STORAGE CONNECTION AGREEMENT

BETWEEN

NATIONAL GAS TRANSMISSION PLC

AND

[ ]

# IN RELATION TO A STORAGE FACILITY AT

[ ]



National Gas Transmission plc National Grid House Warwick Technology Park Gallows Hill Warwick CV34 6DA

Storage Connection Agreement v2.0

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#### THIS AGREEMENT is made this

day of

#### BETWEEN:

(1) National Gas Transmission plc (registered no. 02006000) having its registered office at National Grid House, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA (hereinafter called "National Gas")

and

(2) [ ] (registered number [ ]) having its registered office at [ ] acting in its capacity as operator of the Storage Facility and not as System User (hereinafter called the "Storage Operator")

#### WHEREAS:

- (A) National Gas is the operator of a pipeline system in Great Britain and holds a licence as a gas transporter under the Gas Act, pursuant to which National Gas has prepared its Network Code (which incorporates the Uniform Network Code).
- (B) The Storage Operator is or will be the operator of the Storage Facility.
- (C) For the purposes of the Uniform Network Code, the points at which the Storage Facility is to be connected to the System will constitute a Connected System Exit Point and a System Entry Point in relation to which the Storage Operator will be respectively the Connected System Operator and the Delivery Facility Operator.
- (D) The Uniform Network Code contemplates that there will be a Storage Connection Agreement in relation to a Storage Facility.
- (E) This Agreement is the Storage Connection Agreement relating to the Storage Connection Point and shall constitute both the Network Entry Agreement and Network Exit Agreement in respect thereof for the purposes of Uniform Network Code.

#### IT IS HEREBY AGREED AS FOLLOWS:

#### 1. **DEFINITIONS**

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

"Affiliate" means, in relation to any company, any subsidiary, subsidiary undertaking or holding company of such company, and any subsidiary or subsidiary undertaking of any such holding company for the time being as such terms are defined in section 1159 of the Companies Act 2006.

"Agreement" means this Storage Connection Agreement including all annexes and schedules hereto;

"Authority" means the Gas and Electricity Markets Authority or any successor thereof;

"**Competent Authority**" means any local, national or supranational agency, authority, department, inspectorate, minister, official, court, tribunal or public or statutory person (whether autonomous or not) of the United Kingdom which has jurisdiction over National Gas or the Storage Operator or the subject matter of this Agreement (including without limitation the Authority);

"Connection Facilities" means the National Gas Connection Facilities and the Storage Connection Facilities;

"**CSEP**" means the Connected System Exit Point comprising physically the Individual System Exit Point(s) at which the Storage Facility is connected to the System as described in Annex A;

"CSEP Agent" has the meaning given to it in Annex B, Part A, paragraph 3;

"CSEP User" has the meaning given in the Uniform Network Code;

"**Directive**" means any present or future directive, request, requirement, instruction, code of practice, direction or rule of any Competent Authority having the force of law or which a party is otherwise required to comply with under the arrangements by which a party is regulated pursuant to the Gas Act and any modification, extension or replacement thereof;

"Effective Date" has the meaning given to it in Clause 2.2 of this Agreement;

"Expert" means a person appointed as an expert pursuant to Clause 13;

"Gas Act" means the Gas Act 1986, as amended from time to time;

"**National Gas Connection Facilities**" means the facilities installed and operated by National Gas at the Storage Connection Point as more particularly described in Annex A;

"National Gas Construction Agreement" means the agreement for Design and Construction of minimum connection facilities in respect of [ ] made between National Gas Transmission plc and [ ] dated [ ];

"**Network Code**" means the network code prepared by National Gas as from time to time modified pursuant to the National Gas Licence (and any reference to a modification of the network code is a reference to any modification made in accordance with the National Gas Licence) (and incorporates the Uniform Network Code); "**Operator**" means National Gas or the Storage Operator and "Operators" means National Gas and the Storage Operator;

"Reasonable and Prudent Operator" means 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;

"**SEP**" means the System Entry Point comprising physically the Individual System Entry Point(s) at which the Storage Facility is connected to the System as described in Annex A;

"**Storage Agreement**" means an agreement made between the Storage Operator and a Storage User for the storage (including injection or withdrawal) of gas in the Storage Facility;

"**Storage Connection Facilities**" means the facilities installed and operated by the Storage Operator at the Storage Connection Point as more particularly described in Annex A;

"Storage Connection Point" or "SCP" means the points (each being an Individual System Exit Point or an Individual System Entry Point or both) at which the System and the Storage Facility are connected as more particularly described in Annex A;

"Storage Facility" means the [ ] storage facility including the Storage Connection Facilities;

"**Storage Flow Notification**" or "**SFN**" means a notification from the Storage Operator to National Gas in the form attached marked Schedule A to Annex H and which shall be an Offtake Profile Notice for the purposes of Uniform Network Code;

"Storage Local Operating Procedures" means procedures established between the Operators in connection with the Connection Facilities and related parts of the System and the Storage Facility, initially as set out in Annex H and as revised in accordance with Clause 9.2;

"**Storage User**" means the Storage Operator and any person (whether or not being a System User, and including National Gas if such a person) with whom the Storage Operator may for the time being have arranged for the storage of gas in the Storage Facility;

"**System**" means the pipeline system operated by National Gas and includes, for the avoidance of doubt, the National Gas Connection Facilities;

"System Entry Capacity" has the meaning given in the Uniform Network Code;

"System User" means any person which is, pursuant to the Uniform Network Code, for the time being a CSEP User in respect of the CSEP and/or is for the time being registered as holding System Entry Capacity at the SEP;

**"Transportation Arrangement**" means an arrangement made by National Gas with any person for the transportation of gas in the System to or from the Storage Connection Point and a reference to a Transportation Arrangement shall include the Network Code and the Uniform Network Code;

"Uniform Network Code" means the uniform network code prepared by National Gas in conjunction with other gas transporters as from time to time modified pursuant to the terms thereof (and any reference to a modification of the uniform network code is a reference to any modification made in accordance with the terms thereof); and

"User" has the meaning given in the Uniform Network Code.

- 1.2 The provisions of Annex G as to the interpretation of technical expressions shall apply.
- 1.3 Words and expressions defined in the Uniform Network Code and not defined in this Agreement have the meanings ascribed to them under the Uniform Network Code.
- 1.4 References to Annexes and Clauses are references to annexes to and clauses of this Agreement, references to Paragraphs are (unless otherwise provided) references to paragraphs of the Annex in which the reference occurs and, unless otherwise provided, references to Sections are references to sections of the Uniform Network Code.
- 1.5 Unless otherwise provided, references to paragraphs are references to paragraphs of the Annex to this Agreement in which such reference is made.

# 2. CONDITIONS AND DURATION

- 2.1 This Agreement shall not come into effect until the following conditions are satisfied, and if any of such conditions is not satisfied by the date of this Agreement hereof either Operator may terminate this Agreement by giving notice to the other whereupon this Agreement and the rights and liabilities of each Operator shall cease and no Operator shall have a claim against the other (save in respect of any antecedent breach of this Agreement):
  - (a) the Substantial Completion (as defined in the National Gas Construction Agreement) of the National Gas Connection Facilities pursuant to the National Gas Construction Agreement;
  - (b) the Storage Operator has met its specific obligations pursuant to the National Gas Construction Agreement; and
  - (c) the installation and validation of the Measurement Equipment as more particularly described in Annex D.

- 2.2 This Agreement shall be effective from the date on which all of the conditions in Clause 2.1 are satisfied (the "Effective Date") and shall continue in force until and unless terminated by agreement of the Operators or as otherwise provided in this Agreement.
- 2.3 Upon the termination of this Agreement (unless a new Agreement is entered into in place of this Agreement); the Storage Facility ceasing operation (either as notified by the Storage Operator to National Gas or as otherwise reasonably determined by National Gas), a request from the Storage Operator for the Storage Facility to be disconnected from the NTS, the Storage Facility shall cease to be connected to the System and the Storage Operator shall be responsible for

(a) its cost for any required decommissioning, disassembly or removal of its Connection Facilities; and

(b) all reasonable costs incurred by National Gas in respect of the disconnection, decommissioning and disassembly or removal of National Gas's facilities which shall be determined in accordance with National Gas's relevant and then current charging methodology statement.

- 2.4 Upon the termination for any reason of this Agreement, National Gas will permit the continued connection of the Storage Facility to the System, for the purposes only of enabling gas remaining in the Storage Facility to be withdrawn and delivered to the System, for a period not exceeding fifteen (15) months, provided that the terms of this Agreement are complied with in respect of the delivery of such gas to the System.
- 2.5 National Gas will notify any termination of this Agreement to all System Users by notification on UK Link as soon as reasonably practicable after such termination save where the parties immediately enter into a further Storage Connection Agreement in respect of the Storage Facility.

# 3. GENERAL

- 3.1 Subject to the terms of this Agreement it is agreed that the Storage Operator shall be entitled to have the Storage Facility connected to the System at the Storage Connection Point.
- 3.2 Without prejudice to Network Code and the Uniform Network Code but subject to Clause 11 and paragraph 5 of Annex H and Clause 4.4, nothing in this Agreement shall:
  - (a) impose any obligation or confer any entitlement on National Gas or any User to inject gas to or withdraw gas from the Storage Facility or on the Storage Operator to deliver gas to or offtake gas from the System, or as to the rates, quantities, pressure and quality of gas so injected, withdrawn, delivered or offtaken; nor
  - (b) make any provision of any Transportation Arrangement or Storage Agreement binding as between National Gas and the Storage Operator nor is any provision of this Agreement deemed to amend or vary the Transportation Arrangement or Storage Agreement.

- 3.3 Without prejudice to any other agreement (including any Storage Agreement or Transportation Arrangement) between the Operators, this Agreement shall not require National Gas or the Storage Operator to reinforce any part of the System or (as the case may be) Storage Facility, or to take any other step with a view to its being feasible to accept the injection or delivery of gas into, or make gas available for offtake or withdrawal from, the System or (as the case may be) Storage Facility at the Storage Connection Point in any quantities or at any rate, nor to accept an application by any User for any particular System Capacity or capacity in the Storage Facility.
- 3.4 Without prejudice to any other agreement (including any Storage Agreement or Transportation Arrangement) between the Operators, and subject to Clause 4.4:
  - (a) National Gas shall not be liable to the Storage Operator in respect of any failure by System Users to comply with any provision of a Transportation Arrangement, nor for any failure of National Gas to make gas (at any rate or pressure or of any quality or in any quantity) available for offtake from or accept delivery of gas into the System;
  - (b) the Storage Operator shall not be liable to National Gas in respect of any failure by Storage Users to comply with any provision of a Storage Agreement, nor for any failure of the Storage Operator to make gas (at any rate or pressure or of any quality or in any quantity) available for withdrawal from or accept injection of gas into the Storage Facility.
- 3.5 Save as expressly provided otherwise in this Agreement, each Operator will perform its duties under this Agreement in accordance with the standard of a Reasonable and Prudent Operator.

# 4. ENTRY AND EXIT PROVISIONS

- 4.1 The provisions of Annex B are hereby given effect in relation to the CSEP.
- 4.2 The provisions of Annex C are hereby given effect in relation to the SEP. The provisions of Annex C are the Network Entry Provisions in respect of the SEP for the purposes of the Uniform Network Code.
- 4.3 The provisions of Annex D are hereby given effect for the purposes of the monitoring and measurement of the pressure, quantity and quality of gas flowing between the System and the Storage Facility at the Storage Connection Point.
- 4.4 The Storage Facility is not a Constrained Storage Facility and the provisions of Annex E shall not apply.
- 4.5 The provisions of Annex F are hereby given effect for the purposes of the commissioning of the Storage Facility.

