

21 January 2026

DX CSA Template

DATED

202[]

RNG FACILITY

CONNECTED SYSTEM AGREEMENT

Connected System Point

at

[Insert Location]

between

[INSERT NAME OF COUNTERPARTY]

and

GAS NETWORKS IRELAND

***[This is a template document for DX Connected Sites
based on the maximum connection model.***

Site Specific Information must be included as indicated.

This note and all relevant drafting notes to be deleted prior to issue.]

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“Affiliate” means a company which, directly or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, a party. For this purpose, control means the direct or indirect ownership of fifty per cent (50%) or more in aggregate of voting capital;

“Agreement” means this agreement including its Schedules as the same may be amended or supplemented from time to time and the Communications Plan as the same may be amended or supplemented from time to time;

“Applicable NIS Law” means EU Directive 2016/1148 on security of Network and Information Systems and any law or regulation implementing or supplementing it.

“Business Day” means a day (other than a Saturday or Sunday) on which banks are open for business in Dublin;

“Code of Operations” or “Code” means the code of practice for the operation of the Transportation System published pursuant to the provisions of Section 13(1) of the Gas (Interim) (Regulation) Act 2002 which governs certain aspects of the relationship between the Transporter and Shippers, and as modified from time to time;

“Competent Authority” means any local, national or supra-national agency, authority, department, inspectorate, minister, official, court, tribunal or public or statutory Person (whether autonomous or not) of Ireland or the European Union which has jurisdiction over the Transporter and/or the Delivery Facility Operator or the subject matter of this Agreement, and includes the Regulator;

“Connected System Point” means the point at which the Transportation System is connected to the DFO Delivery Facility as shown in Schedule 1;

“Connected System Point Measurement Equipment” means together the Meter, the Transporter Measurement and Control Equipment and the Repeat Signals;¹

“Constraint” means an inability on the part of the Transportation System to take delivery at the Connected System Point of the End of Day Delivery Quantity;

"Constraint Notice" means a notice substantially in the form as set out in Schedule 3, Appendix 2;

“Curtailment” means an inability on the part of the DFO Delivery Facility to deliver at the Connected System Point of the End of Day Delivery Quantity;

¹Repeat Signals to be included in Section 51 Section 5.

"Curtailment Notice" means a notice substantially in the form as set out in Schedule 3 Appendix 3;

"Day" has the meaning in the Code of Operations;

"Day D" means the Day on which Renewable Natural Gas flows or is scheduled to flow and D-1, D + 1, D + 4 and D + 5 shall be construed accordingly;

"Daily Flow Notification" or "DFN" shall mean an Initial Daily Flow Notification or a Revised Daily Flow Notification as the case may be;

"Delivery Facility Operator" or "DFO" means the operator of the DFO Delivery Facility as defined in this Agreement (including its permitted assignees);

"Delivery Facilities Site" means the part of the property [*Insert property description/folio as appropriate*] as identified in the map² in Schedule 1;"DFO Delivery Facility" means the plant and equipment constructed and/or installed at the Delivery Facilities Site, located upstream of the Connected System Point and operated by the DFO from which RNG may be tendered for delivery to the Transportation System at the Connected System Point;

["DFO Measurement and Control Equipment" means the DFO's measurement and control equipment at the DFO's biomethane production / upgrading facility including the DFO's data control system and equipment interfacing with the Transporter's Measurement and Control Equipment.]³

"Directive" means the Code of Operations and any present or future directive, regulation, request, requirement, instruction, instrument, code of practice, direction or rule of any Competent Authority having the force of law or, if not having the force of law, if it is reasonable in all the circumstances for it to be treated as though it had legal force, or with which an Operator is otherwise required to comply and any modification, extension or replacement thereof;

"Effective Date" means the date of this Agreement;

"Emergency" means an escape or suspected escape of Natural Gas or circumstances which, in the opinion of the Transporter and/or the Delivery Facility Operator (as the case may be), has the effect that (a) the safety of its System or any localised part thereof is significantly at risk or (b) the safe conveyance of Natural Gas by its System

² Map to include DFO Delivery Facility to include full facility as defined as well as any pipeline connecting the plant to the DX at the Connected System Point.

³ Use/delete if necessary.

or any localised part thereof is significantly at risk or (c) Natural Gas conveyed by its System is at such a pressure or of such a quality as to constitute, when supplied to premises, a danger to life or property or (d) the relevant Operator's ability to maintain safe pressures within its System is affected or threatened by an interruption or disruption to its System, an insufficiency of deliveries of Natural Gas to its System, or any actual or potential failure of or damage to any part of its System, or any other circumstances reasonably believed by the Transporter, the NGEM, or the Delivery Facility Operator (as the case may be) to constitute an emergency (which, for the avoidance of doubt, may include circumstances upstream or downstream of the Connected System Point) and, where the context requires, a reference to an Emergency includes the event or circumstance which gives rise to such Emergency. For the purpose of this definition references to the conveyance of Natural Gas by its System with respect to the Delivery Facility Operator shall include a reference to Renewable Natural Gas;

"End of Day Delivery Quantity" or "EoDQ" means the quantity of gas to be delivered from the DFO Delivery Facility to the Transportation System on a Day;

"EPA" means the Environmental Protection Agency established pursuant to the provisions of the Environmental Protection Agency Act 1992 as such body is may be charged with the function of the EPA from time to time;

"Expert" means the Person appointed as such in accordance with Clause 11;

"Force Majeure Event" shall have the meaning given in Clause 12.2;

"Gas Quality Specification" means the specification for Natural Gas to be to be delivered at the Connected System Point as set out in Schedule 4 or such other specification for Renewable Natural Gas required by any Legal Requirement as notified to the Delivery Facility Operator by the Transporter from time to time;

