provided in paragraph (p).
(f)	Water Content	not such as would cause a water dewpoint more than minus ten degrees Celsius (-10ºC) at the delivery pressure provided in paragraph (p).
(g)	Wobbe Number	shall be between 47.2 MJ/m^3, and 51.41 MJ/m^3.
(h)	Incomplete Combustion (ICF)[2]	not more than 0.48 (Factor).
(i)	Soot Index (SI)[2]	not more than 0.60 (Index).
(j)	Odour	Gas delivered shall have no odour that might contravene the Northern Gas Networks' statutory

[1] This is based on qualification for the Certificate of Exemption No.1 of 2013 for the Gas Safety (Management) Regulations 1996 [GS(M)R} which permits an oxygen content of equal or less than 1.0% (molar). Should qualification to the exemption not be met or if the exemption be withdrawn, then the normal GS(M)R limit of equal or less than 0.2% (molar) shall apply.

[2] Incomplete combustion factor (ICF) and Soot Index (SI) have meanings as defined in Part 1 of Schedule 3 of the Gas Safety (Management) Regulations 1996.

		obligation not to transmit or distribute any gas at a pressure below 7bar(g), which does not possess a distinctive and characteristic odour. [3]
(k)	Carbon Dioxide[4]	not more than 2.0 mol%.
(l)	Nitrogen[5]	not more than 10.0 mol%.
(m)	Total Inerts[4]	not more than 10.0 mol%.
(n)	Gross Calorific Value	shall be within the range 37 to 44MJ/m^3 (real gross dry); and below the Target CV cap (as notified pursuant to paragraph 3).
(o)	Delivery Temperature[6]	shall be between one and twenty degrees Celsius (1°C and 20°C).
(p)	Pressure	shall be that required to deliver gas into the System taking account of the back pressure as the same shall vary from time to time. The delivery pressure shall not exceed seven bar gauge (7 barg).
(q)	Organo Halides	Not more than 1.5 milligrams per scm.
(r)	Radioactivity[7]	Not more than 5 Becquerals per gram.
(s)	Impurities	shall not contain solid or liquid material that may interfere with the integrity or operation of pipes or gas appliance.
(t)	Other Contaminants[8]	see footnote 8 below

2.4 Pursuant to the provisions of the Gas Safety (Management) Regulations 1996 (the "Regulations"), the Network Emergency Coordinator may, where it is necessary to prevent a supply emergency, authorise (for a specified period) Gas not conforming with the requirements specified in Part I of Schedule 3 to the Regulations to be conveyed in the System if the Gas conforms with the requirements specified in Part II of Schedule 3 to the Regulations. In the event that the Network Emergency Coordinator does so authorise Gas not conforming with the requirements specified in Part I of Schedule 3 to the Regulations to be conveyed in the System from the System Entry Point, the requirements in relation to Wobbe Number and incomplete Combustion Factor (ICF) set out in paragraph 2.3 above shall be amended as set out below for the period specified by the Network Emergency Coordinator:-

a) Wobbe Number shall be between 46.5 MJ/SCM, and 52.85 MJ/SCM.

b) Incomplete Combustion Factor (ICF) shall be not more than 1.49.

[3] Definitive list of masking agents is not available however chemical groups such as terpenes (especially limonene and cyclic terpene) are known to cause masking problems
[4] Modification 0049 to the Unified Network Code
[5] As all Supplemental agreements at NGN entry points
[6] Based on PE System requirements (see IGEM TD/3 Edition 4 Steel and PE Pipelines for Gas Distribution)
[7] Based on Radio Active Substances Act (Exemption Order)
[8] * N.B. Contaminants (e.g. silioxanes etc.) will be identified by the initial gas analysis of the gas to be entered and will be reviewed on an agreed basis (see 2.7).

2.5 In order to meet the calibration ranges for typical analysis equipment, unless agreed otherwise by the Parties, the concentration ranges of the following components in the Gas delivered shall be as follows:

Component	% mole low	% mole high
Methane	78.0	100.0
Ethane	0	18.0
Propane	0	7.0
i-Butane	0	1.0
n-Butane	0	1.0
neo-Pentane	0	0.35
i-Pentane	0	0.35
n-Pentane	0	0.35
C6+ fraction	0	0.35
Nitrogen	0	10.0
Carbon Dioxide	0	7.0

2.6 Prior to Gas entering the System sampling and analysis of the Gas will be required to fully characterise any contaminants that may be present in the Gas. Based on the results of this analysis there may be a requirement for additional entry conditions to be specified and monitored in order to comply with Legal Requirements and pursuant to NGN's GQ8 process. The variability in Gas quality will define the frequency and duration of the sampling, analysis and any additional monitoring that is required.

2.7 Any change at the Delivery Facility that may impact upon the composition of the Gas tendered for delivery by System Users to the System at the System Entry Point including but not limited to a change in feedstock will be notified to NGN. NGN may decide to reasonably request additional sampling and analysis be carried out and based on the results of this analysis there may be a requirement for additional entry conditions to be specified and monitored in order to comply with Legal Requirements and pursuant to NGN's GQ8 process.

2.8 Additional contaminant monitoring requirements:

- NGN will not allow contaminates including siloxanes to enter the System, therefore the allowable limit is zero;

- Activated carbon filters must be included in the design for Howden as per HSE guidance;

- A monthly monitoring regime should be setup to monitor any break-through of the carbon filters to ensure immediate replacement when this happens;

- Pre commissioning monitoring must be carried out to the current practical detectable levels of siloxanes;

- A monthly monitoring regime should be setup to monitor the current practical detectable level of siloxanes;

- Following future research and development, the above can be reviewed in accordance with clauses 2.6 and 2.7.

3. Target Calorific Value

3.1 All Gas tendered for delivery to the System at the System Entry Point shall be in accordance with the target gross calorific value of Gas ("Target CV") as set out below.

Upper Limit	Current FWACV for North LDZ + 0.3MJ/Sm3
Lower Limit	Lowest attributable CV for North LDZ + 0.3MJ/Sm3

It is anticipated that Target CV setting will be close to the lower limit, as detailed above.