- 4.6 Section E1.9 of the Transportation Principal Document that forms part of the Uniform Network Code shall apply in respect of the Storage Facility pursuant to Section R1.6 of the Transportation Principal Document that forms part of the Uniform Network Code.
- 4.7 Section J6.3.4 of the Transportation Principal Document that forms part of the Uniform Network Code provides that a System User may not apply for or hold System Capacity at or offtake gas at a Connected System Exit Point until and unless the System User has complied with such conditions as may be specified in the relevant Network Exit Agreement (and this Agreement is the Network Exit Agreement in respect of the CSEP).
- 4.8 Section R1.9 of the Transportation Principal Document that forms part of the Uniform Network Code provides that, as a condition of a System User applying for or holding System Entry Capacity or delivering gas to the System at a Storage Connection Point, the System User must comply with such conditions as may be specified in the relevant Storage Connection Agreement (and this Agreement is the relevant Storage Connection Agreement in respect of the SCP

### 5. CHANGE

- 5.1 No amendment or variation to this Agreement shall be effective unless in writing and signed by duly authorised representatives of the Operators. The Storage Operator acknowledges that pursuant to the Uniform Network Code, National Gas will not agree with the Storage Operator to amend any provision (other than the Storage Local Operating Procedures) of this Agreement which governs or otherwise is directly relevant to the arrangements between National Gas and System Users pursuant to the Uniform Network Code except (i) in the circumstances specified in Sections I2.2.2 and J4.3.6 of the Transportation Principal Document that forms part of the Uniform Network Code, or (ii) in order to comply with any Legal Requirement.
- 5.2 Where after the date of this Agreement there is any change in any Legal Requirement (or 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 or conveyed by the System, as a result of which any provision of this Agreement is not consistent with or does not enable either Operator to comply with applicable Legal Requirements, either Operator may require that the relevant provision of this Agreement shall be amended so as to be so consistent or enable such compliance; and where either Operator notifies the other of such a requirement, if the Operators have not agreed upon the appropriate amendment within a reasonable time after such notice, the matter shall be referred to an Expert. Each Operator shall use reasonable endeavours to ensure that this Agreement is modified in accordance with this Clause.
- 5.3 Where any modification of the Network Code or the Uniform Network Code is made as a result of which any provision of this Agreement is inconsistent with or does not enable National Gas to comply with the Network Code or the Uniform Network Code, as the case may be, National Gas may require that the relevant provision of this Agreement shall be amended so as to be so

consistent or enable such compliance; and where National Gas notifies the Storage Operator of such a requirement, if the Operators have not agreed upon the appropriate amendment within a reasonable time after such notice, the matter shall be referred to an Expert. Each Operator shall use reasonable endeavours to ensure that this Agreement is modified in accordance with this Clause.

5.4 It is acknowledged that this Agreement and its Annexes are based on the nature and configuration of the Connection Facilities and the Storage Facility as at the date of this Agreement. In the event that a material change thereto occurs or is expected to occur as a consequence of which it is reasonable for National Gas or the Storage Operator to seek to revise those terms which apply in relation to the SCP or the offtake of gas from, or delivery of gas to, the System at the SCP, National Gas and the Storage Operator agree (subject to Clause 5.1) to meet in good faith to agree appropriate amendments to the Agreement and/or the Annexes. Where the parties fail to agree such amendments the matter shall be referred to an Expert for determination in accordance with Clause 13.

### 6. CONNECTION FACILITIES

- 6.1 The Operators agree to consult and cooperate with a view to ensuring that the objective in Clause 6.2 is satisfied.
- 6.2 The objective is that, without prejudice to Clause 3.2(a) of this Agreement, in all material respects the National Gas Connection Facilities and the Storage Connection Facilities are and will be technically and operationally compatible, as facilities by which the System and the Storage Facility may safely be connected and operated.
- 6.3 The Storage Operator shall take all reasonable measures to prevent flow of non System gas from the Storage Facility into the System. The term "**non System gas**" shall mean any gas other than native gas (as defined in the Uniform Network Code) and gas which has been conveyed from the System to the Storage Facility.
- 6.4 Where, by reason of any modification, other than a modification to comply with a Legal Requirement, made or to be made by either Operator to its Connection Facilities, the objective in Clause 6.2 ceases or will cease to be satisfied, such Operator shall reimburse to the other any expenditure reasonably incurred by the other for the purpose of ensuring that the objective continues to be or is again satisfied.
- 6.5 Each Operator shall be entitled, upon reasonable notice to the other, to inspect the other's Connection Facilities (and to have access to the site thereof accordingly), for the purpose of determining whether the objective in Clause 6.2 and requirement of Clause 6.3 are satisfied.
- 6.6 Without prejudice to any other agreement between National Gas and the Storage Operator (including any Storage Agreement or Transportation Arrangement, or any agreement in respect

of the installation of the National Gas Connection Facilities or the Storage Connection Facilities), nothing in this Agreement shall impose any obligations upon or take effect as a warranty by National Gas in relation to the System or the Storage Operator in relation to the Storage Facility and neither Operator will be liable to the other in respect of any failure or malfunction thereof.

- 6.7 In the event that at any time either Operator becomes aware that the condition of that Operator's Connection Facilities becomes or is likely to become such that the objective in Clause 6.2 or the requirement of Clause 6.3 ceases or will cease to be satisfied then that Operator shall as soon as practical notify the other Operator in writing.
- 6.8 Without prejudice to any other right either Operator may have to disconnect the Storage Facility from the System, in the event that either Operator receives a notice from the other Operator pursuant to Clause 6.7 or otherwise discovers that the objective in Clause 6.2 or the requirement of Clause 6.3 has ceased to be satisfied then that Operator may disconnect the Storage Facility from the System.
- 6.9 Subject to the provisions of any other agreement between the Operators, where pursuant to this Agreement either Operator (the "first Operator") is required or entitled to have any measurement or other equipment installed on land or buildings or plant which the other owns or operates, the first Operator shall retain ownership of such equipment (unless it has become a part of land owned or occupied by the other) and shall have such reasonable access and other rights (without undue disturbance of the other) as are required to maintain, repair, replace, inspect, operate or cease operation of such equipment, provided that the first Operator shall comply with such reasonable safety and site procedures as may be imposed by the other Operator.

# 7. LIABILITY AND INSURANCE

- 7.1 Save as provided in Clauses 2.3, 6.2 or 6.4, each Operator hereby agrees that it shall have no liability to the other Operator nor any recourse against the other Operator, whether in contract, in tort (including negligence), breach of duty (statutory or otherwise) or otherwise arising of or in connection with subject matter of this Agreement.
- 7.2 Neither Operator shall be liable to the other in respect of any loss of profit, revenue, use, contract or goodwill or any increased cost of working of either Operator arising out of or in connection with this Agreement from any cause whatsoever (whether or not foreseeable at the date of this Agreement) including but not limited to the negligence or breach of duty (statutory, contractual or otherwise) of either Operator or by any other tortious act or omission or breach of this Agreement by either Operator.

# 8. INFORMATION AND CONFIDENTIALITY

8.1 Subject to Clause 8.2 the Storage Operator may disclose the terms of this Agreement to System Users and Storage Users (or persons intending to become System Users or Storage Users), and

to any Competent Authority. National Gas may disclose the existence (but not the terms) of this Agreement (other than the terms of the generic Storage Connection Agreement produced by National Gas from time to time) to System Users (or persons intending to become System Users) and the terms of this Agreement to any Competent Authority.

- 8.2 The Storage Operator and National Gas may disclose to any Storage User and any System User respectively, and to any agent of any such Storage User or System User, and to the Authority, any of the following information obtained from the other pursuant to this Agreement:
  - the terms of the generic Storage Connection Agreement produced from time to time by National Gas;
  - (b) information needed for reconciliation purposes produced by any reports produced pursuant to Annex D.
- 8.3 Subject to Clauses 8.2, 8.4, 8.5 and 12.4, each Operator (the "**recipient Operator**") shall keep confidential and shall not disclose or use any information ("**confidential information**") relating to the affairs of the other which it obtains pursuant to this Agreement, other than information which is in the public domain or which it also obtains (other than under a duty of confidence) other than pursuant to this Agreement and save to the extent to which it is required to disclose such information by any Legal Requirement.
- 8.4 Confidential information:
  - (a) may be used by the recipient Operator for purposes contemplated in this Agreement, or for the purposes of performing any Transportation Arrangement or Storage Agreement, or for the purposes of the operation of the System or the Storage Facility, or for any purposes reasonably ancillary to any of those purposes;
  - (b) may be disclosed to
    - (i) officers or employees of the recipient Operator whose province it is to know the same, or
    - (ii) professional advisers or consultants to the recipient Operator, or
    - (iii) an Expert appointed pursuant to Clause 13, to the extent necessary for the Expert to determine the dispute in question

provided that such persons shall first agree to be bound by obligations of confidentiality no less onerous than those set out in this Agreement.

- 8.5 Each Operator shall jointly own all data obtained from measurement or monitoring equipment referred to in Annex A and may freely disclose such information to the other Operator; and in relation to such data as is (in accordance with Annex D) provided to the other Operator, the other Operator shall be entitled to disclose such data in accordance with Clause 8.2, and to use such data in connection with the operation of the System and UK Link or (as the case may be) the Storage Facility, and for the purposes contemplated by this Agreement.
- 8.6 This Clause 8 is without prejudice to the provisions of any Transportation Arrangement as to confidentiality as between National Gas and System Users or any Storage Agreement as to confidentiality as between the Storage Operator and Storage Users.

### 9. LOCAL OPERATING PROCEDURES

- 9.1 The Operators agree that, with effect from the Effective Date, the Storage Local Operating Procedures shall apply between the Operators. The Operators shall keep under review, and (as may be appropriate for reasons of safety or prudent operation) from time to time revise, the prevailing Storage Local Operating Procedures, provided that no revision shall be effective unless signed by duly authorised representatives on behalf of each Operator.
- 9.2 Each Operator shall provide information to the other in accordance with, and otherwise comply with, the Storage Local Operating Procedures.

### 10. MAINTENANCE

- 10.1 Without prejudice to Clause 8.5, the Operators agree to exchange information as to, and to take reasonable steps to co-ordinate, their respective plans for maintenance of their respective Connection Facilities and adjacent parts of the Storage Facility or System.
- 10.2 Where the operation of any pipeline inspection or maintenance equipment in the System or the Storage Facility requires a specific rate of offtake or delivery of gas from or to the System or injection or withdrawal to or from the Storage Facility at the Storage Connection Point for any period, each Operator agrees to co-operate reasonably with the other (and with each Storage User and/or System User as appropriate) with a view to ensuring that such rate of offtake is maintained for such period.
- 10.3 Without prejudice to Clause 10.1, each of National Gas and the Storage Operator will endeavour to give to the other as much notice as is reasonably practicable of the times, and of any change in the times, at which it intends to carry out planned maintenance of any part of the System or as the case may be the Storage Facility where such maintenance is likely to affect gas flows or pressures at the Storage Connection Point.
- 10.4 For the purpose of Section J 4.3.1 (f) of the Transportation Principal Document that forms part of the Uniform Network Code the number of Days of permitted Programmed Maintenance shall be

eight (8) days in any one Planned Maintenance Period and twenty (20) days in any three consecutive Planned Maintenance Periods.

10.5 Section L4.4.1 of the Transportation Principal Document that forms part of the Uniform Network Code provides that a Network Entry Agreement or Network Exit Provisions may provide for the rates of delivery or offtake at a particular System Entry Point or NTS Exit Point to be controlled so as to ensure fixed rates of gas flow in any part of the Total System for a period where required for certain pipeline inspection activities and the provisions of Section L4.4 shall therefore apply in relation to this CSEP and SEP.