"Hourly Flow Rate" means the hourly rate (in SCM/hour) of Natural Gas to be delivered at the Connected System Point;

"Information" shall have the meaning given in Clause 8.2;

"Initial Daily Flow Notification" means a notification by the Delivery Facility Operator to the Transporter of the EoDQ of Natural Gas to be delivered at the Connected System Point on a Day in accordance with Schedule 3 clause 2.2;

"Legal Requirement" means any Act of the Oireachtas, delegated legislation, regulation, licence or Directive;

“Maximum Hourly Delivery Rate” means the operationally maximum hourly rate (in SCM) at which Natural Gas can be delivered to the Transportation System at the Connected System Point as set out in Schedule 3 Section 3;

“Measurement Risk Assessment” means an assessment carried out by or on behalf of the Transporter in order to gain a semi quantitative ranking of risks associated with the measurement of various gas quality and related parameters which assessment is based on certain assumptions related to the type and quality of the feedstock used by the Delivery Facility Operator to produce Renewable Natural Gas at the DFO Delivery Facility and the process used for production of such Renewable Natural Gas;

“Measurement Standards” means the applicable industry standards for the testing of gas quality samples as set out in Schedule 5 Section 6 paragraph 2 or as otherwise prescribed by the Transporter in accordance with clause 5 of this Agreement. “Meter” means the custody transfer fiscal gas meters and equipment installed and operated by the Transporter for measuring in SCM/hr volumes of Natural Gas delivered to the Transportation System at the Connected System Point;

“Metered Quantity” means the quantity(ies) of Natural Gas determined as having been delivered to the Transportation System at the Connected System Point on a Day as measured by the Transporter Measurement and Control Equipment or as otherwise determined by the Transporter pursuant to Schedule 3;

“National Gas Emergency Manager” or “NGEM” has the meaning given in Section 2 of the Gas (Interim) (Regulation) Act 2002 (as amended);

“Natural Gas” has the meaning in the Code of Operations and includes Renewable Natural Gas which has been processed to and meets the Gas Quality Specification;

“Natural Gas Emergency Plan” has the meaning given in Section 2 of the Gas (Interim) (Regulation) Act 2002 (as amended);

“Operator” means the Delivery Facility Operator with respect to the DFO Delivery Facility or the Transporter with respect to the Transportation System, as the context requires, and “Operators” means both of them;

“Permitted Range” means the percentage range of Uncertainty in relation to energy flow and volume flow as specified in Schedule 5, Section 1;

“Person” means any natural person, company, firm, partnership, association or body corporate;

“Reasonable and Prudent Operator” or “RPO” means a party to this Agreement seeking, in good faith, to perform its contractual obligations under this Agreement and, in addition, in the case of the Transporter, its obligations pursuant to the Code of Operations and, in so doing and in the general conduct of its undertaking, exercising that degree of skill, diligence, prudence and foresight which is reasonably and ordinarily exercised by skilled and experienced operators engaged in the same type of undertaking, under the same or similar circumstances and conditions, and any reference to the “Standard of a Reasonable and Prudent Operator” shall mean such degree of skill, diligence, prudence, and foresight;

“Regulator” means the Commission for Regulation of Utilities (CRU), which is the body established by the Electricity Regulation Act 1999 (the “1999 Act”), as amended by, inter alia, the Gas (Interim) Regulation Act 2002 (the “2002 Act”), and having the powers and functions as prescribed in the 1999 Act and the 2002 Act;

"Rejection Notice" means a notice rejecting a Daily Flow Notification issued by the Transporter under Schedule 3;

“Renewable Natural Gas” or RNG is a fuel most commonly produced by anaerobic digestion of biodegradable matter and which is (or will be) prior to such gas being tendered for delivery at the Connected System Point) purified and upgraded to meet the Gas Quality Specification;

“Repeat Signals” has the meaning given in Section 5 of Schedule 5 hereto;

“Revised Daily Flow Notification” means a revision to an Initial Daily Flow Notification or previous Revised Daily Flow Notification in respect of a Day;

“System” means the DFO Delivery Facility or the Transportation System as the context requires and “Systems” means both of them;

“Third Party” means a person who is not a party to this Agreement;

“Transportation Arrangement” means a transportation arrangement (incorporating the provisions of the Code of Operations) between the Transporter and a Shipper for the transportation of Natural Gas in the Transportation System and reference to such a transportation arrangement shall include the Code of Operations;

"Transportation Entry Facilities" means those facilities and equipment located at the Delivery Facilities Site owned, or to be owned, and operated by the Transporter and comprising the BNEF and, inter alia, the Transporter Measurement and Control Equipment and other ancillary equipment and the pipeline within the Delivery

Facilities Site upstream of the Connected System Point and forming part of the Transportation System;

"Transporter Measurement and Control Equipment" means the biomethane network entry facility including filtration, metering gas quality measurement (including CV) diversion/ROV, system odourisation and compression system and the meter owned or to be owned and operated by the Transporter forming part of the Transportation Entry Facilities;

"Transportation System" means the pipeline system measurement and control equipment operated by the Transporter for the conveyance of Natural Gas from the Connected System Point and all other pipelines comprising the Natural Gas transportation system operated by the Transporter under the Code of Operations;

"Wilful Misconduct" means, in relation to any party to this Agreement, an intentional and conscious, or reckless, disregard of any provision of this Agreement or of good gas industry practice by any of such party's, or its Affiliates', directors or senior supervisory or management employees but shall not include any act, omission, error of judgement or mistake made in the exercise of good faith, and which exercise of such good faith is:

- (a) done or made in the exercise of any function, authority or discretion conferred on that party under this Agreement; or
- (b) justifiable by special circumstances including, but not limited to, the safeguarding of life, property or the environment and other emergency situations.