NGN reserves the right to modify the Target CV in circumstances where CV capping is in force in the North LDZ. This temporary Target CV would be set at the lowest LDZ attributable CV for North LDZ.

The calculation of the Target CV will be carried out from time to time on the NGN Distribution Network Control System (DNCS) and will be communicated to site by means of facsimile message as soon as reasonably practicable after it is determined. The CV being delivered by the facility will be continually monitored against this Target CV.

Future consideration will be given to the means of communicating the Target CV value to site. Any changes to this arrangement will be subject to discussion and acceptable to all parties.

3.2 The DFO will install, commission, operate and maintain equipment necessary to ensure that Gas presented to the System at the System Entry Point shall be in accordance with the Target CV. This may require the DFO to enrich the Gas (at the DFO's cost).

4. Measurement Provisions

4.1 The Measurement Provisions shall be as set out in Schedule 5.

5. Points of Delivery

5.1 The points of delivery at the System Entry Point shall be those illustrated in the diagram contained in Schedule 1.

6. Additional Requirements

6.1 The DFO shall maintain, repair and operate the Delivery Facility to the standard of a Reasonable and Prudent Operator, and NGN shall maintain, repair and operate the Entry Facility to the standard of a Reasonable and Prudent Operator. In the event that either Party believes that the other Party is not complying with its obligations set out above, then (without prejudice to any rights the first Party may have under any Delivery Arrangement or Transportation Arrangement) it shall notify the other Party accordingly. Following the giving of such notice, the Parties shall meet as soon as reasonably practicable to discuss the matter in good faith.

Schedule 5 - MEASUREMENT PROVISIONS

1. Measurement Equipment

1.1 The Measurement Provisions shall be as set out in this Schedule 5. The provisions of this Schedule 5 as to the measurement of flow (and determination of volume and energy) and the determination of gas quality, including calorific value of gas, delivered to the System shall apply to the System Entry Point.

2. Installation, Commissioning, Operation and Maintenance of the Measurement Equipment comprised within the Connected Delivery Facility:

2.1 This Schedule 5 specifies the metering, sampling, analysis and other equipment (the "Measurement Equipment") at the System Entry Point. The Measurement Equipment shall be installed and maintained to meet the requirements of the Gas (Meters) Regulations 1983, the Gas Safety (Management) Regulations 1996, the Gas Act 1986 and the Gas (Calculation of Thermal Energy) Regulations 1996 (as appropriate).

2.2 General Requirements:

a) The Measurement Equipment at the Delivery Facility must comply with standards that allow for the determination of the gas quality parameters as stated within the Gas Entry Conditions.

b) The Measurement Equipment must also determine the volume and energy of all Gas transferred between the System and the Delivery Facility under the relevant contractual and regulatory obligations, where applicable. The requirements for these determinations that must be met or exceeded are set out within these Measurement Provisions.

c) The Measurement Equipment shall be supported by relevant telemetry and communication equipment that allows for sufficient communication between the Delivery Facility, Entry Facility and NGN's System control facilities.

d) The Measurement Equipment shall be subject to a programme of testing by the DFO to determine its operational capabilities and the results shall be acceptable to NGN prior to any Gas flow being allowed to or from the System.

e) The Measurement Equipment shall be validated prior to any gas flow being allowed to or from the System.

2.3 Gas Quality

a) The DFO shall install, commission, operate and maintain equipment to determine the characteristics defined in the Gas Entry Conditions of any Gas that is passed from the Delivery Facility to the System.

b) The Parties agree that, not withstanding paragraph 2.10, the equipment referred to in this paragraph 2.3 shall constitute the sole equipment for the measurement of Gas quality at the System Entry Point. This equipment shall, subject to continuing and satisfactory maintenance and calibration by the

DFO acting as a Reasonable and Prudent Operator, be accepted by both Parties as providing accurate and reliable measurements.

c) Either Party may request a validation of the Gas quality measurement equipment in which event paragraph 2.10 shall apply except that such validation shall be undertaken within 24 hours, or as soon as reasonable practicable, of such request and both Parties shall be entitled to witness the validation. Both Parties accept that it may not be possible to give adequate advance notification of the timing of such validation, but the Party arranging the validation will use reasonable endeavours to ensure that the other Party is able to witness the validation. Until such time as validation is complete the Gas quality Measurement Equipment shall be considered to be operating in a true and accurate manner.

d) Such equipment shall meet the following criteria:

   i. All measurement biases shall as far as is practicable be eliminated or compensated for;

   ii. The uncertainty of measurement shall be such that the risk of the DFO and NGN flowing Gas that they are both unaware is out with Schedule 3 of the Gas Safety (Management) Regulations 1996 is minimised;

   iii. The sampling system used to obtain the sample of Gas for quality measurements shall ensure that the sample is representative of the Gas passed between the System and the Delivery Facility and that no change to the Gas composition occurs between the sample point and the analytical instrument; and

   iv. Calibration and validation of equipment to make such measurement shall, where feasible, be traceable to national or international standards.

e) NGN require that the sampling and analysis of gas quality parameters must be completed in such a time that if the gas is not compliant with the NEA then an emergency shut off valve will be automatically activated to prevent non compliant gas entering the metering system.

2.4 Energy and Volume

The DFO shall install, commission, operate and maintain flow measurement equipment to determine instantaneous and integrated volume and energy flows out of the Delivery Facility such that:

a) All volume and energy flows to the System shall comply with this paragraph;

b) All volumes shall be corrected to metric Standard Temperature and Standard Pressure conditions, and reported as cubic metres of gas;

c) The measurement of volume shall be without bias and with an uncertainty of better than plus or minus 1.0% of reading over the specified flow range; and

d) The uncertainty of the energy flow must be better than ±1.1% of reading over the specified flow range.

2.5 Volume and Energy Calculation

a) Volume flow-rate shall be calculated in accordance with the appropriate standard using a dedicated flow computer that shall accept all signals

necessary for the calculation of the total station volume and energy flow-rate.

b) Flow metering of gas and energy flow to the NGN network is to be verified compliant with ME/2.