# 11. EMERGENCIES

- 11.1 The Storage Operator and National Gas agree to co-operate so far as is necessary to ensure safety in the event of any emergency circumstances affecting the other. The Operators will agree detailed emergency procedures for giving effect to this clause.
- 11.2 In the event of a Gas Supply Emergency and in the event of a Gas Supply Emergency being declared, the Storage Operator will co-operate with the NEC and will comply with the Emergency Procedures and any instructions issued by the NEC (including but not limited to any instructions to deliver, or cease delivering, gas to the System or to withdraw, and/or cease withdrawing, gas from the System).
- 11.3 The Storage Operator will comply with any instruction from National Gas to deliver gas from the Storage Facility to the System in a Network Gas Supply Emergency in accordance with Section Q 3.3 of the Transportation Principal Document that forms part of the Uniform Network Code.
- 11.4 For the avoidance of doubt the Operators agree that the provisions of this Clause 11 shall constitute "appropriate arrangements" for the purposes of Section Q 3.3 of the Transportation Principal Document that forms part of the Uniform Network Code.
- 11.5 The Storage Operator shall be at all times contactable via telephone and email on the details provided in Schedule C to Annex H and shall be responsible for providing emergency service via the Storage Connection facilities in accordance with statutory requirements and relevant Institution of Gas Engineering and Management recommendations for the time being enforced.

National Gas shall at all times be contactable in the event of an emergency via the Shift Representative at the contact details provided in Schedule C to Annex H.

# 12. INFORMATION REQUIREMENTS

12.1 For the purposes of enabling National Gas to discharge its safety obligations in respect of the System the Storage Operator undertakes to provide to National Gas the information set out in Annex I where the Storage Facility has a total storage deliverability of more than 10 GWh/day, subject to Clause 8. For the purposes of enabling the Storage Operator to discharge its safety obligations in respect of the Storage Facility National Gas agrees to provide to the Storage Operator such information in respect of the SCP as the Storage Operator reasonably requires subject to Clause 8 provided that National Gas shall not be required to provide more information than National Gas would be obliged to provide in order to comply with the Storage Operator's statutory safety obligations.

- 12.2 The Storage Operator undertakes to provide to National Gas all such information as National Gas may from time to time reasonably require in order for National Gas to carry out System Planning and to assess its Operating Margins Requirements, its requirements pursuant to Section Q of the Transportation Principal Document that forms part of the Uniform Network Code, and its Constrained Storage Requirements (together with any other associated or related matters). National Gas will normally request such information through an annual consultation process (known as Transporting Britain's Energy (TBE)) by means of a questionnaire for Storage Operators.
- 12.3 For the purposes of improving security of supply, the Storage Operator undertakes to provide to National Gas, on such frequency as National Gas may from time to time reasonably require, the quantity of gas at the relevant time physically in the Storage Facility that can be withdrawn from the Storage Facility in the course of normal operations and irrespective of the time taken to withdraw that gas (the "Stock Levels").
- 12.4 National Gas may, to the extent necessary to comply with its obligations in the Transportation Principal Document that forms part of the Uniform Network Code, publish the Stock Levels for the Storage Facility on a regular basis. National Gas shall be entitled to publish such information as follows:
  - (a) as an individual figure in respect of the Storage Facility
  - (b) as part of an aggregate figure for facilities of the same Storage Facility Type.
  - (c) as part of an aggregate figure of all Storage Facility Types

The Storage Operator consents to the disclosure of the Stock Levels for the Storage Facility as set out above.

#### 13. EXPERT DETERMINATION

- 13.1 Wherever this Agreement provides or the Operators have agreed that any matter is to be referred to an Expert for determination, the provisions of this Clause 13 shall apply.
- 13.2 An Operator seeking the referral of such matter to an Expert shall give notice to the other Operator that it wishes an Expert to be appointed and with such notice shall give:

- (a) details of the matter which it proposes shall be resolved by the Expert; and
- (b) the proposed terms of reference.
- 13.3 If within twenty-one (21) days from the service of the said notice the Operators have failed to agree upon the identity of the Expert and/or the terms of reference then the matter may be referred by either Operator to the President for the time being of the Law Society of England and Wales who shall be requested to select the Expert in accordance with this Clause and if willing to do so settle the terms of reference of such Expert within thirty (30) days.
- 13.4 Upon an Expert being agreed or selected under the foregoing provisions of this Clause either Operator shall forthwith notify such Expert of his selection and of any proposed terms of his appointment and shall request him within fourteen (14) days to confirm to the Operators whether or not he is willing and able to accept the appointment on the terms proposed.
- 13.5 If the Expert shall be either unwilling or unable to accept the appointment or shall not have confirmed his willingness and ability to accept such appointment within such period then (unless the Operators are able to agree on the appointment of another Expert) the matter may be referred by either Operator to the President for the time being of the Law Society of England and Wales who shall be requested to make a further selection and the process shall be repeated until an Expert is found who accepts the appointment in accordance with the proposed terms.
- 13.6 No person shall be appointed to act as the Expert under this Agreement:
  - (a) who at the time of his appointment is a director, office holder, or employee of or is directly or indirectly retained as a consultant to either of the Operators or an Affiliate of any of them, or otherwise has any conflict of interest; or
  - (b) who at the time of his appointment does not have the relevant experience and/or training to determine the matter in dispute in accordance with the terms of reference.
- 13.7 The Expert shall be deemed not to be an arbitrator but shall render his determination as an expert and the provisions of the Arbitration Act 1996 (as amended from time to time) and the law relating to arbitration shall not apply to such Expert or his determination or the procedure by which he reaches his determination.
- 13.8 The determination of the Expert shall be final and binding upon the Operators save in the event of fraud or manifest error.
- 13.9 Each of the Operators shall bear its own costs of providing all data information and submissions given by it and the costs and expenses of all the counsel witnesses and employees retained by it but the costs and expenses of the Expert and any independent advisors to the Expert and any costs of his appointment shall be borne equally by the Operators.

13.10 Any and all communications between either Operator and the Expert shall be made in writing and a copy thereof provided simultaneously to the other and no meeting between the Expert and either Operator shall take place unless both Operators have a reasonable opportunity to attend any such meeting.

### 14. INVOICING AND PAYMENT

- 14.1 Where pursuant to this Agreement either Operator is required to make any payment to the other (the "**payee**") the provisions of this Clause 14 shall apply.
- 14.2 As soon as practicable after the end of each month the payee shall prepare and send to the other Operator an invoice for the total amount (rounded to the nearest penny) payable hereunder (including any applicable VAT) in respect of such month together with any supporting data and information required (under the relevant provision hereof) to be given.
- 14.3 On the latter of the twentieth day of the month following that to which the invoice relates or the tenth Business Day after submission of the invoice, the paying Operator shall pay such invoice in immediately available funds to such account as the payee may direct.
- 14.4 Where any sum is disputed the paying Operator shall pay the undisputed portion thereof in accordance with Clause 14.3 and the Operators shall seek to resolve the dispute but if such dispute is not resolved within thirty (30) days after the receipt of such invoice either Operator may refer the matter for determination by an Expert pursuant to Clause 13.
- 14.5 Where any amount payable hereunder is not paid by the due date in accordance with Clause 14.3, the paying Operator shall pay interest on the overdue amount from the date such amount was due to the date it is eventually paid at an annual rate equal to Barclays Bank plc base rate plus 3 percentage points per annum, or if payment of any part of the overdue amount was withheld pursuant to Clause 14.4 by reason of a bona fide dispute, Barclays Bank plc base rate plus 1 percentage point per annum on such part and Barclays Bank plc base rate plus 3 percentage point per annum on such part and Barclays Bank plc base rate plus 3 percentage points per annum on the balance.
- 14.6 If the paying Operator defaults in paying any amount payable hereunder (other than an amount subject to a bona fide dispute) for a period of thirty (30) days or more after the due date, the payee may without prejudice to any other rights or remedies suspend the performance of its obligations hereunder or terminate this Agreement, and such termination shall be without prejudice to the rights and obligations of the Operators which have accrued at the date of such termination.
- 14.7 Unless expressly otherwise stated, amounts provided to be payable by either Operator hereunder are stated exclusive of any applicable VAT, and such VAT shall be payable in addition to the amount stated.

#### 15. FORCE MAJEURE

- 15.1 For the avoidance of doubt, the provisions of this Agreement shall be without prejudice to any question as to whether National Gas or the Storage Operator is entitled, as a result of circumstances constituting 'force majeure' for the purposes of Transportation Arrangements or (as the case may be) Storage Agreements, to any relief in respect of its obligations (or liability in respect of its obligations) pursuant thereto.
- 15.2 In this Agreement, subject to Clause 15.3, "Force Majeure" means any event or circumstance, or any combination of events and/or circumstances, the occurrence of which is beyond the reasonable control of, and could not have been avoided by steps which might reasonably have been expected to have been taken by, an Operator (the "Affected Operator") and which causes or results in the failure of the Affected Operator to perform, or its delay in performing, any of its obligations owed to the other Operator under this Agreement including but not limited to:
  - (a) war declared or undeclared, threat of war, act of public enemy, terrorist act, blockade, revolution, riot, insurrection, civil commotion, public demonstration, sabotage, act of vandalism;
  - (b) act of God;
  - (c) strike, lockout or other industrial disturbance;
  - (d) explosion, fault or failure of plant, equipment or other installation which the Affected Operator could not prevent or overcome acting as a Reasonable and Prudent Operator;
  - (e) governmental restraint or the coming into force of any Legal Requirement.
- 15.3 Inability (however caused) of an Operator to pay any amount due under this Agreement shall not be Force Majeure.
- 15.4 The act or omission of any agent or contractor of a Party shall not be Force Majeure unless such act or omission is caused by or results from events and/or circumstances which would be Force Majeure within the meaning of Clause 15.2 if such person were the Affected Operator.
- 15.5 Subject to Clause 15.6, the Affected Operator shall be relieved from liability for any delay or failure in the performance of any obligation under this Agreement which is caused by or results from Force Majeure.
- 15.6 The Affected Operator shall be relieved from liability under Clause 15.5 only for so long as and to the extent that the occurrence of Force Majeure and/or the effects of such occurrence could not be overcome by measures which the Affected Operator might reasonably be expected to take with a view to resuming performance of its obligations.

#### 16. ASSIGNMENT

- 16.1 Either Operator may assign its rights and obligations under this Agreement with the written consent of the other Operator (which shall not unreasonably be withheld) to any other person (and in the case of National Gas only to a person holding a gas transporter licence in respect of the Storage Connection Point), provided that the assignee shall enter into an Agreement with the other Operator covenanting to be bound by the obligations of the assigning Operator under this Agreement as if the assignee had originally been named in this Agreement in place of the assigning Operator, whereupon the assigning Operator shall be released from all further obligations under this Agreement but without prejudice to the rights and liabilities of the Operators accrued prior to such date.
- 16.2 Either Operator may subcontract its obligations under this Agreement, provided that the Storage Operator shall remain responsible for the operation of the Storage Facility and the Storage Connection Facilities and National Gas shall remain responsible for the operation of the System and the National Gas Connection Facilities whether or not in either case the Operator utilises the services of an operation and maintenance contractor.

#### 17. NOTICES

- 17.1 Where any notice or other communication (other than a communication given in accordance with a procedure set out in the Storage Local Operating Procedures) is to be given or made by either Operator to the other under this Agreement:
  - (a) such communication shall be in writing and may be delivered to the recipient or sent by first class prepaid letter or email to the address or number of the recipient specified in Clause 17.2 or such other address or number as may be notified hereunder by that Operator from time to time for this purpose;
- 17.2 such communication shall be deemed to have been given or made and delivered, if by letter, on the second day after posting, if by delivery, when left at the relevant address, and if by email at the time of sending if sent by email (except that if (i) the email is sent outside of 9am to 5pm or on a non-Business Day it shall be deemed to have been received by the address at 9am on the next Business Day, or (ii) an automatic notification is received by the sender sending the email informing the sender that the email has not been delivered to the recipient or that the recipient is out of the office that email will be deemed not to have been served).For the purposes of Clause 17.1:
  - (a) the postal and email addresses of National Gas are:

National Gas Transmission plc National Grid House Warwick Technology Park

Gallows Hill	
Warwick	
CV34 6DA	
Email address:	
For the attention of:	Gas Customer Manager, Gas Transmission

(b) the postal and email addresses of the Storage Operator:

Email address:	[]
For the attention of:	[]

17.3 In the event of an emergency, the provisions regarding contact details in Clause 11.5 shall override the provisions of Clause 17.1.