1.2 Where the sense requires, terms denoting the singular only shall include the plural and vice-versa, and reference to a gender shall include any other gender.

1.3 Unless otherwise stated, a reference to a Clause, Section or Schedule is a reference to a clause, section or schedule of this Agreement.

1.4 The Schedules to this Agreement shall form an integral part of this Agreement and any Clause which contains a reference to a Schedule shall be read as if all of such part or Section of the Schedule which is referred to was set out in the main body of the Clause itself but, if there is a conflict, the provisions of the main body of this Agreement shall prevail over such Schedule to the extent necessary.

1.5 Clause, paragraph and Section numbers and headings are inserted for convenience of reference only and shall not affect the construction of this Agreement.

- 1.6 References to “day”, “month” and “year” shall, unless otherwise stated, mean a calendar day, month and year respectively.
- 1.7 Unless otherwise expressly provided herein, reference to an agreement or instrument is to the same as properly amended, modified, novated or replaced from time to time.
- 1.8 Reference to a statute, by-law, regulation, rule, delegated legislation or order is to the same as amended, modified consolidated or re-enacted from time to time and to any by-law, regulation, rule, delegated legislation or order made thereunder.
- 1.9 Unless otherwise defined in this Agreement or otherwise agreed in writing between the parties hereto, terms defined in the Code of Operations from time to time shall have the same meaning when used in this Agreement.
- 1.10 The words “include” and “including” shall be construed without limitation.
- 1.11 Unless otherwise stated, references to time are to time in Ireland.
- 1.12 For the purposes of the final determination of any values herein, all values will be calculated to two (2) decimal places by initially calculating without rounding, adding the value five (5) to the value in the 3rd decimal place and then deleting all decimals to the right of the 2nd decimal.
- 1.13 The determination of any quantities herein is based on, a “Day” or “day” as a period of twenty-four (24) hours. In the event of a twenty-three (23) or twenty-five (25) hour Day or day, a quantity set out in this Agreement shall be adjusted by multiplying such quantity by the number of hours on such Day or day and dividing the result thereof by twenty-four (24).
- 1.14 Unless otherwise provided, references in a Schedule to this Agreement to Sections and paragraphs are references to Sections and paragraphs of the Schedule in which such reference is made.
- 1.15 Natural Gas which flows from the DFO Delivery Facility to the Transportation System shall be deemed to be “delivered” at the Connected System Point.

2. EFFECTIVE DATE AND DURATION

- 2.1 This Agreement shall take effect on and from the Effective Date and shall continue in force and effect unless and until terminated pursuant to Clause 2.3 or Clause 14.

2.2 Notwithstanding any other provisions of this Agreement it is agreed between the parties hereto that Natural Gas may not be delivered to the Transportation System at the Connected System Point until such time as:

- (a) the DFO Delivery Facility shall have been satisfactorily commissioned on the Delivery Facilities Site to the satisfaction of the Transporter;
- (b) an RNG Entry Point has been declared pursuant to the Code of Operations at which Natural Gas produced at the DFO Delivery Facility may be delivered;
- (c) a Shipper is registered at the RNG Entry Point at the Connected System Point pursuant to the Code of Operations;
- (d) the Delivery Facility Operator has granted or procured the transfer or grant to the Transporter all necessary consents, wayleaves, easements, property and access rights in connection with the installation, maintenance, operation, repair, replacement or otherwise of all pipelines and facilities to be constructed by or on behalf of the Transporter within the Delivery Facilities Site;
- (e) the Delivery Facility Operator shall have provided to the Transporter or procured the grant to the Transporter of such rights of access as the Transporter may require in order to inspect, maintain, operate, repair or replace the Transportation Entry Facilities the Transporter Measurement and Control Equipment and any such additional ancillary equipment and/or facilities as the Transporter considers necessary in connection with the operation of the Transportation Entry Facilities and the Transportation System and the delivery of Natural Gas from the DFO Delivery Facility to the Transportation System; and
- (f) the Delivery Facility Operator shall have provided to the Transporter evidence that the DFO has effected insurances as required by Clause 9.8.

and each Operator shall use all reasonable endeavours to satisfy or procure satisfaction of relevant conditions as applicable to it as soon as is reasonably practicable.

2.3 Notwithstanding any other provisions of this Agreement, in the event that any of the conditions referenced in Clause 2.2 has not been either satisfied or waived by the parties hereto by the first anniversary of the Effective Date or such later date as the Operators may otherwise agree in writing, this Agreement may be terminated forthwith by one Operator serving written notice on the other Operator to such effect at any time thereafter and while such condition or conditions remain unsatisfied. Until such time as such notice is given, the Operators shall continue to use all reasonable endeavours to satisfy or procure satisfaction of any outstanding condition(s) as soon as is reasonably practicable.

2.4 If at any time following:

- (a) the expiry of twelve (12) months after the Effective Date, no Natural Gas has been delivered from the DFO Delivery Facility to the Transportation System and allocated to a Shipper at the RNG Entry Point at the Connected System Point (other than as a result of Force Majeure); or
- (b) after the first Day in respect of which Natural Gas delivered from the DFO Delivery Facility to the Transportation System has been allocated to a Shipper, for a continuous period of twelve (12) months (other than as a result of damage to or failure of any part of the Delivery Facility or the Transportation System where such damage is other than as a result of a Force Majeure Event and is being remedied with reasonable diligence) no Natural Gas has been tendered for delivery at the Entry Point at the Connected System Point;

and in either event:

- (i) it is not reasonably foreseeable that within the following twelve (12) months Natural Gas will be tendered for delivery at the Connected System Point; and
- (ii) as a result of the circumstances described in paragraphs (a) or (b) and paragraph (i) above, it is no longer economic for either Operator to maintain the connection of its System to the other Operator's System,

the Operators shall discuss in good faith such circumstances and what steps may be taken with a view to agreeing a basis on which such continued connection may be made economic or the termination of this Agreement.