2.6 Volume Measurement

a) The flow Measurement Equipment shall be designed, built and installed to BS EN 1776. Further guidance is given in the Institute of Gas Engineers' reports IGE/GM/1 and IGE/GM/4. In addition, the following standards/guidelines shall also apply:

i. For orifice plate metering systems, BS EN ISO 5167;

ii. For turbine metering systems, BS 7834 (ISO 9951);

iii. For ultrasonic metering systems, BS 7965, BS ISO/TR 12765, AGA 9;and

iv. For any other metering system, such standards/guidelines as may be agreed by NGN.

b) The uncertainty of the Measurement Equipments must be assessed in accordance with ISO5168 and the relevant parts of ISO5167, ISO9951 and BS 7965 as may be applicable (or such other standards as may be agreed between the Parties).

c) The calculation of density for the purpose of calculating volume flow and for correction to standard conditions shall be such that:

i. All densities shall be determined as kilograms per cubic metre (kg/CM);

ii. The line density may be measured using an in-line densitometer. One densitometer shall be installed for each metering stream and these shall be installed in a 'pressure recovery' mode of operation to minimize the amount of gas vented to atmosphere. Alternatively line density may calculated from a gas composition obtained via a gas chromatograph. The calculation of line density will be in accordance with the latest version of the ISO 12213 using a live pressure and temperature; and

iii. The reference density shall be calculated from gas composition obtained via a gas chromatograph unless otherwise agreed. The calculation of reference density will be in accordance with the latest version of the ISO 12213 using Standard Pressure and Standard Temperature.

iv. The measurement of temperature for the purpose of calculating volume flow and for correction to standard conditions shall be such that:

v. Temperatures shall be determined as degrees Celsius (°C); and

vi. The requirements of the relevant parts of ISO5167, ISO9951 and BS 7965 as may be applicable (or such other standards as may be agreed between the Parties) are met.

d) The measurement of pressure for the purpose of calculating volume flow and for correction to standard conditions shall be such that:

i. Pressure shall be determined as bar gauge; and

ii. The requirements of the relevant parts of ISO5167, ISO9951 and BS 7965 as may be applicable (or such other standards as may be agreed between the Parties) are met.

2.7 CV Measurement

a) The DFO shall install, commission, operate and maintain calorific value measurement equipment that is approved for such use by Ofgem.

b) All calorific values shall be corrected to Standard Temperature and Standard Pressure, and reported as Megajoules per cubic metre (MJ/SCM); and

   i. The equipment shall read without bias and the uncertainty of the calorific value must be better than plus or minus 0.1% of reading over the specified calorific value range. The determination of uncertainty shall be traceable to national or international standards as appropriate.

c) The design and operation of the Measurement Equipment shall follow all relevant national or international standards, specifically:

   i. Where the calorific value is determined by analysis of the Gas composition, it shall typically be determined according to ISO 6976 (1995) or better; and

   ii. Where an on-line analytical system is used, its performance shall normally be evaluated according to ISO 10723 (1995) or better.

d) NGN may evaluate all instruments used in the determination of the calorific value and witness the calibrations or perform tests on the apparatus.

e) As the Gas (Calculation of Thermal Energy) Regulations 1996 (as amended) apply at the System Entry Point, then the apparatus used for the determination of calorific value will be operated and maintained under direction from Ofgem and will be used for the purposes of calculating flow weighted average calorific value (FWACV) applied to that charging area.

2.8 Permitted Ranges

a) The typical operational range of measurement (the "Permitted Range") and the uncertainty of parameters determined by the Measurement Equipment shall be better than the values defined in the table below, and the frequency with which measurements are taken shall be not less than that specified in the table below:

Characteristic	Unit	Permitted Range	Uncertainty	Frequency
Volume Flow Rate	m^3/hour	0 to 2,000	+/-1.0%	Continuous
Energy Flow Rate	MJ/hour	0 -88,000	+/-1.1%	Continuous
Gas Pressure	barg	0 to 6.9	+/-0.4%	Continuous
Gas Temperature	°C	0 to 20	+/-0.2%	Continuous
Hydrocarbon Dewpoint	°C at 7 barg	-20 to 10	+/-1.0	6 Monthly

Characteristic	Unit	Permitted Range	Uncertainty	Frequency
Water Dewpoint	°C at 85 barg	-20 to 10	+/-1.0	Continuous
Oxygen	Mole %	0 to 2.0	+/-0.01	Continuous
Hydrogen	Mole %	0 to 0.15	+/-0.01	6 Monthly
Hydrogen Sulphide	mg/m^3	0 to 6.0	+/-0.5	Continuous
Total Sulphur	mg/m^3	0 to 60.0	+/-1.0	6 Monthly
Incomplete Combustion factor	Number	-3.0 to 2.0	+/-0.2	Continuous
Soot Index	Number	0 to 1.0	+/-0.2	Continuous
Inert Gases (including Carbon Dioxide and Nitrogen)	Mole%	0 to 10.0	+/-0.01	Continuous
Nitrogen	Mole%	0 to 10.0	+/-0.01	Continuous
Carbon Dioxide	Mole%	0 to 5.0	+/-0.15	Continuous
CV	MJ/SCM	36 to 44	+/-0.01	Continuous
Relative Density	Number	0.5 to 0.8	+/-0.002	Continuous
[Wobbe]	MJ/SCM	45.0 to 55.0	+/-0.1	Continuous

b) For the avoidance of doubt, the maximum hourly flow rate set out in the table above is quoted in respect of volume, as Standard Cubic Metres of gas and, in respect of energy, in Megajoules, both as defined in this Agreement. Such rate does not constitute for the purposes of the Network Code or otherwise an indication of the available capacity in respect of the System Entry Point.

2.9 Communication Interface

(a) Communications are required for two purposes; operational monitoring and control and measurement validation.