### 18. MISCELLANEOUS

- 18.1 Nothing in this Agreement shall create or be deemed to create a partnership or the relationship of principal and agent between the Operators.
- 18.2 No failure or delay in either Operator in exercising any of its rights under this Agreement shall be deemed to be a waiver thereof and no waiver of a breach of any provision of this Agreement shall be deemed to be a waiver of any subsequent breach of the same or any other provision.

#### 19. THIRD PARTIES

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

### 20. ENTIRE AGREEMENT

This Agreement represents the entire agreement of the Operators relating to the subject matter of this Agreement and each of the Operators agrees that save in respect of statements made fraudulently it shall have no claim in respect of any untrue statement upon which it relied when entering this Agreement and that its only claim shall be for breach of contract.

### 21. SEVERABILITY

If any provision of this Agreement is held by any court or other Competent Authority to be invalid or unenforceable in whole or in part, this Agreement shall continue to be valid as to its other provisions and the remainder of the affected provision.

## 22. GOVERNING LAW

- 22.1 This Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of England and Wales.
- 22.2 The parties irrevocably agree that, save in respect of decisions to be made by the Expert, the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim that arises out of or in connection with this agreement or its subject matter or formation (including non-contractual disputes or claims).

**IN WITNESS** whereof the duly authorised representatives of the Operators have executed this Agreement the day and year first above written.

Signed for and on behalf of:	Signed for and on behalf of:
National Gas Transmission plc	[]
Signature:	Signature:
Name:	Name:
Position:	Position:

# **Annex A - CONNECTION FACILITIES**

National Gas Facilities

[To include line diagrams showing points of connection; description of each Operator's offtake and delivery facilities; measurement and metering facilities, calorimeter and non-return valves etc]

### Annex B - NETWORK EXIT PROVISIONS

### Part A - GENERAL AND INTERPRETATION

#### 1. Scope

1.1 This Annex B sets out provisions applying in respect of the offtake of gas from the System at the CSEP for delivery to the Storage Facility.

#### 2. Interpretation

2.1 Unless expressly otherwise provided, references in this Agreement to rates of offtake of gas are to the instantaneous rate of such offtake from the System, and a reference to rate of offtake is to such rate of offtake, in aggregate by all System Users, from the System at the CSEP. Reference to a flow of gas is to an offtake of gas.

#### 3. CSEP Agent

3.1 For the purposes of Section J6.5.2, it is a requirement that, at any time at which there is more than one System User, the System Users appoint a person to act as User Agent ("CSEP Agent").

### 4. Application of Section J4

- 4.1 The provisions of Sections J5.3, J4.4, J4.5, J4.6, J4.7, and J5.7 shall apply in respect of the CSEP on the basis that references to:
  - (a) a Supply Point Network Exit Agreement or Network Exit Agreement;
  - (b) a Supply Meter Point (including a NExA Supply Meter Point or NTS Supply Meter Point);
  - (c) the consumer;
  - (d) the Permitted Supply Point Offtake Rate; and
  - (e) the Registered User or Sharing Registered Users

shall be construed respectively as references to:

- (a) this Agreement;
- (b) the CSEP;
- (c) the Storage Operator;

- (d) the Maximum CSEP Offtake Rate determined in accordance with paragraph 2.1 of Part B of this Annex B; and
- (e) the System User(s).

### 5. Certain Network Exit Provisions

5.1 For the purposes of Section J1.4.2, the CSEP comprises the following Individual Systems Exit Point(s):

[] Storage Facility

as such are marked on the drawing contained in Annex A.

- 5.2 For the purposes of Sections J4.3.3(a) and (c):
  - the provisions of Annex D as to the measurement of flow, determination of volume and determination of calorific value of gas offtaken at the CSEP shall apply;
  - (b) Annex D specifies the measurement equipment which is (and is required to be) installed, operated and maintained by the Storage Operator at the CSEP.
- 5.3 The CSEP is a relevant Connected System Exit Point or an eligible Connected System Exit Point for the purposes of the following Sections:
  - Section C 4.1.7 (b) but without prejudice to any provision of paragraph 2.1 of Part B of this Annex B;
  - (b) Section C 4.1.10 (b) but without prejudice to any provision of paragraph 2.1 of Part B of this Annex B;
  - (c) Section C 4.1.11 (b);
  - (d) Section D2.2.1(f)(3);
  - (e) Section E 6.1.3;
  - (f) Section E 6.1.4 (c);
  - (g) Section F 3.3.1 (a) (ii);
  - (h) Section F 3.3.2 (a) (ii);
  - (i) Section F 3.3.2 (d) (ii); and

- Sections J3.9.1 and J3.9.3. For the purposes of these Sections, the maximum aggregate rate referred to in those sections is the maximum instantaneous offtake rate specified in paragraph 2.1 of Part B of this Annex B;
- 5.4 The CSEP is a Metered Connected System Exit Point as defined in Section A 3.3.4.
- 5.5 The CSEP is a relevant Metered Connected System Exit Point for the purposes of Section E 1.3.4 (b).

## 6. Offtake Profile Notice

6.1 The Offtake Profile Notice shall be combined with the Storage Flow Notification to form a single notice.

## Part B - FLOW PROFILES, RATE CHANGES, ETC

#### 1. Pressure

- 1.1 For the purposes of Section J2.1.4 the Applicable Offtake Pressure is twenty-five (25) bar gauge.
- 1.2 For the purposes of Section J4.3.1(e), at the date of this Agreement, the anticipated normal offtake pressure for the CSEP is forty-five (45) bar gauge and National Gas will notify the Storage Operator of any reductions thereto at the same time it so notifies the System Users in accordance with Section J2.2.2. For the avoidance of doubt the provision of such information shall not imply any liability to the Storage Operator in respect of the same.
- 1.3 The point at which the pressure of gas made available for offtake from the System is measured is the point of offtake.
- 1.4 The Storage Operator, if it reasonably considers that the information provided in accordance with paragraph 1.2 is inaccurate or incorrect, may request that the matter be referred for determination by an Expert in accordance with Clause 13.
- 1.5 Pursuant to the Pressure Systems Safety Regulations 2000, National Gas will notify the Storage Operator of the Safe Operating Limits in respect of the System at the SCP and any changes thereto.

#### 2. Offtake Rate Changes and Ramp Rates

- 2.1 The maximum instantaneous offtake rate at the CSEP shall not exceed forty five (45) MSCM/day.
- 2.2 All communications (including the giving and modification of the Offtake Profile Notice pursuant to Section J4.5):
  - to be given to National Gas shall be given by the Storage Operator or the CSEP Agent only; and
  - (b) to be given by National Gas shall be given to the Storage Operator or the CSEP Agent only.
- 2.3 For the purposes of Section J4.5.1, the time at which the Offtake Profile Notice for each Gas Day is to be given to National Gas (where required) is 17:00 hours on the Preceding Day.
- 2.4 For the purposes of Section J4.5.4, the period of notice to be given to National Gas of any change in the rate of offtake shall be as follows:

- (a) for an increase in offtake, or (subject to paragraph 2.5) a relevant cumulative increase in offtake, which exceeds fifty percent (50%) of the maximum instantaneous offtake rate as set out in paragraph 2.1, not less than four (4) hours;
- (b) for an increase in offtake, or (subject to paragraph 2.5) a relevant cumulative increase in offtake, which exceeds twenty-five percent (25%) of the maximum instantaneous offtake rate as set out in paragraph 2.1 but does not exceed fifty percent (50%) of the maximum instantaneous offtake rate as set out in paragraph 2.1, not less than two (2) hours;
- (c) for an increase in offtake, or (subject to paragraph 2.5) a relevant cumulative increase in offtake, which does not exceed twenty-five percent (25%) of the maximum instantaneous offtake rate as set out in paragraph 2.1, not less than one (1) hour;
- (d) for a decrease in offtake, not less than one (1) hour.
- 2.5 For the purposes of this paragraph 2 a relevant cumulative increase is the aggregate increase in rate of offtake under any two or more connected changes of the rate of flow, for the purposes of which two changes are connected where notice of the second-notified change is required (in accordance with paragraph 2.4) to be given before the first-notified change has occurred.
- 2.6 The tolerance within which the rate of offtake may deviate from the Prevailing Offtake Rate without the requirement for notice under paragraph 2.4 is plus or minus three percent (+/- 3%) of the Prevailing Offtake Rate.
- 2.7 For the purposes of Section J4.7:
  - (a) except as provided in paragraph (b), the rate of increase of the rate of offtake shall not exceed five hundred (500) MW/minute. If so requested National Gas shall use its reasonable endeavours, where appropriate, to permit a greater rate of increase of the rate of offtake provided that the System can safely accommodate such greater rate with no additional cost to National Gas or System Users;
  - (b) the rate of offtake during the first two (2) minutes of any increased rate of offtake (being from either zero or the Prevailing Offtake Rate) shall not exceed one thousand (1,000) MW during such two (2) minute period. If so requested National Gas shall use its reasonable endeavours, where appropriate, to permit a greater rate of increase of the rate of offtake provided that the System can safely accommodate such greater rate with no additional cost to National Gas or System Users;
  - (c) the rate of decrease of the rate of offtake shall not exceed five hundred (500) MW/minute.
- 2.8 For the purposes of Section J5.7, in the event of a failure of either Operator's Facilities such that the Storage Operator cannot maintain the Prevailing Offtake Rate:

- (a) the requirements under paragraphs 2.4(d) and 2.7(c) do not apply:
- (b) notice under paragraph 2.4 is not required in respect of any increase in the rate of offtake which is completed within a period of sixty (60) minutes after, and results in a rate of offtake not exceeding the Prevailing Offtake Rate immediately before, the occurrence of such event.

### 3. Offtake Flow Rate

- 3.1 In the event that the flow rate of gas offtaken from the System required to achieve the Storage Operator's Expected End of Day Quantity is less than 46,125,000 kWh/day then the Storage Operator will notify National Gas as soon as reasonably practical and the Operators will cooperate in defining mutually acceptable flow rates. Any SFN issued by the Storage Operator relating to such Gas Day will define the flow profile accordingly. The conversion from gas volumes to energy quantity in paragraphs 2.1 and 3.1of Part B of this Annex B is based on an assumed gross calorific value of thirty-six decimal nine (36.9) MJ/m3.
- 3.2 The Prevailing Offtake Rate is that flow which will offtake the Expected End of Day Quantity at a constant rate over the 24 hour period or, following a revised SFN, the remainder of the Day to 0600 hours. The rate of flow of gas offtaken from the System will be equal to the Prevailing Offtake Rate except where paragraph 3.1 applies or where the flow rate is changing to a revised Prevailing Offtake Rate or where otherwise agreed with National Gas.

#### 4. MAINTENANCE

- 4.1 For the purposes of determining the period referred to in Section J4.4.5(b)(ii), where National Gas has been notified of a requirement for maintenance of or failure or defect in the National Gas Connection Facilities:
  - (a) National Gas will:
    - arrange for a competent person to attend, as soon as reasonably practicable and within six (6) hours after such notification, at the CSEP site for the purposes of assessing the maintenance, repair or replacement works required; and
    - (ii) unless such works can be carried out by a competent person upon such visit, prepare and submit to the Storage Operator and System User(s) a programme for the carrying out of the works with all reasonable diligence; and
  - (b) where the competent person carries out such works upon such visit, the period referred to in that Section shall be deemed to expire when such works are

completed, and National Gas will keep the Storage Operator and System User(s) informed of the expected time of completion of such works; and

(c) except as provided in paragraph (b), the period referred to in that Section will be the period expiring at the end of the period provided for in the programme provided under paragraph (a)(ii), with any reasonable extensions necessitated by any failure of the Storage Operator to provide reasonable access and co-operation to National Gas in the carrying out of the required works.