3. GENERAL TERMS AND CONDITIONS

3.1 Subject to the terms of this Agreement, it is agreed that the Delivery Facility Operator shall be entitled to keep the DFO Delivery Facility connected to the Transportation System at the Connected System Point and that the Transporter shall be entitled to keep the Transportation System connected to the DFO Delivery Facility at the Connected System Point.

3.2 The Delivery Facility Operator and the Transporter agree that, in all material respects, the DFO Delivery Facility and the Transportation System shall prior to first Natural Gas flows at the Connected System Point be, and shall thereafter continue to be, technically and operationally compatible at the Connected System Point, such that the Transportation System and the DFO Delivery Facility may safely be connected for the purpose of Natural Gas flowing from the DFO Delivery Facility to the Transportation System in accordance with the provisions of this Agreement.

If the Transporter proposes to modify the Transportation Entry Facilities or the Delivery Facility Operator proposes to modify the DFO Delivery Facility in each case such that the DFO Delivery Facility and the Transportation Entry Facilities would cease

to be technically and/or operationally compatible following such modification, then the Operator proposing the modification shall give the other Operator as much advance notice of the same as is reasonably practicable. Following the giving of such notice the Operators shall meet as soon as reasonably practical to discuss in good faith the implications of the proposed modification on the DFO Delivery Facility or the Transportation Entry Facilities (as the case may be).

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

Without prejudice to the foregoing and for the avoidance of doubt:

- (a) the Transporter shall in no circumstances be liable for any modifications required to any plant equipment or facilities upstream of DFO Delivery Facility;
- (b) the Delivery Facility Operator shall in no circumstances be liable for any modifications required to any part of the Transportation System downstream of the Transportation Entry Facilities;
- (c) the Transporter shall not be liable to pay the Delivery Facility Operator any costs in respect of modifications to the DFO Delivery Facility that arise as a result of any modifications to the Transportation System (other than the Transportation Entry Facilities) and the Delivery Facility Operator shall not be liable to pay the Transporter any costs in respect of modifications to the Transportation Entry Facility that arise as a result of any modifications to any plant, equipment or facilities upstream of the DFO Delivery Facility.

3.3 Nothing in this Agreement shall:

- (a) impose or confer on the Delivery Facility Operator any obligation or entitlement to deliver Natural Gas to the Transportation System or on the Transporter any obligation or entitlement to offtake Natural Gas from the

DFO Delivery Facility, or in either case as to the rates, quantities, pressure and quality of Natural Gas so delivered or offtaken, (it being acknowledged that the only persons having such obligations or entitlements with respect to the Transportation System are Shippers);

- (b) make any provision of any Transportation Arrangement binding as between the Delivery Facility Operator and the Transporter;
- (c) impose or confer on any Shipper or any Third Party any obligation or entitlement to deliver Natural Gas to or offtake Natural Gas from the applicable System (but without prejudice to any Transportation Arrangement); or
- (d) take effect as a warranty against defects by either Operator in relation to its System.

3.4 Subject to Clause 3.2, nothing in this Agreement shall be construed as requiring either Operator to reinforce any part of its System or to take any other step with a view to it being feasible to tender Natural Gas for delivery, or accept Natural Gas made available for delivery into its System, as applicable, at the Connected System Point in any quantities or at any rate, nor to accept an application by any Shipper for any capacity in the Transportation System.

3.5 The Transporter shall not be liable to the Delivery Facility Operator or any Third Party in respect of any failure by Shippers to comply with any provision of any Transportation Arrangements nor shall either Operator be liable to the other for any failure of that Operator to make Natural Gas (at any rate or pressure or of any quality or in any quantity) available for offtake from, or accept delivery of Natural Gas into, its System.

3.6 The Delivery Facility Operator acknowledges that the Transportation Arrangements contain or may contain provisions pursuant to which the ability of the Transporter to take delivery of Natural Gas tendered for delivery to the Transportation System may be suspended or discontinued and/or the rate of such delivery or offtake may be limited.

3.7 The Delivery Facility Operator shall notify the Transporter and any affected Shipper in a timely manner of any and all issues which may affect the availability or operation of the DFO Delivery Facility and/or the ability of the Delivery Facility Operator and/or the DFO Delivery Facility to make Natural Gas available for delivery to the Transportation System at the Connected System Point.

3.8 It is acknowledged:

- (a) that the Transporter is responsible for determining the amount of capacity in the Transportation System which shall be made available at the RNG Entry Point to the Transportation System at the Connected System Point; and
- (b) by the Delivery Facility Operator that the number of Shippers which may be registered at the RNG Entry Point at the Connected System Point in respect of any Day shall be regulated pursuant to the Code of Operations; and
- (c) that Natural Gas may not be delivered at the RNG Entry Point at the Connected System Point on any Day on which there is no Registered Shipper at that RNG Entry Point.

3.9 Each Operator will perform its duties under this Agreement in accordance with the standard of a Reasonable and Prudent Operator and in compliance with the terms and conditions of this Agreement

3.10 Where pursuant to any Legal Requirement, either Operator is required to take a particular action or not to take or to cease a particular action, nothing in this Agreement shall prevent such Operator from taking such action or not taking, or ceasing to take, such action and such Operator shall not be in breach of any of its obligations to the other Operator pursuant to this Agreement where such Operator acts in accordance with such Legal Requirement.