(b) The DFO will install, commission, operate and maintain communication equipment to provide signals to NGN of type, quality, quantity and frequency to be agreed between NGN and the DFO. The requirement may include: Needs confirming

Commented [AO1]: Meeting in August to finalise

Characteristic	Unit	Permitted Range	Transmittal mode	Frequency
Mains Fail			Digital	Continuous
Calorimeter alarm (System 1)			Digital	Continuous

Characteristic	Unit	Permitted Range	Transmittal mode	Frequency
Flow to grid valve Open			Digital	Continuous
Flow to grid valve Closed			Digital	Continuous
Reject valve Open			Digital	Continuous
Reject Valve Closed			Digital	Continuous
Instantaneous Volume (F1)	MSCM/D	TBA	Analogue	Continuous
Integrated Volume	MSCM	TBA		Continuous
Slam Shut Alarm			Digital	Continuous
Outlet Pressure	barg	0-10	Analogue	Continuous
Oxygen	Mole %	0-2	[Analogue]	Continuous
Hydrogen Sulphide	ppm	0-10ppm	[Analogue]	Continuous
[otal Sulphur	mg/CM		[Analogue]	Continuous
Incomplete Combustion factor			[Analogue]	Continuous
Soot Index			[Analogue]	Continuous
Inert Gases (including Carbon Dioxide and Nitrogen)	Mole%		[Analogue]	Continuous
Nitrogen	Mole%		[Analogue]	Continuous
Carbon Dioxide	Mole%	0-10	[Analogue]	Continuous
GS(M)R compliance alarm			Digital	Continuous
Meter Pressure	barg	0-10	[Analogue]	Continuous
Meter Temperature	°C	-10 to +40	[Analogue]	Continuous
Meter Suspect			Digital	
Hydrocarbon Dewpoint	°C at [27] barg		[Analogue]	Continuous
Water Dewpoint	°C at [85] barg		[Analogue]	Continuous
Carbon Dioxide	Mole%	0-10	[Analogue]	Continuous
CV	MJ/SCM	35-44	[Analogue]	Continuous
Relative Density		0.5-0.8	[Analogue]	Continuous

Characteristic	Unit	Permitted Range	Transmittal mode	Frequency
Wobbe	MJ/SCM		[Analogue]	Continuous
Other	As Appropriate	Dependant on Risk		

(c) The signals provided pursuant to this paragraph 2.9 shall be provided as 4-20 mA or volt-free contact signals / RS232/ RS485 / modbus as agreed by both Parties.

2.10 Validation

(a) The Measurement Equipment shall be validated prior to any Gas flow being allowed to or from the System.

(b) The procedures for the validation and subsequent revalidation shall be agreed between both Parties. Validation is most likely to comprise a performance evaluation carried out in accordance with ISO10723, re-calibration or analysis of a certified mixture.

(c) The DFO shall carry out validation of the measurement equipment no less frequently than once every 12 months.

(d) Either Party may request that the Measurement Equipment be validated at any time in which case any such validation shall be carried out as soon as reasonably practicable. Subject to paragraph 2.10(e), the costs and expense of such validation, and any adjustment or replacement of the components of the Measurement Equipment made as a result of any validation made pursuant to this paragraph 2.10(d) shall, if the Measurement Equipment is found to read without discernable bias and within the Permitted Range, be paid by the Party requesting the validation and in any other case by the operator of the relevant part of the Measurement Equipment.

(e) Either Party may request that the Measurement Equipment be validated if the previous validation took place more than one (1) month previously, and any validation pursuant to this paragraph 2.10(e) shall be carried out as soon as reasonably practicable. The operator of the relevant part of the Measurement Equipment shall bear the costs and expenses of such validation and any adjustment or replacement of the components of the Measurement Equipment made as a result thereof.

(f) Immediately following validation as specified in paragraph 2.10(d) or (e), the individual components of the Measurement Equipment shall be adjusted or replaced as necessary so that the Measurement Equipment reads without bias and uncertainty within the allowed limits. Each individual component of the Measurement Equipment shall read within its recommended tolerance. Where the Measurement Equipment is found when so validated to read with a discernable bias, regardless of whether it is within the Permitted Range, then:

(i) the Measurement Equipment shall be assumed to have read with bias during the latter half of the period since last validated and found to be without bias exceeding the allowed limits or, if later, since last adjusted to read without bias within the accepted levels (except in the case where it is proved that the Measurement Equipment has begun to read outside the Permitted Range on some other date);

(ii) for the purposes of calculating the amount of allowance to be made to or the surcharge to be made on System Users, the quantities read as offtaken from or delivered to the System during the period when the Measurement Equipment is assumed to have read with bias shall be adjusted by an amount corresponding to the amount by which the Measurement Equipment was found on validation to be in error in accordance with the principals of the Uniform Network Code document *"Measurement Error Notification Guidelines For NTS to LDZ and LDZ to LDZ Measurement Installations"* relating to Offtake metering errors.

(g) Immediately following validation as specified in paragraph 2.10(d) or (e), the individual components of the Measurement Equipment shall be adjusted or replaced as necessary so that the Measurement Equipment reads with bias and uncertainty within the Permitted Range. Each individual component of the Measurement Equipment shall read within its recommended tolerance. Where the Measurement Equipment is found when so validated to read with bias and or uncertainty then, for the purposes of calculating the amount of allowance to be made to or the surcharge to be made on System Users the quantities read as offtaken from or delivered to the System during the period when the Measurement Equipment is assumed to have read outside the Permitted Range shall be accepted prior to adjustment.

(h) Any validation pursuant to this paragraph 2.10 shall be conducted by the operator of the relevant part of the Measurement Equipment, and the operator of the relevant part of the Measurement Equipment shall give reasonable advance notice of such validation to the other Party, and such other Party shall be entitled to be present. The operator of the relevant part of the Measurement Equipment shall provide a validation report to the other Party within fourteen (14) days of any validation stating the results of such validation.

(i) The results of any validation shall be binding on System User(s), NGN and the DFO unless the DFO or NGN shall within fourteen (14) days after receiving the validation report specified in paragraph 2.10(h), give notice to the operator of the relevant part of the Measurement Equipment that it disputes the accuracy of such validation. The DFO or NGN shall not be entitled to dispute the accuracy of such validation solely on the grounds that it did not attend such validation.

(j) At the request of either Party, the Parties shall meet and discuss and endeavour to settle any dispute or failure to agree arising from the application of the provisions of this paragraph 2.10 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 (at the request of either Party) in accordance with the provisions set out in Schedule 7.0).