### Annex C - GAS ENTRY & QUALITY PROVISIONS

### Part A - GENERAL

#### 1. Scope and Interpretation

- 1.1 This Annex C sets out provisions applying in respect of the SEP and the delivery of gas to the System.
- 1.2 Unless expressly otherwise provided, references in this Agreement to rates of input of gas are to the instantaneous rate of such input to the System, and a reference to rate of input is to such rate of input, in aggregate by all System Users, to the System at the SEP. Reference to a flow of gas is to an input of gas.

### 2. Network Entry Provisions

- 2.1 For the purposes of the Code, the Network Entry Provisions applicable in respect of the SEP shall be as set out in this paragraph 2.
- 2.2 The Storage Facility is the Connected Delivery Facility in respect of the SEP, and the Storage Operator is the Delivery Facility Operator in respect of that Connected Delivery Facility.
- 2.3 The Individual System Entry Point comprised in the SEP is as shown in the drawing contained in Annex A.

The point of delivery at each Individual System Entry Point comprised in the SEP is identified on the drawing contained in Annex A.

- 2.4 The Gas Entry Conditions are as specified in Part B of this Annex C.
- 2.5 The Measurement Provisions are as specified in Annex D.
- 2.6 Local Operating Procedures for the SEP are included in the Storage Local Operating Procedures.
- 2.7 Any other provision of this Agreement, insofar as (i) relating to the delivery of gas to the System at the SEP, and (ii) falling within the permitted scope of Network Entry Provisions pursuant to Section I2.3.3, shall form part of the Network Entry Provisions.

#### 3. Input Rate

- 3.1 The maximum instantaneous rate of input at the SEP shall not exceed forty five (45) MSCM/day.
- 3.2 All communications (including the giving and modification of the Storage Flow Notification):

- to be given to National Gas shall be given by the Storage Operator or the CSEP Agent only; and
- (b) to be given by National Gas shall be given to the Storage Operator or the CSEP Agent only.
- 3.3 The time at which the Storage Flow Notification for each Gas Day is to be given to National Gas (where required) is 17:00 hours on the Preceding Day.

# 4. Input Flow Rate

- 4.1 In the event that the flow rate of gas delivered to the System required to achieve the Storage Operator's Expected End of Day Quantity is less than 46,125,000 kWh/day then the Storage Operator will notify National Gas as soon as reasonably practical and the Operators will cooperate in defining mutually acceptable flow rates. Any SFN issued by the Storage Operator relating to such Gas Day will define the flow profile accordingly. The conversion from gas volumes to energy quantity in paragraphs 3.1 and 4.1 of Part A of this Annex C is based on an assumed gross calorific value of thirty-six decimal nine (36.9) MJ/m3.
- 4.2 The Prevailing Input Rate is that flow which will input the Expected End of Day Quantity at a constant rate over the 24 hour period or, following a revised SFN, the remainder of the Day to 0600 hours. The rate of flow of gas input to the System will be equal to the Prevailing Input Rate except where paragraph 4.1 applies or where the flow rate is changing to a revised Prevailing Input Rate or where otherwise agreed with National Gas.

# Part B - GAS ENTRY CONDITIONS

- 1.1 These Gas Entry Conditions apply at the SEP.
- 1.2 Gas delivered to the System from the Storage Facility 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 from the Storage Facility shall be in accordance with the following values:

[Note: Parameter values should be based upon the current National Gas Ten Year Statement except where circumstances require or permit site specific values or as stated below.]

- (a) Hydrogen Sulphide not more than 5 mg/m<sup>3</sup> (including COS)
- (b) Total Sulphur not more than 50 mg/m<sup>3</sup>
- (c) Hydrogen Content not more than 0.1 mole%

(d)	Oxygen Content	not more than 0.001 mole%
(e)	Hydrocarbon Dewpoint	not more than -2°C at any pressure up to the delivery pressure provided in paragraph (n)
(f)	Water Content/Dewpoint	not more than 50 mg/m <sup>3</sup> nor such as would cause a water dewpoint more than minus ten degrees Celsius (-10°C) at the delivery pressure provided in paragraph (n)
(g)	Wobbe Number	shall be in the range 47.20 MJ/m <sup>3</sup> to 51.41 MJ/m <sup>3</sup>
(h)	Incomplete Combustion Factor (ICF)	not more than 0.48
(i)	Soot Index (SI)	not more than 0.60
(j)	Odour	where gas is delivered to the National Gas National Transmission System it shall have no odour that may cause National Gas to fail to meet its obligation under Part 1 of Schedule 3 of the Gas Safety (Management) Regulations 1996.
(k)	Carbon Dioxide	not more than 2.5 mole%
(k) (l)	Carbon Dioxide Gross Calorific Value	not more than 2.5 mole% shall be within the range 36.9 to 42.3 MJ/m <sup>3</sup> (real gross dry). Where National Gas identifies that the flow of gas from the Storage Facility causes a material increase in the risk that the calorific value in respect of the gas conveyed to any offtake point within a charging area is less than the area calorific value in respect of that charging area (as both are calculated pursuant to paragraph 4A of the Gas (Calculation of Thermal Energy) Regulations 1996 (as amended), then the Storage Operator shall use reasonable endeavours to cooperate with National Gas to minimise the impact of such risk. Where National Gas believes that the Storage Operator is not making such reasonable endeavours then the issue may be referred to an Expert for determination in accordance Clause 13.
		shall be within the range 36.9 to 42.3 MJ/m <sup>3</sup> (real gross dry). Where National Gas identifies that the flow of gas from the Storage Facility causes a material increase in the risk that the calorific value in respect of the gas conveyed to any offtake point within a charging area is less than the area calorific value in respect of that charging area (as both are calculated pursuant to paragraph 4A of the Gas (Calculation of Thermal Energy) Regulations 1996 (as amended), then the Storage Operator shall use reasonable endeavours to cooperate with National Gas to minimise the impact of such risk. Where National Gas believes that the Storage Operator is not making such reasonable endeavours then the issue may be referred to an Expert for

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.

- 1.3 Where gas is offtaken at the CSEP outside the Gas Entry Conditions set out in paragraph 1.2 and such gas is:
  - (a) within the limits referred to in Part 1 of Schedule 3 of the Gas Safety (Management) Regulations 1996 (the "GS(M)R Limits") as may be revised from time to time, then the Gas Entry Conditions (other than calorific value) in respect of such gas will be the GS(M)R Limits. In respect of calorific value the Gas Entry Condition will be that set out in paragraph 1.2(I) above;
  - (b) outwith the GS(M)R Limits the Storage Operator shall not input to the System such gas unless it is brought within the GS(M)R Limits and paragraph 1.2(I) above or unless an arrangement referred to in paragraph 1.4 applies.
- 1.4 In the circumstances referred to in paragraph 1.3(b), the Operators shall use reasonable endeavours to co-operate to enter into an arrangement to allow input of such gas to the System which arrangements may include consultations with the appropriate enforcement authority to ensure that there is no detriment to the safety of the System or to any gas consumer: provided that nothing in this paragraph shall require either Operator to act or omit to act in contravention of its statutory obligations.

## Annex D - MEASUREMENT PROVISIONS

# 1. Measurement Equipment

1.1 The Measurement Provisions shall be as set out in this Annex D. The provisions of this Annex D 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 SEP and the CSEP.

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

- 2.1 This Annex D specifies the metering, sampling, analysis and other equipment (the "Measurement Equipment") at the SEP and the CSEP. 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 Storage 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 Storage 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 validated prior to any gas flow being allowed to or from the System.

# 2.3 Gas Quality

- (a) The Storage Operator 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 Storage Facility to the System. 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 Storage Operator and National Gas flowing gas that they are both unaware is outwith Part 1 of

Schedule 3 of the Gas Safety (Management) Regulations 1996 is minimised. The uncertainties shall be better than those in the specified ranges;

- (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 Storage Facility and that no change to the gas composition occurs between the sample point and the analytical instrument; and
- (iv) Measurements and validation of equipment to make such measurement shall, where feasible, be traceable to national or international standards.
- 2.4 Energy and Volume
  - (a) The Storage Operator shall install, commission, operate and maintain flow measurement equipment to determine instantaneous and integrated volume and instantaneous and integrated energy flows into and out of the Storage Facility such that:
    - All volume and energy flows to and from the System shall comply with this paragraph;
    - (ii) All volumes shall be corrected to metric Standard Temperature and Standard Pressure conditions, and reported as cubic metres of gas;
    - (iii) The measurement of volume shall be without bias and with an uncertainty of better than  $\pm$  1.0% of reading over the specified flow range; and
    - (iv) The uncertainty of the energy flow must be better than ±1.1% of reading over the specified flow.

## 2.5 Volume and Energy Calculation

- (a) Volume flowrate 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 flowrate.
- (b) The live input signals from each orifice plate metering stream shall include but not be limited to:
  - (i) differential pressure transmitter low range;
  - (ii) differential pressure transmitter high range;
  - (iii) pressure transmitter;
  - (iv) temperature transmitter;

- (v) line density (if a chromatograph is not installed);
- (vi) relative density (if a chromatograph is not installed); and
- (vii) gas composition (if a chromatograph is installed).
- (c) The live input signals from each turbine metering stream shall include but not be limited to:
  - (i) turbine meter pulses;
  - (ii) pressure transmitter;
  - (iii) temperature transmitter;
  - (iv) line density (if a chromatograph is not installed);
  - (v) relative density (if a chromatograph is not installed); and
  - (vi) gas composition (if a chromatograph is installed).
- (d) The live input signals from each ultrasonic metering stream shall include but not be limited to:
  - (i) ultrasonic meter pulses (or ultrasonic meter parameters via serial link);
  - (ii) pressure transmitter;
  - (iii) temperature transmitter;
  - (iv) line density (if a chromatograph is not installed);
  - (v) relative density (if a chromatograph is not installed); and
  - (vi) gas composition (if a chromatograph is installed).
- (e) The flow computer shall accept the results of a calibration carried out at a suitably accredited facility to minimise the error of measurement. For turbine and ultrasonic meter calibrations, the number of calibration points that can be entered shall not be less than five.

## 2.6 Volume Measurement

- (a) The flow measurement system shall be designed, built and installed to BS EN 1776.
  Further guidance is given in the Institution of Gas Engineers & Managers' report 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 National Gas.
- (b) The uncertainty of the measurement systems 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/m<sup>3</sup>);
  - (ii) The line density shall be 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 AGA 8 using a live pressure and temperature; and
  - (iii) The reference density shall be calculated from gas composition obtained via a gas chromatograph. The calculation of reference density will be in accordance with the latest version of the ISO 6976 using Standard Pressure and Standard Temperature.
- (d) The measurement of temperature for the purpose of calculating volume flow and for correction to standard conditions shall be such that:
  - (i) Temperatures shall be determined as degrees Celsius (°C); 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.
- (e) 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 Storage Operator shall install, commission, operate and maintain calorific value measurement equipment that operates by chromatography such that:
    - (i) All calorific values shall be corrected to Standard Temperature and Standard Pressure, and reported as Megajoules per cubic metre (MJ/m<sup>3</sup>); and
    - (ii) The equipment shall read without bias and the uncertainty of the calorific value must be better than plus or minus 0.4% of reading over the specified calorific value range. The determination of uncertainty shall be traceable to national or international standards as appropriate.
  - (b) The design and operation of the measurement system shall follow all relevant national or international standards, specifically:
    - 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.
  - (c) National Gas may evaluate all instruments used in the determination of the CV and witness the calibrations or perform tests on the apparatus.