3.11 The remotely operated valve which forms part of the Transporter Measurement and Control Equipment and which isolates the Transportation System from the DFO Delivery Facility has been designed and configured to automatically close (as described in Schedule 5) and can be manually closed on site or remotely closed including in the circumstances as described in Schedule 5, Section 6 paragraph 6.

3.12 Without prejudice to any other rights of the Transporter under this Agreement the Delivery Facility Operator acknowledges that the Transporter, acting as a Reasonable and Prudent Operator responsible for the operation of the Transportation System, may in certain circumstances close the remotely operated valve which forms part of the Transporter Measurement and Control Equipment and which isolates the Transportation System from the DFO Delivery Facility.

4. OPERATING PROCEDURES AND COMMUNICATION PLAN AND PRIORITY

4.1 The Operators shall comply with the operating procedures (otherwise Local Operating Procedures or LOPs) further detailed in Schedule 7⁴ (including all agreed amendments thereto) and such other operating procedures as may be agreed between them from time to time.

⁴ GNI to develop and list LOPs.

- 4.2 The Transporter will develop and notify to the DFO a communications plan outlining the process for operational communications between the DFO and the Transporter (the "Communications Plan"). The Transporter may vary the Communications Plan from time to time. The DFO shall comply with any Communications Plan so notified to the DFO by the Transporter from time to time.
- 4.3 In the event of any inconsistency between the Operators obligations pursuant to any Legal Requirement, this Agreement, and/or any Local Operating Procedure(s) such inconsistencies shall subject as set out below be resolved in the following order of priority:
- (a) Legal Requirement
 - (b) this Agreement
 - (c) Local Operating Procedure(s)
 - (d) the Communications Plan

5. DELIVERY AND OFFTAKE PROVISIONS

- 5.1 The provisions of Section 4 of Schedule 2 hereto shall apply with respect to the pressure of Natural Gas made available for delivery at the Connected System Point.
- 5.2 Natural Gas which is tendered for delivery at the Connected System Point shall meet the Gas Quality Specification.
- 5.3 Subject as hereinafter set out the provisions of Schedules 3 and 4 shall apply in relation to the Connected System Point, including with respect to quantities and gas quality of Natural Gas at the Connected System Point.

The provisions of Schedule 5 shall apply for the purpose of the monitoring and measurement of the pressure, quantity and quality of Natural Gas flowing from DFO Delivery Facility to the Transportation System, at the Connected System Point.

- 5.4 The Measurement Standards as set out in Schedule 5, Section 6 paragraph 2 have been developed by the Transporter having regard to the Measurement Risk Assessment as at the date of this Agreement. The Transporter may at any time acting as an RPO require an updated assessment of measurement risks and an updated or new Measurement Risk Assessment. Any such updated or new Measurement Risk Assessment shall supersede the previously applicable Measurement Risk Assessment and where applicable the Measurement Standards.

The DFO shall fully co-operate with the Transporter in the undertaking and preparation of any such Measurement Risk Assessment.

The Transporter may notify to the DFO revised or new Measurement Standards following any such Measurement Risk Assessment (which new or revised Measurement Standards shall vary and/or replace the Measurement Standards as set out in Schedule 5 Section 6) and shall apply with effect from the date as notified by the Transporter and shall be the Measurement Standards for the purpose of this Agreement.

The DFO acknowledges that without prejudice to the generality of the foregoing the Transporter may require or undertake a new or revised Measurement Risk Assessment:

- (a) as required under any then applicable Measurement Risk Assessment; or
- (b) if any applicable licence issued by the EPA related to the DFO Delivery Facility and/or the production of RNG at that facility – is amended or replaced or
- (c) if the Transporter receives a request for approval under clause 5.5; or
- (d) if the Transporter is in receipt of (or becomes aware of) the existence of any information or circumstances which in the Transporter’s opinion would necessitate an application for the Transporter approval under clause 5.5;
- (e) the Transporter is of the view that there is a variation to the components or constituent elements of Renewable Natural Gas produced at the Delivery Facility for onward delivery to the Transportation System including but not limited to those components in Schedule 4;

the process associated with a new or revised Measurement Risk Assessment shall be set out in Local Operating Procedures [*Insert details*].

5.5 The DFO shall not without the prior written approval of the Transporter:

- (a) tender for delivery at the Connected System Point any Renewable Natural Gas produced from any feedstock other than feedstock (or sourced from a different supplier) to the feedstock or material contemplated by then applicable Measurement Risk Assessment and any applicable license issued by the EPA.
- (b) not deliver or tender for delivery Renewable Natural Gas produced other than at the DFO Delivery Facility.

Without prejudice to the foregoing the Parties shall comply with the Local Operating Procedure which includes processes associated with approval under this clause 5.5.

5.6 Any requirement for approval by the Transporter pursuant to this clause 5 is solely for the purpose of enabling the Transporter to consider the requirement or otherwise for a new or revised Measurement Risk Assessment and any approval granted by the

Transporter shall only be construed as meaning the Transporter has considered the application for that purpose and not otherwise.

6. MAINTENANCE

6.1 Without prejudice to Clause 8, the Operators agree to exchange information as to, and to take reasonable steps to co-ordinate, their respective plans for maintenance of their respective Systems to the extent that any such maintenance plans may affect the flow of Natural Gas at the Connected System Point.

6.2 Where the operation of any pipeline inspection or maintenance of equipment in the Transportation System requires a specific rate of delivery of Natural Gas to the Transportation System at the Connected System Point for any period, each Operator agrees to co-operate with the other as appropriate and use what means it possesses with a view to ensuring that such rate of delivery is maintained for such period.