2.11 Inspection Rights

(a) Either Party shall have the right, upon giving reasonable notice to the operator of the relevant part of the Measurement Equipment to inspect the such part of the Measurement Equipment and the charts and other measurements or test data of the operator of the relevant part of the Measurement Equipment but the reading calibration and adjustment of such and the changing of any charts shall be carried out only by the operator of the relevant part of the Measurement Equipment who shall preserve all original test data, charts and other similar records for a period of three (5) years and shall, at the expense of the other Party, make a copy thereof available to NGN upon request.

(b) The operator of the relevant part of the Measurement Equipment shall maintain auditable logs that shall include but not be limited to:

(i) System alarms contributing to flow Measurement Equipment fault alarm and to any equipment within the Measurement Equipment;

(ii) Configuration of flow computers and programmable devices within Measurement Equipment; and

(iii) Tests or validations of the Measurement Equipment.

2.12 Measurement Failure

(a) In the event of failure of the equipment for measuring Gas composition to be installed in respect of the System Entry Point unless prohibited under legislation the DFO shall cease flow into the network.

(i) the operator of the relevant part of the Measurement Equipment shall rectify such failure as soon as reasonably practicable. Rectification shall include, inter alia, recalibration within 24 hours of the operator becoming aware of the failure. Any further remedial works required as a consequence of such failure shall be notified to the other operator no later than the next working day;

(b) The intention is to exchange information between the Parties such that no significant energy measurement errors are allowed to accumulate and an agreed end of day number is always achieved. As such:

(i) whenever a significant energy measurement error occurs, other than as included in paragraph 2.10 it will be documented in a mis-measurement report and the reconciliation of the metering errors will be in accordance with reconciliation procedures defined by NGN subject to approval by Ofgem.

(ii) where details of the error are known, to include but not be limited to the start and end dates, error quantity (to include fixed or variable), the error shall be calculated from the available data; and

(iii) where the full details of the error are not known then the normal principle used for reconciliation is that a correction for half of the measurement error shall be applied to the volume/energy for the entire period between the correction to the measurement error and the previous validation check or point at which it can be demonstrated that there was no measurement error.

(c) Reconciliation will be calculated using the end of day data previously recorded on UK-Link.

(d) Where the error cannot be agreed the matter may be referred to an expert for determination (at the request of either Party) in accordance with the provisions set out in Schedule 7 0.

2.13 Modifications

The operator of the relevant part of the Measurement Equipment shall provide not less than three (3) months prior written notice to the other Party of any intended modifications to that part of the Measurement Equipment which may affect the measurement of the flow or quality of gas at the System Entry Point. The other Party shall accept the Measurement Equipment (as modified) for flow of Gas once the Measurement Equipment (as amended) has been validated (as appropriate).

Schedule 6 - LOCAL OPERATING PROCEDURES

1. Introduction

1.1 This Schedule 6 sets out Local Operating Procedures between the DFO and NGN for the provision of Gas flow related information to each other so as to facilitate the safe and efficient operation of the Delivery Facility, the Entry Facility and the System.

2. Routine Notifications

2.1 Notices

(a) Notices given by the DFO to NGN in accordance with these Local Operating Procedures will be made to the NGN Shift Representative. The NGN Shift Representative is the System Control Shift Engineer.

(b) Notices given by NGN to the DFO in accordance with these Local Operating Procedures will be made to the DFO Representative.

(c) The telephone numbers; facsimile number; email addresses and the postal addresses of the Parties for service of notices given in accordance with these Local Operating Procedures are set out in Attachment C. In the event of the telephone number, facsimile number or other details being changed, the Party whose number or details are subject to such change shall notify the other Party as soon as it is reasonably practicable and in any event in advance of such changes taking place.

2.2 Daily Notifications of Gas Forecast Flow Rate, Expected Calorific Value Input and End of Day Volumetric Quantity for D, D-1 to D-6.

(a) The DFO will notify NGN at the earliest practicable opportunity but no later than 12:00 hours on D-1 Gas Day of the Expected Flow Rate, Expected End of Day Volumetric Quantity and the calorific value in accordance with Schedule 4 paragraph 3.1.

(b) The notification will be in the form of a completed Daily Flow Notification to be notified by facsimile or other agreed means by the DFO to NGN.

(c) The DFN shall be in a form substantially similar to the pro forma set out in Attachment A.

2.3 Re-notification of Gas Expected Flow Rate, Calorific Value and Expected End of Day Volumetric Quantity

(a) On D-1 Gas Day

i. Before D Gas Day commences the DFO will, as soon as is reasonably practicable following the time at which it is made aware of any changes requiring an update to the DFN, notify the NGN Shift Representative of any such changes. Any physical flows entering the NGN network which exceed the DFN in excess of +/- 10% will require an updated DFN. Notification of such change will be made by facsimile or other agreed means. This must adhere to the operating rules laid out in section (ii).

ii. Any changes are subject to the following notices.

a. Not less than 4 hours notice if a rate change is > 50% Maximum Daily Quantity
b. Not less than 2 hours notice a rate change between 25% and 50% Maximum Daily Quantity

c. Not less than 1 hour notice required if a rate change is < 25% Maximum Daily Quantity
d. A minimum of 1 hour notice for any decrease in rate
e. Only one Daily Flow Nomination may be submitted per hour

iii. The revised Forecast Flow Rate on the DFN shall indicate when the change will take effect and will show the Expected End of Day Volumetric Quantity that is estimated will be delivered on that Gas Day with a forecast of the calorific value in accordance with Schedule 4 paragraph 3.1 of the Gas that is estimated will be delivered on that Gas Day.

(b) Within D Gas Day

i. Within D Gas Day the DFO will, subject to the relevant Tolerances, notify NGN of any changes to the Forecast End of Day Volumetric Quantity and/or Forecast Flow Rate and/or the Forecast calorific value in accordance with Schedule 4 paragraph 3.1 of such Gas, as soon as is reasonably practicable following the time at which it is made aware of such changes.

ii. Notification will be made by facsimile or other agreed means. The revised completed DFN will indicate the revised Expected Flow Rate (showing when the change is likely to take effect), the revised Expected End of Day Volumetric Quantity and a forecast of the calorific value in accordance with Schedule 4 paragraph 3.1 of the Gas that is estimated will be delivered for the remainder of D Gas Day.

iii. Where the change is not due to a re-nomination, the DFO shall indicate this fact on the DFN. The DFO may at its sole discretion provide additional information related to the reason for the change.

iv. Notified variations to the Expected Flow Rate will be effective from a specified Exact Hour or as soon as reasonably practical.