# 2.8 Specified Ranges

(a) The uncertainty of parameters determined by the measurement system shall be better than the values defined in the table below:

Characteristic	Unit	Specified Range	Uncertainty	Frequency			
Volume Flow Rate	MSCM/day	0 - 45	$\pm$ 1% of flow	Instantaneous			
Energy Flow Rate	MJ/hour	0 – 75,000,000	±1.1% of flow	Instantaneous			
Gas Pressure	barg	0 – 100	±0.5 barg	Instantaneous			
Gas Temperature	°C	-10 - +40	±0.5 °C	Instantaneous			
Water Dewpoint	°C at Line Pressure	-110 - +20	±2 °C	4 minutes			
Oxygen	mole%	0 - 0.25	±0.001 mole%	4 minutes			
Carbon Dioxide	mole%	0 – 5	±0.1 mole%	4 minutes			
Hydrogen Sulphide (Including COS)	ppm	0 – 5	±0.1 ppm	4 minutes			
Total Sulphur	mg/m <sup>3</sup>	0 – 100	±1 mg/m <sup>3</sup>	12 minutes			
Incomplete Combustion factor		-3 - +2	±0.02	4 minutes			
Soot Index		0 – 1	±0.02	4 minutes			
Nitrogen	mole% 0 - 10 ±0.1 mole%		±0.1 mole%	4 minutes			
Calorific Value	MJ/m <sup>3</sup>	35 – 44	±0.1 MJ/m <sup>3</sup>	4 minutes			
Relative Density		0.5 - 0.7	±0.01	4 minutes			
Wobbe Number	MJ/m <sup>3</sup>	45 – 54	±0.1 MJ/m <sup>3</sup>	4 minutes			

(b) For the avoidance of doubt, the maximum flow rate set out in the table above is quoted in respect of volume, as millions of 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 Uniform Network Code or otherwise an indication of the available capacity in respect of the SEP and/or the CSEP.

# 2.9 Communication Interface

- (a) Communications are required for two purposes; operational monitoring and measurement validation.
- (b) The Storage Operator shall install, commission, operate and maintain communication equipment to provide signals to National Gas of type, quality and quantity to be agreed between National Gas and the Storage Operator. The requirement shall include:

Characteristic	Unit	Specified Range	Transmittal mode	Frequency		
Instantaneous standard volume flow rate (system entry)	MSCM/day	0 – 45	Analogue	10 seconds		
Instantaneous energy flow rate (system entry)	TJ/day	0 – 1,800	Analogue	10 seconds		
Integrated standard volume flow (system entry)	MSCM/day	0 – 999,999 1,000 SCM pulse significance value	Digital	10 seconds		
Integrated energy flow (system entry)	TJ/day	0 – 999,999 40,000 MJ pulse significance value	Digital	10 seconds		
Instantaneous standard volume flow rate (system exit)	MSCM/day	0 – 45	Analogue	10 seconds		
Instantaneous energy flow rate (system exit)	TJ/day	0 – 1,800	Analogue	10 seconds		
Integrated standard volume flow (system exit)	MSCM/day	0 – 999,999 1,000 SCM pulse significance value	Digital	10 seconds		
Integrated energy flow (system exit)	TJ/day	0 – 999,999 40,000 MJ pulse significance value	Digital	10 seconds		
Meter Pressure	barg	0 – 100	Analogue	10 seconds		
Meter Temperature	°C	-10 - +40	Analogue	10 seconds		
Water Dewpoint	°C at Line Pressure	-110 - +20	Analogue	10 seconds		
Oxygen	mole %	0 - 0.25	Analogue	10 seconds		

Characteristic	Unit	Specified Range	Transmittal mode	Frequency
Carbon Dioxide	mole%	0-5	Analogue	10 seconds
Hydrogen Sulphide (Including COS)	ppm	0-5	Analogue	10 seconds
Total Sulphur	mg/m <sup>3</sup>	0 – 100	Analogue	10 seconds
Incomplete Combustion factor		-3 - +2	Analogue	10 seconds
Soot Index		0 – 1	Analogue	10 seconds
Nitrogen	mole%	0 - 10	Analogue	10 seconds
Calorific Value	MJ/m <sup>3</sup>	35 – 44	Analogue	10 seconds
Relative Density		0.5 - 0.7	Analogue	10 seconds
Wobbe Number	MJ/m <sup>3</sup>	45 – 54	Analogue	10 seconds
Remote Pressure P3 (NTS side of valve)	barg	0 – 100	Analogue	10 seconds
Flow Measurement Fault Alarm			Digital	10 seconds
Gas Quality Alarm			Digital	10 seconds

(c) The signals shall be provided 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.
- (c) National Gas 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(d), 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(c) shall, if the Measurement Equipment is found to read without discernible bias and within the Permitted Range, be paid by the person requesting the validation and in any other case by the Storage Operator.

- (d) National Gas may request that the Measurement Equipment be validated if the previous validation took place more than six (6) months previously, and any validation pursuant to this paragraph 2.10(d) shall be carried out as soon as reasonably practicable. The Storage Operator 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.
- (e) Following validation as specified in paragraph 2.10(c) or (d), the individual components of the Measurement Equipment shall immediately be adjusted or as soon as practical replaced as necessary so that the Measurement Equipment reads without bias and 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 a discernible 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 or, if later, since last adjusted to read without bias (except in the case where it is proved that the Measurement Equipment has begun to read outside the Permitted Range on some other date). Where components need to be replaced and cannot be replaced immediately the Measurement Equipment shall be assumed to read with bias for the whole period from being found to have bias until the component is replaced and the Measurement Equipment shown to be reading without bias;
  - (ii) for the purposes of calculating the amount of allowance to be made to or the surcharge to be made on the 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; and
  - (iii) the amount by which the quantity determined to have been offtaken from or delivered to the System on any day differs from the quantity originally determined to have been offtaken on such Day pursuant to any validation or resolution of any dispute in relation thereto shall be treated as the Individual CSEP Reconciliation Quantity.
- (f) Following validation as specified in paragraph 2.10(c) or (d), the individual components of the Measurement Equipment shall be immediately adjusted or as soon as practicable replaced as necessary so that the Measurement Equipment reads without bias and 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 without bias and outside the Permitted Range then, for the purposes

of calculating the amount of allowance to be made to or the surcharge to be made on the 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 without adjustment.

- (g) Any validation pursuant to this paragraph 2.10 shall be conducted by the Storage Operator, and the Storage Operator shall give reasonable advance notice of such validation to National Gas, and National Gas shall be entitled to be present. The Storage Operator shall provide a validation report to National Gas within fourteen (14) days of any validation stating the results of such validation.
- (h) The results of any validation shall be binding on National Gas and the Storage Operator unless National Gas shall within fourteen (14) days after receiving the validation report specified in paragraph 2.10(g), give notice to the Storage Operator that it disputes the accuracy of such validation. National Gas shall not be entitled to dispute the accuracy of such validation solely on the grounds that such party did not attend such validation.
- (i) At the request of a System User, the Storage Operator, all relevant System User(s) and National Gas shall meet and discuss and endeavour to settle any dispute or failure to agree arising from the application of the provisions of this paragraph 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 a System User, the Storage Operator or National Gas) in accordance with the provisions set out in Clause 13.
- 2.11 Inspection Rights
  - (a) National Gas shall have the right, upon giving reasonable notice to the Storage Operator to inspect the Measurement Equipment and the charts and other measurements or test data of the Storage Operator but the reading calibration and adjustment of such and the changing of any charts shall be carried out only by the Storage Operator who shall preserve all original test data, charts and other similar records for a period of three (3) years and shall, at the expense of National Gas, make a copy thereof available to National Gas upon request.
  - (b) The Storage Operator shall maintain auditable logs that shall include but not be limited to:
    - System alarms contributing to flow measurement system fault alarm and to any equipment within the measurement system;
    - (ii) Configuration of flow computers and programmable devices within measurement system; and

- (iii) Tests or validations of the measurement system.
- (iv) Reasons for, and the dates of, any meter removal and measurement data at the time of removal / replacement.

# 2.12 Measurement Failure

- (a) The Storage Operator shall, for the purposes of facilitating any data reconciliation or the resolution of any dispute, preserve all measurement data, charts and other similar records for a period of three (3) years and shall, at the expense of National Gas, make a copy thereof available to National Gas upon request.
- (b) In the event of failure of the equipment for measuring quality of gas to be installed in respect of the SEP and/or the CSEP:
  - (i) spot samples shall be taken and analysed at any approved laboratory with sufficient frequency to monitor properly changes in operating conditions. The method and equipment used and installed for taking samples shall be subject to reasonable agreement by National Gas and the Storage Operator (such agreement not to be unreasonably withheld or delayed); and
  - (ii) the Storage Operator shall rectify such failure as soon as reasonably practicable.
- (c) 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:
  - 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 that will have been agreed with National Gas;
  - (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. This process allows system average prices to be used over the period.
- (d) Reconciliation will be calculated using the end of day data previously recorded on UK-Link.

- (e) Where the error cannot be agreed the method of allocation in the SLOP, if any, will be used. Where there is no method of allocation in the SLOP, or the method is unable to resolve the issue the matter may be referred to an Expert for determination (at the request of a System User, the Storage Operator or National Gas) in accordance with the provisions set out in Clause 13.
- 2.13 Modifications
  - (a) The Storage Operator shall provide reasonable notice to National Gas of any intended modifications to the Measurement System which may affect the measurement of the flow or quality of gas at the SEP and/or the CSEP. National Gas shall accept the Measurement System (as modified) for flow of gas once the Measurement System (as amended) has been validated (as appropriate).
- 2.14 Definitions for the purposes of this Annex D:

MSCM	Millions of standard cubic metres
MSCM/day	Millions of standard cubic metres per day
MJ/m <sup>3</sup>	Megajoules (10 <sup>6</sup> Joules) per cubic metre (at standard conditions (15C)
Barg	Bar gauge
TJ	Terrajoules (10 <sup>12</sup> Joules)
TJ/day	Terrajoules (10 <sup>12</sup> Joules) per day
Validation	Validation of the metering system requires each installed component of the measurement system to be checked to ensure it is still operating in the manner required by the design specification.

# Annex E - CONSTRAINED PROCEDURE ARRANGEMENT

## 1. General

- 1.1 The Storage Operator will provide National Gas with all such information concerning Storage Users holding Storage Space in the Storage Facility (including details of their gas in storage and Storage Space) and as may be required to give effect to the provisions of paragraph 3 of Section R of the Transportation Principal Document that forms part of the Uniform Network Code.
- 1.2 The provisions of this Annex E do not apply to National Gas when acting for Operating Margins Purposes as a Storage User of the Storage Facility and references in this Annex E to "User" or "Storage Users" do not include a reference to National Gas when so acting; but references in this Annex E (other than in paragraphs 1.4 and 1.5) to "Users" or "Storage Users" do include National Gas acting in any other capacity.
- 1.3 The terms of each Storage Agreement relating to the Storage Facility will provide in relation to the Storage User holding space in the Storage Facility pursuant to such Storage Agreement to authorise the Storage Operator to deliver gas to the System at the Storage Connection Point pursuant to a Constrained Storage Renomination.
- 1.4 Where in respect any Storage User:
  - (a) on the first Day of the Winter Period the User's gas-in-storage in the Storage Facility is less than the Weekly Minimum Requirement; or
  - (b) on any other Day in the Winter Period, the User's gas-in-storage in the Storage Facility is less than the Minimum Weekly Requirement (provided that a User's gas-in-storage shall not be deemed to be less than the Minimum Weekly Requirement where it is less than the Minimum Weekly Requirement by reason of a Constrained Storage Renomination);

paragraph 1.5 shall apply.

- 1.5 In the circumstances in paragraph 1.4, the Storage Operator (as User) shall make Output Nominations in respect of the Storage Connection Point (for injection to the Storage Facility), on or as soon as reasonably practicable after the relevant Day under paragraph 1.4, for a quantity or quantities equal in aggregate to the relevant quantity (and may but shall not be obliged to secure the delivery to the System of a quantity of gas not exceed the relevant quantity). Such injection quantities shall be treated as injected by the User to the Storage Facility, but will not be treated as of taken from the System by the User.
- 1.6 A Storage User will not make a Storage Withdrawal Nomination in respect of the Storage Facility which would result in the User's gas-in-storage in the Storage Facility being less than the Weekly Minimum Requirement.