7. EMERGENCIES

7.1 The existence of an Emergency on the Transportation System shall be determined by the Transporter, irrespective of the cause of the Emergency and of whether the Transporter or any other Person may have caused or contributed to the Emergency. An Emergency on the Transportation System shall continue until such time as the Transporter determines that the circumstances which gave rise to the Emergency no longer apply and that normal operation of the Transportation System may be resumed. The Transporter shall inform the Delivery Facility Operator expeditiously of the details of an Emergency on the Transportation System which materially affects, or has the potential to materially affect, the delivery of Natural Gas into the Transportation System at the Connected System Point.

7.2 The existence of an Emergency in the DFO Delivery Facility shall be determined by the Delivery Facility Operator, irrespective of the cause of the Emergency and of whether the Delivery Facility Operator or any other Person may have caused or contributed to the Emergency. An Emergency in the DFO Delivery Facility shall continue until such time as the Delivery Facility Operator determines that the circumstances which gave rise to the Emergency no longer apply and that normal operation of the DFO Delivery Facility may be resumed. The Delivery Facility Operator shall inform the Transporter expeditiously of the details of an Emergency on or affecting the DFO Delivery Facility which materially affects, or has the potential to so materially affect, the delivery of Natural Gas into the Transportation System at the Connected System Point.

7.3 Both Operators shall use all reasonable endeavours to assist one another to restore safe operation of their respective Systems as soon as reasonably practicable after notification by an Operator of an Emergency (without prejudice to any right of the Operator which determined the existence of an Emergency on its System to take any

action itself in such event) provided that this shall not require the Transporter to act in breach, of any Transportation Arrangement.

7.4

- (a) To the extent that the Transporter is obliged to comply with the procedures and instructions established by the National Gas Emergency Manager or the Natural Gas Emergency Plan, the Delivery Facility Operator shall co-operate with the Transporter to facilitate compliance by the Transporter with such procedures and instructions.
- (b) To the extent that the Delivery Facility Operator is obliged to comply with the procedures and instructions established by the National Gas Emergency Manager or the Natural Gas Emergency Plan, the Transporter shall co-operate with the Delivery Facility Operator to facilitate compliance by the Delivery Facility Operator with such procedures and instructions.

7.5 Without prejudice to any other right of the Delivery Facility Operator or of the Transporter (as the case may be) to reduce or discontinue the flow of Natural Gas at the Connected System Point, if, as a result of an Emergency or circumstances which could give rise to an Emergency affecting the Transportation System or any part of the Transportation System, it is necessary for the Delivery Facility Operator or the Transporter (as the case may be) to take steps to reduce the level of demand on the Transportation System or such part of it, the Transporter, may require the rate at which Natural Gas is being delivered at the Connected System Point to be reduced:

- (a) in accordance with any Directive of a Competent Authority relating to such reduction; or
- (b) by such amount or to such rate as the Transporter may reasonably require to protect or maintain the integrity of the Transportation System; or
- (c) to relieve or prevent an Emergency or anticipated Emergency; or
- (d) to comply with the requirements, procedures or instructions of the National Gas Emergency Manager or the Natural Gas Emergency Plan.

8. INFORMATION AND CONFIDENTIALITY

8.1 The Transporter may:

- (a) disclose this Agreement to Shippers and may also disclose this Agreement in accordance with a Directive of any Competent Authority. The Delivery Facility Operator and the Transporter may disclose the terms of this Agreement to any interested Third Party; and
- (b) disclose to the DFO the expected expiry date of the Long Term Entry Capacity Booking of a Shipper at the RNG Entry Point at the Connected System Point.

- 8.2 The Transporter may disclose any information obtained from the Delivery Facility Operator pursuant to this Agreement (“Information”)
- (a) to any Shipper and to any agent of any such Shipper or so far as required for the purposes of, or in order to comply with, any applicable Transportation Arrangements; and
 - (b) to the Regulator and/or to any Competent Authority.
- 8.3 Save as provided in Clause 8.2, each Operator undertakes to keep all information received hereunder strictly confidential and shall not disclose any information received by it from the other Operator to any Third Party without the prior written consent of the Operator from whom it received such information, except:
- (a) to the extent that such disclosure is required by law or any regulatory authority (including any recognized stock exchange) or pursuant to any judicial or other arbitral process or tribunal having jurisdiction in relation to the party (or applicable Affiliate) being required to disclose the same;
 - (b) to an Expert to the extent that such disclosure is required in the course of or for the purposes of a reference made to such Expert pursuant to the terms of this Agreement;
 - (c) to the extent that such information is or lawfully comes into the public domain other than by a breach of this Clause 8.3 or which is lawfully received from a Third Party not under an obligation of confidentiality to the disclosing Operator;
 - (d) that the Transporter may disclose to Shippers any notice of a Curtailment at the Connected System Point and/or the contents of such notices given by the Delivery Facility Operator to the Transporter;
 - (e) to an Affiliate of a party to this Agreement provided that such party shall procure that such Affiliate does not further disclose such information;
 - (f) in respect of any party to this Agreement or any of its Affiliates, to any of its directors, officers, employees, consultants, external legal advisers, insurers, insurance brokers or statutory auditors or to any of its in-house contractors (being a contractor or an employee of such contractor working as a member of staff of such party or any of its Affiliates but not falling within the legal definition of an employee) who is made aware of the confidential nature of such information and is bound by the terms of their employment or engagement by such party or Affiliate or by separate written agreement to maintain such information in confidence; or
 - (g) to any bona fide potential permitted assignee of a party of any interest in this Agreement, provided that such party obtains a similar undertaking of confidentiality from such potential permitted assignee, together with an undertaking from such potential permitted assignee to utilise any information so disclosed solely for the purposes of the proposed assignment.