3. Confirmation of Gas Quantities Delivered at the System Entry Point

3.1 The NGN Shift Representative and the DFO representative will make contact from time to time as reasonably required with a view to avoiding any disparities in the Parties' measurement of the End of Day Energy Quantity, calorific value and volume of Gas delivered at the System Entry Point during the Gas Day.

3.2 End of gas day notification is required before 07:00 D+1. Refer to attachment D.

4. Other Notifications/Communications

4.1 General Communication

Subject to the Party's duty of confidentiality to any third party the DFO Representative and the NGN Shift Representative will at all times keep each other informed of all matters likely to have, or which are already having, a significant effect on Gas flow, pressure or quality at the System Entry Point. Both Parties will use reasonable endeavours to give as much notice to the other as possible.

4.2 Planned Flow Changes due to Maintenance Procedures

(a) Both Parties shall, in good faith, seek to coordinate their maintenance activities at the System Entry Point in order to minimise disruption to each other.

(b) Representatives of the DFO and NGN shall meet at least once per year and on other occasions as required to discuss their respective planned maintenance programmes, emergency shutdown tests, pipeline operations and procedures associated with these activities to assist the integrity and safety of the Delivery Facility and the Entry Facility. In addition, representatives of the DFO and NGN shall meet at least once per year and on other occasions as required to discuss any new supplies and changes to existing supplies to assist the integrity and safety of the Delivery Facility and the Entry Facility. The two meetings referred to above may be held separately from each other or combined to form a single meeting, as the Parties may agree from time to time.

(c) The representatives for NGN would be the System Control Support Engineer and the E&I Network Operations Manager.

4.3 Transportation Flow Advice Notification (TFA).

(a) If in NGN's reasonable opinion, the System will be unable to accommodate any Expected Flow Rate or Expected End of Day Volumetric Quantity as notified on the DFN, or any Actual Flow Rate, NGN may advise the DFO by means of a TFA facsimile, which will be in substantially the form set out in Attachment B. In so doing, NGN will advise the DFO as to the flow rates and End of Day Quantity that it anticipates the System may be able to accommodate. NGN will provide the DFO with a reason for its TFA.

(b) If NGN believes that Gas tendered for delivery at the System Entry Point is reasonably expected not to comply with the Gas Entry Conditions, NGN may advise the DFO of the specification parameter that is reasonably expected to be in breach and request that the DFO take action to prevent such a breach or NGN will isolate the site by closing the ROV.

(c) If Gas tendered for delivery at the System Entry Point does not comply with the Gas Entry Conditions, NGN may;

i. issue a TFA that advises of the specification parameter that is being breached and requesting a reduction in, or a cessation of, the flow of Gas being tendered for delivery, or;

ii. isolate the Delivery Facility from the System by closing the necessary valves at the Entry Facility; and

iii. NGN will issue a TFA informing the DFO of the isolation of the Delivery Facility from the System and the cessation of flow.

(d) The DFO recognises and acknowledges that NGN issues a TFA to protect the System either from contamination by Gas outside the agreed specification or from over-pressurisation. Where NGN has issued a TFA to the DFO, the DFO shall reduce or cease flow (as the case may be) such that the flow from the Delivery Facility is less than or equal to the flow rate specified in the TFA. If the DFO fails to comply with the TFA in a timely manner, it may become necessary for NGN to isolate the flow from the Delivery Facility (by closing the necessary valves at the Entry Facility) to prevent over-pressurisation of the System or to prevent Gas outside the agreed specification entering the System.

(e) Following any cessation of flow caused by NGN isolating the Delivery Facility from the System, an NGN operative will attend the Entry Facility. The NGN operative will complete all necessary testing at the Entry Facility to ensure that the Network Entry Provisions as set out in Schedule 4 are satisfied, the Measurement Provisions set out in Schedule 5 are satisfied and it is safe to re-establish flow from the Delivery Facility to the System Entry Point. Only at this point will flow be re-established.

(f) Where NGN issues a TFA pursuant to this paragraph 4.3, the DFO shall resubmit its Expected Flow Rates in accordance with paragraph 2.3(b) based on the flow of Gas specified in the TFA.

4.4 Information Quality

If it becomes apparent over a period of time that the estimates of the changes do not reasonably reflect the actual changes, then the representatives will meet to discuss the relevant data with a view to improving the accuracy of such estimates in future. If reasonably requested by NGN, the DFO will use its reasonable endeavours to co-operate in the provision of additional information to NGN regarding DFN changes in any analysis of the balancing of the System.

4.5 Notification of Upstream Maintenance

(a) The DFO will, by 1st March and 1st September each year, provide NGN with all available details of planned maintenance activities for the following calendar year that, in the DFO's reasonable opinion, could impact on the deliverability of Gas to the System. Information should be provided for any maintenance activity that may affect the availability of Gas delivery to the System.

i. The following information should be provided in a form substantially the same as Attachment E

ii. activity reference number

iii. the start and finish dates of the maintenance activity.

iv. the anticipated reduction in Gas deliverability (in scm/d) at the point at which the Delivery Facility is connected to the System as a consequence of the maintenance activity.

v. details of the maintenance activity

vi. whether the details of the maintenance activity are provisional or confirmed.

vii. contact details for a specific person/role within the DFO's organisation from whom NGN could request additional information if required.

NGN System Control will have an internal written procedure to notify GNCC.

(b) The completed planned maintenance proforma should be faxed or emailed to NGN who will confirm receipt of the maintenance information.

(c) If NGN has not received the maintenance information by the 15th March and the 15th September, then NGN will contact the DFO and request that this information be provided as soon as reasonably practicable.