1.7 The Storage Operator shall procure that each Storage Agreement relating to the Storage Facility shall contain provisions that permits the operation of the foregoing paragraphs 1.5 and 1.6.

# **Annex F - COMMISSIONING ARRANGEMENTS**

- 1.1 The provisions of this Annex F shall apply to the commissioning of the Storage Facility.
- 1.2 The Operators shall (each acting reasonably) agree in writing the process of commissioning within a reasonable time prior to the start of such commissioning. Such process shall include an agreed methodology for calculating the quantity of gas offtaken during commissioning.
- 1.3 The Storage Operator shall give five (5) days notice to National Gas of the start of the commissioning and (unless otherwise agreed as part of the process of commissioning agreed between the parties under paragraph 1.2 above) the Storage Operator shall notify National Gas as soon as reasonably practicable and in any event within twenty-four (24) hours of the date on which the commissioning is completed.
- 1.4 The Storage Operator shall provide an SFN to National Gas no later than 17:00 on D-1 in respect of each day of commissioning.

#### Annex G - TECHNICAL INTERPRETATION

1.1 In this Agreement the following terms have the following meanings:

"**bar**": the bar as defined in ISO 1000-1992(E);

"calorific value": that number of MJs produced by the complete combustion at a constant absolute pressure of 1.01325 bar of 1 Cubic Metre of gas at a temperature of 15°C with excess air at the same temperature and pressure as the gas when the products of combustion are cooled to 15°C and when the water formed by combustion is condensed to the liquid state and the products of combustion contain the same total mass of water vapour as the gas and air before combustion; and for the avoidance of doubt calorific value shall be REAL as defined in ISO 6976-1:1995(E);

"**Cubic Metre**" or "m<sup>3</sup>": when applied to gas, that amount of gas which at a temperature of 15°C and an absolute pressure of 1.01325 bar and being free of water vapour occupies one 1 cubic metre;

"°C": the particular interval between the temperature in Kelvin and the temperature 273.15 Kelvin as defined in ISO 1000-1992(E);

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

"hour": the hour as defined in ISO 1000-1992(E);

"Joule": the joule as defined in ISO 1000-1992(E);

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

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

"metre": the metre as defined in ISO 1000-1992(E);

"Mole": the molecular weight of a component in the respective mass units;

"**mol%**": molecular percentage the ratio of the number of Moles of a particular component in a mixture of the total number of Moles present multiplied by one hundred per cent (100%);

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

"**Relative Density**": shall mean the mass of a volume of dry gas divided by the mass (expressed in the same units) of an equal volume of dry standard air as defined in ISO 6976-1:1983(E) both such gases being at a temperature of 15°C and an absolute pressure of 1.01325 bar; and

Relative Density (REAL) shall for the avoidance of doubt be REAL as defined in ISO 6976-1:1995(E);

"second": the second as defined in ISO 1000-1992(E).

# Annex H - STORAGE LOCAL OPERATING PROCEDURES

- 1. Introduction
- 2. Routine Notifications
- 3. Confirmation of gas quantities delivered and/or offtaken at the Storage Connection Point
- 4. Other Notifications/Communications
- 5. Information related to the local security of the Storage Facility and the System

Schedules to Local Operating Procedures:

- A. Storage Flow Notification or "SFN" Proforma
- B. Transportation Flow Advice or "TFA" Proforma
- C. Communications
- D. End of Day Quantity and CV Notification.
- E. Not Used
- F. Not Used
- G. Storage Capacity Notice

# 1. Introduction

- 1.1 This Annex sets out Storage Local Operating Procedures between the Storage Operator and National Gas for the provision of gas flow related information to each other so as to facilitate the safe and efficient operation of the System and the Storage Facility.
- 1.2 In these procedures the following terms shall have the following meanings:

"Gas Day" means "Gas Flow Day" as defined in the Uniform Network Code;

"Gas Day D-1" means the Day preceding the relevant Gas Day;

"Gas Day D+1" means the Day following the relevant Gas Day;

"**Expected Flow Rates**" means the rates (in million m<sup>3</sup>/hour) of gas that the Storage Operator expects to offtake from and deliver to the System at the SCP for each remaining hour of a Gas Day;

"End of Day Quantity" means the amount of gas offtaken from and delivered to the System at the SCP in respect of a Gas Day;

"**Expected End of Day Quantity**" means the amount of gas the Storage Operator expects to offtake from and deliver to the System at the SCP in respect of a Gas Day.

## 2. Routine Notifications

2.1 Notices

Notices given by the Storage Operator to National Gas in accordance with these procedures will be made to the National Gas shift representative as set out in Schedule C to this Annex (the "National Gas Shift Representative").

Notices given by National Gas to the Storage Operator in accordance with these procedures will be made to the Storage Operator's representative as set out in Schedule C to this Annex ("the Storage Facility Representative").

The telephone numbers, postal addresses and email addresses for service of notices pursuant to this Annex are set out in Schedule C to this Annex. In the event of either telephone number or other details being changed the Operator whose number or details are subject to such change shall notify the other Operator as soon as it is reasonably practicable and in any event in advance of such changes taking place.

2.2 Daily Notifications of gas Expected Flow Rate, Calorific Value and Expected End of Day Quantity.

The Storage Operator will notify National Gas at the earliest practicable opportunity but no later than 1700 hours on Gas Day D-1 of the Expected Flow Rates and Expected End of Day Quantity and its good faith estimate of the calorific value of the natural gas that is estimated will be input and/or offtaken on the Gas Day.

The notification will be the Storage Flow Notification and will be sent by email or other approved means by the Storage Operator to the National Gas Shift Representative. The Storage Flow Notification shall be combined with the Offtake Profile Notice to form a single notice.

The SFN shall be in a form substantially similar to the proforma set out in Schedule A.

- 2.3 Re-notification of natural gas Expected Flow Rate, Calorific Value and Expected End of Day Quantity.
  - (a) On Gas Day D-1
    - (i) Before a Gas Day commences the Storage Operator will, as soon as is reasonably practicable following the time at which it is made aware of any changes requiring an update to the SFN, notify the National Gas Shift Representative of any such changes in the Expected Flow Rate as exceed the relevant tolerances (as defined in paragraph 2.6 of Part B of Annex B. Any revision to an SFN will be provided in the form of additional information on a copy of the SFN or as otherwise agreed by National Gas and the Storage Operator. Notification of such change will be made by email or other agreed means.

The revised Expected Flow Rate on the SFN will indicate when the change is likely to take effect and will show the Expected End of Day Quantity that is estimated will be input or offtaken on that Gas Day with an estimate of the calorific value.

(ii) In the event that National Gas receives a notice under paragraph 2.2 or 2.3(a)(i) specifying an Expected Flow Rate for input which National Gas reasonably anticipates that the System will be unable to accommodate, then National Gas may advise the Storage Operator in accordance with paragraph 4.4 below.

- (b) Within a Gas Day
  - Within a Gas Day the Storage Operator will, subject to the relevant tolerances, notify National Gas by way of revised SFN of any changes to the Expected End of Day

Quantity and/or Expected Flow Rate and/or the estimated calorific value of such natural gas, as soon as is reasonably practicable following the time at which it is made aware of such changes. The Storage Operator may provide the reason for the change in such detail as the Storage Operator may decide. Notification will be made by email or other agreed means. The revised completed SFN will indicate the revised Expected Flow Rate (showing when the change is likely to take effect). The revised SFN will also indicate the revised Expected End of Day Quantity and a good faith estimate of the calorific value for the remainder of Gas Day D.

(ii) In the event that National Gas receives a notice under paragraph 2.3(b)(i) specifying an Expected Flow Rate for input which in National Gas's reasonable opinion (taking into account any information provided by the Storage Operator of the reason for the change of flow rate) the System will be unable to accommodate, it may as soon as is reasonably practicable so advise the Storage Operator in accordance with paragraph 4.4 below.

In the event that the actual flow rate is in excess of the Expected Flow Rate then National Gas may as soon as is reasonably practicable so advise the Storage Operator requesting a reduction in flow rate or a revised SFN.

- (iii) Variations to the Expected Flow Rate accepted by National Gas will be effective from a time specified by the Storage Operator, however, the actual flow rate may change before or after the exact hour.
- 2.4 Notification of Storage Use Gas
  - (a) For the purposes of this paragraph 2.4, the term "storage use gas provider" shall have the meaning ascribed to it in Section R.1.2.1 of Uniform Network Code, and "storage use gas" shall mean gas which has been injected into the Storage Facility from the System by the relevant Storage Operator for purposes related to, or otherwise connected with, the operation of the Storage Facility.
  - (b) A Storage Operator may have an agreement with one or more Users for the provision of storage use gas in respect of the Storage Facility.
  - (c) The Storage Operator shall, in relation to each Day in each calendar month, notify to National Gas by not later than the 5<sup>th</sup> Business Day of the following calendar month:
    - (i) the quantity of storage use gas; and
    - (ii) the identity of each storage use gas provider, provided that where there is more than one storage use gas provider, the Storage Operator will in addition notify National Gas of the quantities of storage use gas attributable to each storage use gas

provider (and the quantities so attributed shall in aggregate equal the quantity notified under paragraph (a) above).

- (d) In respect of each Gas Day, the Storage Operator will notify National Gas of its best estimate of the quantity of storage use gas and physical stock levels by telemetry or other agreed means no later than 0800 hours on Gas Day D+1. The Storage Operator will notify National Gas of any revision made to the storage use gas quantity. The storage use gas and physical stock levels notification shall be in a form substantially similar to the proforma set out in Schedule D or such other form as may be agreed by National Gas and the Storage Operator
- (e) The Storage Operator shall if requested by National Gas promptly provide reasonable supporting evidence of the details provided pursuant to paragraph 2.4(c) above. National Gas shall have the right to request the Storage Operator to explain its calculations with regard to quantities of storage use gas and if the Parties are unable to resolve an issue between them then either Party may refer the matter to the Expert in accordance with Clause 13.
- (f) The Storage Operator shall for each month, notify to National Gas, by not later than the 5th Business Day of that month; i) The total physical capacity of the storage facility, and ii) The projected total physical deliverability and injectability for the month and details of any known periods of reduced or non-availability of the deliverability/injectability. The storage capacity notification shall be in a form substantially similar to the proforma set out in Schedule G or such other form as may be agreed by National Gas and the Storage Operator.

# 3. Confirmation of Natural Gas Quantities Delivered and/or Offtaken at the Storage Connection Point

- 3.1 In respect of each Gas Day, the Storage Operator will provide to National Gas a best estimate of the End of Day Quantity determined in accordance with Annex D (Measurement Provisions) and the calorific value by telemetry or other agreed means no later than 0800 hours on Gas Day D+1. The Storage Operator will notify National Gas of any revision made to the End of Day Quantity and calorific value in accordance with Annex D.
- 3.2 The End Of Day Quantity and calorific value shall be in a form substantially similar to the proforma set out in Schedule D or such other form as may be agreed by National Gas and the Storage Operator.

# 4. Other Notifications/Communications

#### 4.1 General Communication

Subject to either Operator's duty of confidentiality to any third party, the Storage Facility Representative and the National Gas 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 Storage Connection Point. Both Operators will use reasonable endeavours to give as much notice to the other as possible.

Upon an unforeseen change in gas flow, pressure or quality, the Storage Facility Representative or National Gas Shift Representative shall inform the other of the nature and estimated duration of the change as soon as reasonably practicable.