- 8.4 The Transporter shall jointly with the Delivery Facility Operator own all data and information obtained from the Delivery Facility Operator and each Operator may:
- (a) without the consent of the other Operator use (excluding by way of disclosure) such data and information in connection with the operation of its System (including, in the case of the Transporter, the GNI (IT) Systems) and for the purposes contemplated by this Agreement; and
 - (b) subject (where applicable) to the provisions of clause 8.3, disclose such data and information as provided pursuant to this Agreement or in the case of the Transporter pursuant to any other agreement between the parties.

Nothing in this Agreement shall prevent either Operator from using or disclosing data and information in accordance with any other agreements made between them.

- 8.5 Subject to any requirement of any procedure established pursuant to Clause 4.1 and save as provided in Schedules 3 and 5, nothing in this Agreement shall require the Transporter or the Delivery Facility Operator to act upon or in accordance with any instruction or information received from the other (but without prejudice to any Legal Requirement).

This Clause 8 is without prejudice to the provisions any Transportation Arrangement as to the ownership of information or confidentiality as between the parties thereto.

9. LIABILITY AND INSURANCES

- 9.1 Subject to clause 3.2 and 9.5 the Transporter shall have no liability for any loss, damage or liability which the Delivery Facility Operator or its respective employees, servants, agents, contractors or sub-contractors may suffer in consequence of the Delivery Facility being connected at the Connected System Point to the Transportation System, as a result of anything done or not done (whether negligently or otherwise) by the Transporter, or its Affiliates arising out of or in connection with the performance, mis performance or non-performance of this Agreement (which, for the avoidance of doubt, shall include all loss or damage to the DFO Delivery Facility and all loss, damage or liability arising during or as a result of physical flows of Natural Gas at the Connected System Point howsoever arising and by whomsoever caused and regardless of any negligence or breach of duty (statutory or otherwise) by the Transporter. The Delivery Facility Operator waives any liability (in contract, tort or otherwise) of the Transporter in respect of any such loss, damage or liability suffered or incurred by the Delivery Facility Operator and the Delivery Facility Operator shall indemnify and keep indemnified the Transporter in respect of any such loss or damage and any loss or damage to the DFO Delivery Facility.]
- 9.2 Subject to clause 3.2 and 9.5 the Delivery Facility Operator shall have no liability to the Transporter for any loss, damage or liability which the Transporter or its respective employees, servants, agents, contractors or sub-contractors may suffer in

consequence of the Transportation System being connected to the DFO Delivery Facility at the Connected System Point, as a result of anything done or not done (whether negligently or otherwise) by the Delivery Facility Operator or its Affiliates arising out of or in connection with the performance, mis-performance or non-performance of this Agreement (which, for the avoidance of doubt, shall include loss or damage to the Transportation Entry Facilities) and all loss, damage or liability arising during or as a result of physical flows of Natural Gas at the Connected System Point howsoever arising and by whomsoever caused and regardless of any negligence or breach of duty (statutory or otherwise) by the Delivery Facility Operator or its Affiliates and the Transporter accordingly waives any liability (in contract, tort or otherwise) of the Delivery Facility Operator in respect of any such loss, damage or liability suffered or incurred by the Transporter.

9.3 Save as expressly provided herein the liability of the Parties (and each of them) to any Third Party in respect of loss, damage or destruction of property or any injury or death of Third Parties shall be borne by the Parties according to their liability at law and each of the Delivery Facility Operator and the Transporter shall indemnify the other in respect of any such loss, damage, injury or death to the extent of its liability at law.

9.4 Without prejudice to any other provision of this Agreement excluding or limiting the liability of the Transporter or the Delivery Facility Operator (including the provisions of Clauses 2, 3, 9.1, 9.2, 9.3 and 9.5), no Party hereunder (the "first party") shall be liable to another party hereunder (the "second party") for:

- (a) any claims for loss of a Third Party, any claims for damage of a Third Party, and/or any claims for expense of a Third Party; or
- (b) any indirect or consequential loss, any indirect or consequential damage, any indirect or consequential costs and/or any indirect or consequential financial harm; or
- (c) any loss of profit, loss of revenue, loss of use, loss of contract, loss of goodwill, or increased cost of working;
- (d) personal injury or illness or death, of any of the second party's own officers, directors, employees and agents and/or those of its Affiliates, contractors and/or sub-contractors; and
- (e) loss or damage to the second party's own property or the property of its Affiliates, contractors and/or sub-contractors and/or its and/or their respective officers, directors, employees and agents

of whatever kind and nature suffered by the second party under or in connection with this Agreement howsoever caused (including the default or negligence of the first party or a breach of duty owed in law by the first party).