(d) On a quarterly basis, no later than the 15th day of each relevant month (December, March, June and September), the DFO will advise NGN of all changes to their scheduled planned maintenance programme as submitted to NGN pursuant to this paragraph 4.5. Updated information shall be provided for any existing or new maintenance activity that may affect the deliverability of Gas at the Delivery Facility.

(e) This information, including a null response, if there have been no change from the previous submission, should be faxed or emailed to NGN using the proforma in Attachment E. NGN will confirm receipt of the update.

(f) If NGN has not received the maintenance information by the relevant date, then NGN will contact the DFO and request that this information be provided as soon as reasonably practicable.

(g) If the DFO becomes aware of any change to maintenance plans between the quarterly updates, then the DFO should provide NGN with an updated maintenance form as soon as reasonably practicable.

(h) In the last few months through to the maintenance activity actually being undertaken, the DFO shall give greater priority in informing NGN of any changes to previously communicated planned maintenance dates that subsequently occur.

5. Information related to the Local Security of the Delivery Facility and the System

5.1 If there is a complete cessation of the flow from the Delivery Facility, NGN may shut the necessary valves to the Entry Facility to safeguard the System. When the Delivery Facility is able to resume flows the DFO Representative will telephone the NGN Shift Representative and confirm by facsimile or other agreed means that the Delivery Facility is again capable of delivering the Expected Flow Rate. Both Parties will then co-operate in returning to normal conditions as soon as practicable.

5.2 In the event of an Emergency Shut Down Condition on the System, NGN will close the necessary valves at the Entry Facility and/or elsewhere on the System. NGN will as soon as is practicable following such event inform the DFO Representatives of the reasons and the likely duration of the Emergency Shut Down Condition.

5.3 In the event of an emergency at the Delivery Facility requiring immediate cessation of supply, the DFO Representative will close the necessary valves at the Delivery Facility. The DFO will inform the NGN Shift Representative as soon as possible of the emergency, give the reasons therefore and, if possible, estimate the likely duration of the emergency.

5.4 It is acknowledged that emergency procedures are in place at both the Delivery Facility and the Entry Facility. In the event of an emergency at either facility, that could have an impact on the Gas flows, this paragraph 5 provides for the appropriate communications to be made. Such communications will be made as soon as is reasonably practicable.

6. Additional Site Specific Arrangements.

The gas quality monitoring regime proposed is based on current knowledge. NGN reserves the right to revise the monitoring regime in the light of new knowledge or legislation as set out in paragraphs 2.6 and 2.7 of Schedule 4.

7. Revision of Local Operating Procedures

7.1 The Parties agree to meet as requested by either Party to review and consider amendments to the Local Operating Procedures. Such meeting shall occur within one (1) calendar month of the request being made, unless otherwise agreed by the Parties acting reasonably. The Parties shall discuss and negotiate any such proposed amendments in good faith, and shall use reasonable endeavours to agree the extent of any such proposed amendments. For the avoidance of doubt, the provisions of Clause 4.1 shall apply to any such amendment.

Attachment A to Schedule 6.0 - DAILY FLOW NOTIFICATION & RE-NOMINATION (D to D-6) TEMPLATE

DAILY FLOW NOTIFICATION & RE-NOMINATION FORM

SITE:	HOWDON BIOMETHANE PLANT	WEEK COMMEN. (MONDAY):	24-Mar-14

Date & Time - DFN / Re-Nomination sent to NGN System Control

DAILY FLOW NOMINATION (DFN)	RE-NOMINATION
DATE: 24-Mar-14	DATE:
TIME: 06:00	TIME:

Note: When a Daily Renomination is sent, all subsequent renominations should be queried and the most recent Renomination should be followed

NOMINATED HOURLY FLOW PROFILE

Date	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
	24/03/2014	25/03/2014	26/03/2014	27/03/2014	28/03/2014	29/03/2014	30/03/2014	
Time	Nominated / Expected Hourly volume	Nominated / Expected Hourly volume	Nominated / Expected Hourly volume	Nominated / Expected Hourly volume	Nominated / Expected Hourly volume	Nominated / Expected Hourly volume	Nominated / Expected Hourly volume	Comments - Including Reason for Increase or Reduction
06:00								
07:00								
08:00								
09:00								
10:00								
11:00								
12:00								
13:00								
14:00								
15:00								
16:00								
17:00								
18:00								
19:00								
20:00								
21:00								
22:00								
23:00								
00:00								
01:00								
02:00								
03:00								
04:00								
05:00								
[Daily Total Nominated MCM]								
Expected CV (MJ/m³)								

NOTE: ALL NOMINATED/EXPECTED HOURLY VOLUMES SHOULD BE EXPRESSED IN MCM

Attachment B to Schedule 6

TFA

	Transportation Flow Advice (TFA)

ENTRY POINT	xxxxxxxxxxxxxx	**DFO**	xxxxxxxxxxxx

GAS DAY	

NGN hereby notifies you that, due to a [constraint on the System][breach of the Gas Entry Conditions], the System is unable to accept, to the extent identified in this TFA, Gas from the DFO's Connected Delivery Facility at the rate and/or amount specified in the latest DFN. The instantaneous delivery rate should not exceed the specified TFA rate.

HOUR BAR	**Current DFN**	**TFA Rate**	**Change with this TFA**	**Constraint in place**	**Note**
Units >>>	MSCM/D	MSCM/D	MSC/D	Yes/No	
06.00					
07.00					
08.00					
09.00					
10.00					
11.00					
12.00					
13.00					
14.00					
15.00					
16.00					
17.00					
18.00					
19.00					
20.00					
21.00					
22.00					
23.00					
24.00					
01.00					
02.00					
03.00					
04.00					
05.00					
EoD calculated as sum of rates					

DFO EoD (if different)		

ISSUED	

The information contained in the facsimile is confidential and may be privileged. This facsimile is intended only for the DFO named above. If you are not the intended recipient any review, dissemination or copying of this facsimile is prohibited. If you have received this facsimile by accident, please notify the NWL Network Manager immediately by telephone (contact details are set out in Attachment C to Schedule 6).