#### 4.2 Planned Flow Changes due to Maintenance Procedures

Representatives of National Gas and the Storage Operator will liaise in November and May of each year (or as may otherwise be agreed) to discuss and where practicable co-ordinate their respective planned maintenance programmes, emergency shut down tests, new supplies and changes to existing supplies, pipeline operations and procedures associated with these activities and any other relevant information to assist the integrity and safety of the Storage Facility and the System. If there is any need to have a specific flow profile both Operators will make reasonable efforts to accommodate the requirements of the other. The maintenance related flow profiles will subsequently be detailed on the SFN in accordance with paragraph 2.

Where National Gas is carrying out such planned maintenance, it will endeavour to ensure that the availability of gas for offtake from the System at the CSEP is not reduced by more than is reasonably necessary for or results from the carrying out of such maintenance, and in particular is not wholly discontinued unless the total suspension of availability of gas for offtake from the System is necessary to enable National Gas to comply with a Legal Requirement, or otherwise is not practically avoidable.

## 4.3 Gas Quality Variations

- (a) The Operators recognise that within the gas quality requirement set out in Part B of Annex C there may be variations of the gas quality.
- (b) In the event that National Gas or the Storage Operator reasonably identifies or anticipates any significant variations to the gas quality it will notify the other as soon as is reasonably practicable.
- (c) Without prejudice to any safety case obligation of National Gas, if either party becomes aware, or reasonably anticipates that the gas being, or to be input, may fall outside the requirements set out in the Gas Entry Conditions and/or is in breach of any statutory gas safety requirement, including without limitation, Regulation 8 of the Gas Safety

(Management) Regulations 1996, then the relevant party will give the other as much notice as is reasonably practicable of such gas quality and the Storage Operator shall inform National Gas as soon as reasonably practical by email (or other agreed means) of the expected volume and quality of the gas. Without prejudice to Part B of Annex C the Operators will then liaise and co-operate with each other regarding whether and at what level the continued flow of this gas will be acceptable to National Gas.

- (d) Except in the circumstances where paragraphs 1.3(a) or 1.4 of Part B of Annex C apply, if gas is delivered to the System that falls outside the gas quality requirements set out in the Gas Entry Conditions and/or is in breach of any statutory gas safety requirement, including without limitation, Regulation 8 of the Gas Safety (Management) Regulations, then National Gas shall be entitled to require a reduction in flow rate or a complete cessation of flow.
- (e) Except in the circumstances where paragraphs 1.3(b) or 1.4 of Part B of Annex C apply, following delivery of gas to the System outside the gas quality requirements set out in the Gas Entry Conditions other than in breach of any statutory gas safety requirement, including without limitation, Regulation 8 of the Gas Safety (Management) Regulations, the Operators shall co-operate in ensuring that gas being delivered to the System is brought within the above Gas Entry Conditions as soon as is reasonably practicable.
- (f) Furthermore, in the event of a failure or scheduled shut down of the Storage Facility and the subsequent restarting of the Storage Facility, National Gas will use its reasonable endeavours to accept delivery of any gas at the Storage Connection Point during the recommissioning of the Storage Facility that for operationally justifiable reasons falls outside the requirements set out in the Gas Entry Conditions and in the event of a failure or scheduled shut down in the local National Gas System and the subsequent restarting of the relevant equipment the Storage Operator will use its reasonable endeavours to reestablish normal operations. In such circumstances the Operators will liaise and cooperate with each other regarding the continued flow and acceptance of this gas by National Gas at the Storage Connection Point to ensure that the gas entering and exiting from the System complies with the statutory gas safety requirements.
- (g) Where in National Gas's reasonable opinion, the composition of gas input, or to be input, to the System is outside the Gas Entry Conditions, then National Gas may notify the Storage Operator both by telephone and in accordance with paragraph 4.4.

# 4.4 Transportation Flow Advice (TFA)

If in National Gas's reasonable opinion, the System will be unable to accommodate any Expected Flow Rate to be input as notified on the SFN or the Actual Flow Rate, then National Gas will as soon as is reasonably practicable following the time at which it is made aware, advise the Storage Operator by means of a Transportation Flow Advice (TFA) as set out in Schedule B. In so doing National Gas will advise the Storage Operator as to the flow rates that it anticipates the System will be able to accommodate. National Gas shall give a reason for its advice and advise the duration for which it may apply.

If in National Gas's reasonable opinion, the System will be unable to accommodate the Expected End of Day Quantity as notified in the SFN, then National Gas will as soon as is reasonably practicable, advise the Storage Operator both by telephone and by means of a TFA. Such TFA will advise National Gas's reasonable estimate of the maximum flow rates that can be accommodated at the SEP for the relevant period. National Gas shall give a reason for its advice.

If in National Gas's reasonable opinion, the composition of gas input, or to be input, to the System is, or will be, outside the Gas Entry Conditions, then National Gas will as soon as is reasonably practicable, advise the Storage Operator both by telephone and by means of a TFA. Such TFA will advise National Gas's reasonable estimate of the maximum flow rates that can be accommodated at the SEP for the relevant period. National Gas shall give a reason for its advice.

The Storage Operator will act promptly in response to a TFA and may (but without being obliged to do so), send National Gas a revised SFN in accordance with paragraph 2 of this Annex H.

## 4.5 Minimum Flows

In the event that the Storage Operator's Expected End of Day Quantity is less than the levels for delivery to the System or for offtake from the System, as agreed with National Gas, then either Operator will notify the other Operator as soon as is reasonably practicable and the Operators will co-operate in defining mutually acceptable flow rates. Any SFN issued by the Storage Operator relating to such a Gas Day will define the flow profile accordingly.

#### 4.6 Ramp Rates

For the avoidance of doubt in the event that either Operator anticipates a significant change to the actual flow rate then that Operator will notify the other Operator as soon as is reasonably practicable and the Operators will co-operate in defining mutually acceptable ramp rates.

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

## 5.1 Arrangements to Safeguard the System

If there is an abnormal complete cessation of the flow from the Storage Facility, National Gas may, if required to safeguard the System, shut the necessary valves to the Storage Connection Facilities. When the Storage Facility is able to resume flows the Storage Facility Representative will telephone the National Gas Shift Representative and confirm by email or other agreed means that the Storage Facility is again capable of delivering and/or offtaking the Expected Flow Rate. Both Operators will then co-operate in returning to normal conditions as soon as practicable.

# 5.2 Unforeseen Cessation of Natural Gas Flow

In the event of an Emergency on the National Gas System, National Gas may close the necessary valves as required or may require that the Storage Operator delivers gas to, or offtakes gas from, the System at a rate or rates specified by National Gas. National Gas will as soon as is practicable inform the Storage Facility Representative of the reasons and the likely duration of the Emergency.

In the event of an emergency at the Storage Facility requiring immediate cessation of supply, the Storage Facility Representative may close the Storage owned and operated valves. The Storage Operator will inform the National Gas Shift Representative as soon as possible of the emergency, and may give the reasons therefor and, will if possible, estimate the likely duration of the emergency.

Such communications will be made as soon as is reasonably practicable.

5.3 The parties shall co-operate to facilitate the safe re-opening of the relevant valves following any closure pursuant to paragraphs 5.1 or 5.2 or otherwise.

Expected CV	EOD	Expected	05:00	04:00	03:00	25 Hr Day	02:00	01:00	00:00	23:00	22:00	21:00	20:00	19:00	18:00	17:00	16:00	15:00	14:00	13:00	12:00	11:00	10:00	09:00	08:00	07:00	06:00	Time	Date		T		
																														Expected INJECTION Flow Rate		0	
																														Expected WITHDRAWAL Flow Rate		D-1	
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																														Expected Flow Rate	л	Before/Within Day Revisions	STORAGE FLOW NOTIFICATION FOR: [SITE NAME] FOR GAS DAY COMMENCING 06:00 HOURS ON: [ ]
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																														Expected Flow Rate	8		SITE NAME
MJ/m3		MOM	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	MCM/D	UIID	Ilhite		Pass to	Pass to	
																												Including reason change in flow	COMMENTS		0870 191 0647	Gas Operations	

# SCHEDULE A – STORAGE FLOW NOTIFICATION

Notes

INJECTION - Gas flow into storage facility
 WITHDRAWAL - Gas flow out of storage facility

# SCHEDULE B – TRANSPORTATION FLOW ADVICE

ENTRY POINT [name of facility] OPERATOR [name of company]

GAS DAY Example

National Gas hereby notifies you that due to constraints on the National Gas system, the National Gas system is unable to accept, to the extent identified in this TFA, natural gas from the Operator's connected facility at the rate and/or amount specified in the latest SFN

National Gas requests that the delivery rate should not exceed the specified TFA RATE.

HOUR BAR	SFN RATE	TFA RATE	Change with this TFA	Constraints in place	Note
Units>>>	GWh	GWh		Yes/No	
6.00	•••••				
7.00					
8.00					
9.00					
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					
1.00					
2.00					
3.00					
4.00					
5.00					
EOD calculated as sum of					
rates (A)					
OVER TYPE OPERATOR					
TARGET EOD (B) IF IT IS					
NOT EQUAL TO THE CALC					
EOD (A)					
Operator Target EOD (B)	Diff	Operator target			
	between A				
ISSUE	& B	maintain diff eDate			

ISSUED I IMe-----Date-----Date-----

# SCHEDULE C – COMMUNICATIONS

1. National Gas Representatives

Network Manager National Gas Transmission plc Gas Operations National Grid House Warwick Technology Park Gallows Hill Warwick CV34 6DA

Telephone:	(Switchboard)	01926 65 3000
	(Control Room - Operations)	0870 191 0631 (24 hours)
	(Control Room - Notifications)	0870 191 0635 (24 hours)
	(After The Day - Allocations)	01926 65 4641

2. Storage Facility Representative

Telephone:

3. Storage Facility 24 hour Emergency and Interruption contact

# SCHEDULE D - END OF DAY QUANTITY, STORAGE USE GAS, AND CV NOTIFICATION

From: [Storage Facility Operator]

Address: [ ]

Tel: [ ]

To: National Gas

Address: [ ]

Tel: [ ]

# Daily Storage Measurements for [Storage Facility]

Date: [ ] Time: [ ]

# For Gas Day commencing 0600 hours on: [ ]

Meter	Description	Calorific Value (MJ/m <sup>3</sup> )	Volume (MSCM)	Energy (kWh)
[ ]XI	Storage Injection			
[ ]SE	Storage Withdrawal			
	Own Use Gas			
	Physical Stock Level (including OM)			

Signature:

Position:

# SCHEDULE E - NOT USED

# SCHEDULE F – NOT USED

# SCHEDULE G – STORAGE CAPACITY NOTICE

To National Gas System Operations

From [Storage Facility Operator]

[Storage Facility Operator] hereby notifies National Gas of the Storage Capacity in respect of [ ] Storage Facility.

Monthly Storage Capacity Statement for	[ ] Storage Facility for mm/yyyy				
Position on 1 <sup>st</sup> of month	Space (kWh)				
Physical Capacity					
Capacity allocated to System Users (excluding OM)					
Un-booked Capacity					
Projected available capacity for period until next notice	kWh/d				
Total Physical Deliverability					
Total Physical Injectability					
Details of non/reduced availability (if any)					

# Annex I - SAFETY INFORMATION REQUIRED

- 1.1 The Storage Operator shall provide to National Gas the information described in Section Q5.3.2 of the Transportation Principal Document that forms part of the Uniform Network Code by the dates and times set out therein in a form readable by National Gas.
- 1.2 If required by National Gas, the Storage Operator shall provide National Gas with a statement as to whether it is feasible (by reference to the injection capability of the Storage Facility) for injections to be made, by a time specified by National Gas, which would result in the quantity of Stored Gas reaching a level specified by National Gas.
- 1.3 The Storage Operator shall provide National Gas such information as is necessary to enable National Gas to comply with its current safety case.
- 1.4 The Storage Operator shall ensure that each Storage Agreement relating to the Storage Facility permits the disclosure by the Storage Operator to National Gas of the information referred to in this Annex.