Attachment C to Schedule 6

COMMUNICATIONS

1. **Northern Gas Networks Limited**

Address: Northern Gas Networks
Control Room
Moorside
7 Camberwell Way
Moorside Park,
Sunderland
SR3 3XN

Facsimile: 0845 600 3124

Telephone: Shift Engineer – 0845 600 3175

For the attention of: North of England Control Desk

2. **xxxxxxxxxxxxxxxxx**

Attachment D to Schedule 6

GAS QUANTITY DELIVERY STATEMENT

From: xxxxxxxxxxxxxxxxx Address: xxxxxxxxxxxxx Fax: xxxxxxxxxxxxx Tel: xxxxxxxxxx	To: NGN Address: Northern Gas Networks, Control Room, 7 Camberwell Way Moorside Park, Sunderland SR3 3XN Fax: 0845 600 3124 Tel: 0845 600 3175

Gas Delivery Statement for [Delivery Facility]

Date: [ ] Time: [ ]

Gas Day commencing 0600 hours on: [ ]

Volume Delivered (MSCM): [ ]

Energy Delivered (kWh): [ ]

Average Calorific Value (MJ/SCM): [ ]

Signature: _____

Position: _____

Attachment E to Schedule 6

NOTIFICATION OF MAINTENANCE – By Delivery Facility

This form is used to notify NGN of the maximum gas flow of which the Delivery Facility is capable, at the System Entry Point to the System, taking into account all information available to the DFO, concerning planned maintenance activities.

This information is provided in good faith based upon best judgement of the DFO without liability.

To be returned by 15th of each quarter:

September (for that calendar year and the following calendar year)

December (for the following calendar year)

March and **June** (for that calendar year)

In between each quarterly update any changes to previously communicated planned maintenance should be provided to NGN (on the same proforma), as soon as they are known.

To:	**Company Name**	NGN System Control
	Contact Name	Shift Engineer
	Telephone Number	0845 600 3175
	Fax Number	0845 600 3124
	E-mail Address	NGN_Operations@northerngas.co.uk

From:	**Company Name**	xxxxxxxxxxxxxxxx
	Location	xxxxxxxxxxxxxxxx
	Contact Name	xxxxxxxxxxxxxx
	Telephone Number	xxxxxxxxxxxxx
	E-mail Address	xxxxxxxxxxxxxxxxxxxxxx

MAINTENANCE DETAILS:

Ref. No.	Start Date	Finish Date	Maintenance Activity (with details where appropriate)	Resulting gas flow capability at Facility (mscm/d)	Provisional or Confirmed

Schedule 7 - EXPERT DETERMINATION

1. Introduction

1.1. This Schedule 7 shall comprise the provisions of Section GTA1 of the Network Code which shall be adopted mutatis mutandis, subject to the amendments set out in paragraph 2 below.

2. Amendments to Section GTA1

2.1. Section GTA1.1.1 shall not apply.

2.2. Section GTA 1.1.2 shall be deleted and replaced with the following:

a) a “dispute” is any dispute or difference between NGN and / or the DFO and / or System User(s) in connection with this Agreement;
b) a “User” includes the DFO and / or System Users;
c) in respect of any dispute “parties” means NGN and the User or Users party to such dispute and “party” shall be construed accordingly;
d) a reference to “the Code”, the “Framework Agreement” or any “Ancillary Agreement” shall mean a reference to “this Agreement”;
e) the “Network Code Committee” shall for the purposes of this Schedule 7 be the same committee as that designated under the Network Code.

Schedule 8 - ACCESSION AGREEMENT

ACCESSION AGREEMENT

between

NORTHERN GAS NETWORKS LIMITED

And

[xxxxxxxx]

THIS AGREEMENT is made the [date] day of [date]

BETWEEN:

1. **Northern Gas Networks Limited**, (registered in England and Wales under number 05167070), whose registered office is at 1100 Century Way, Colton, Leeds, LS15 8TU ("**NGN**"); and

2. xxxxxxx, (registered in England and Wales under number xxxxxx), whose registered office is at xxxxxxxx(the "**Applicant**").

RECITALS:

(A) NGN is authorised pursuant to the Network Entry Agreement dated [enter date] in respect of the Howdon Site made between NGN and the other Party named therein as DFO and as now in force pursuant to Accession Agreements (if any) entered into by NGN and any replacement DFO before the date of this Agreement (the "NEA"), to enter into this Agreement.

(B) The Applicant has complied with the requirements set out in Clause 9 of the NEA and wishes to be admitted as DFO under the NEA.

IT IS HEREBY AGREED as follows:

1. In this Agreement words and expressions defined in the NEA and not otherwise defined herein shall have the meanings ascribed thereto under the NEA.

2. The Applicant has by prior written notice advised NGN, of the date on which it is to become the DFO and provided an address and telephone and facsimile for the purposes of service of notices under the NEA.

3. NGN hereby admits the Applicant as a Party under the NEA on the terms and conditions hereof as from the "**NEA Accession Date**", being the date on which the Applicant becomes the DFO.

4. The Applicant hereby accepts its admission as a Party to the NEA on the NEA Accession Date and undertakes with NGN to perform and to be bound by the NEA as a Party as from the NEA Accession Date.

5. For all purposes in connection with the NEA the Applicant shall as from the NEA Accession Date be treated as if it has been a signatory of the NEA in the capacity of the DFO, and as if this Agreement were part of the NEA, and the rights and obligations of the Parties shall be construed accordingly.

6. This Agreement and the NEA shall be read and construed as one document and any reference (in or pursuant to the NEA) to the NEA (howsoever expressed) should be read and construed as a reference to the NEA and this Agreement.

IN WITNESS of which the duly authorised representatives of the parties have executed this Agreement on the day and year first above written.

SIGNED for and on behalf of	**SIGNED** for and on behalf of
Northern Gas Networks Limited	**xxxxx**
Signed:	Signed: .....
Name:	..... Name : .....
Position:	Position: .....

Schedule 9 - THE DELIVERY FACILITY AND THE ENTRY FACILITY

1. The Delivery Facility

1.1. Equipment owned and operated by the DFO as shown in the diagram in Schedule 1

2. The Entry Facility

2.1. Equipment owned and operated by NGN as shown in the diagram in Schedule 1.