- 9.5 Any relief from or limitation of liability pursuant to this Agreement shall not and shall not be deemed to extend to or relieve any party hereto from any liability or obligations with respect to such party's fraud or Wilful Misconduct.
- 9.6 Nothing in this Clause 9 shall exclude the liability of either Operator or other Person entitled to the benefit of the indemnities or relief from, or limitation of, liability herein contained in respect of death or personal injury to the extent that such exclusion is prohibited by law.
- 9.7 Any relief from, or limitation of liability in favour of a Party under this clause 9 shall extend to and apply for the benefit of its respective Affiliates which shall be regarded as a party for such purpose and its and each of their directors, officers, employees, contractors and agents. The Affiliates, directors, officers and employees of each Party have the benefit of such relief from, or limitation of, liability only in respect of any claim which relates to circumstances that are within the ambit of this Agreement in the same circumstances under which the relevant Operator would have had the benefit of such relief from, or limitation of, liability under this Agreement.
- 9.8 Insurances
- (a) Without prejudice to its obligations under this Agreement, including its indemnity obligations, the Delivery Facility Operator agrees to procure and maintain in effect insurance cover with a reputable insurance company or companies providing an adequate level of cover for any liabilities which may arise under or in connection with this Agreement including but not limited to:
 - (i) Public/products liability insurance with a limit of indemnity in the amount of not less than €6.5m for any one event in the aggregate in respect of products liability and sudden and accidental pollution;
 - (ii) employers liability insurance in an amount not less than €13m for any one event and unlimited in aggregate; and
 - (iii) motor insurance with a third party property damage limit of not less than €5m;
 - (iv) professional indemnity insurance with a limit of not less than €2 million in aggregate in respect of any one year.
 - (b) The Delivery Facility Operator will extend its insurance policies (subject to the terms, exceptions and conditions of the policy) to indemnify the Transporter in respect of any loss or damage caused or suffered by any breach by the Delivery Facility Operator of its obligations under this Agreement, including its indemnity obligations;
 - (c) Upon request, the Delivery Facility Operator shall promptly furnish to the Transporter evidence that the required policies (including details of all endorsements) have been procured and have been maintained.

10. AMENDMENT

- 10.1 This Agreement shall not be amended except by written agreement of the Transporter and the Delivery Facility Operator and such amendment shall not be valid unless duly signed and executed by authorized representatives of the Transporter and the Delivery Facility Operator.
- 10.2 The Parties to this Agreement shall amend this Agreement in writing to ensure that it is consistent with any Legal Requirement.
- 10.3 It is acknowledged that any provision of the Code of Operations which is or comes to be in conflict with any provision of this Agreement will, as between the Transporter and Shippers, prevail over such provision of this Agreement.
- 10.4 Without prejudice to Clause 10.2, if either Operator wishes to amend this Agreement, it shall notify the other Operator:
- (a) of the nature and extent of the required amendment; and
 - (b) the reason for such amendment.

Following any such notification, both Operators shall as soon as reasonably practicable enter into good faith negotiations with a view to accommodating such amendment where appropriate. In the event that they have been unable to reach agreement in good faith to accommodate such amendment, then the terms and conditions set out in this Agreement, as may previously have been amended in whole or in part by written agreement between the Operators, shall remain in full force and effect.

11. EXPERT

- 11.1 Wherever this Agreement provides or the Operators agree that any matter is to be referred to an Expert for determination, the provisions of this Clause 11 shall apply.
- 11.2 An Operator seeking the referral of such matter to an Expert shall give written 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.
- 11.3 If within twenty-one (21) Business Days from the service of the said notice, the Operators have failed to agree upon the identity of an Expert and/or the terms of reference then the matter may be referred by either Operator to the President of the Energy Institute who shall be requested to select an Expert in accordance with this

Clause 11 and, if willing to do so, settle the terms of reference of such Expert within thirty (30) Business Days of such referral.

- 11.4 Upon an Expert being agreed or selected under the foregoing provisions of this Clause 11, either Operator shall forthwith notify such Expert in writing of his selection and of the proposed terms of his appointment and shall request him within fourteen (14) Business Days to confirm to the Operators whether or not he is willing and able to accept the appointment on the terms proposed.
- 11.5 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, or the President of the Energy Institute is unable or unwilling to select an Expert and/or settle the terms of reference of such Expert, unless the Operators are able to agree on the appointment and terms of reference of another Expert, the matter may be referred by either Operator to the President of the Law Society of Ireland 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.
- 11.6 No Person shall be appointed to act as the Expert under this Agreement:
- (a) who at the time of his appointment or within the immediately preceding six months is a director, office holder or employee of, or directly or indirectly retained as a consultant to, either of the Operators or an Affiliate of any of them; and
 - (b) unless he shall have the relevant experience and/or training to determine the matter in dispute in accordance with the terms of reference.
- 11.7 The Expert shall be deemed not to be an arbitrator but shall render his determination as an expert and the law relating to arbitration shall not apply to such Expert or his determination or the procedure by which he reaches his determination.
- 11.8 The determination of the Expert in accordance with the provisions of this Clause 11 shall be final and binding upon the Operators save in the event of fraud or manifest error in which case another expert may be appointed in accordance with the provisions of this Clause 11.
- 11.9 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.

11.10 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.

12. FORCE MAJEURE

12.1 For the avoidance of doubt, the provisions of this Agreement shall be without prejudice to any question as to whether either Operator is entitled, as a result of circumstances constituting a Force Majeure Event for the purposes of this Agreement, to claim an event of force majeure has arisen pursuant to any other agreement it has entered into, or to any relief in respect of its obligations (or is subject to any liability in respect of its obligations) under any such other agreement.

12.2 A "Force Majeure Event" shall mean any event or circumstance or combination of events and circumstances which is beyond the reasonable control of an Operator and which, or the effect of which, adversely affects the performance by that Operator of its obligations under or pursuant to this Agreement provided, however, that any such event or circumstance, or combination of events and circumstances, shall not constitute a Force Majeure Event hereunder if it could have been prevented, overcome, or remedied by the affected Operator through the exercise of reasonable diligence and reasonable care. Force Majeure Events hereunder shall include each of the following events and circumstances, but only to the extent that each satisfies the above requirements:

- (a) any act of war (whether declared or undeclared), hostilities, invasion, armed conflict or act of foreign enemy, blockade, embargo, mobilisation, requisition, revolution, riot, insurrection, civil commotion or disorder, act of terrorism, or sabotage;
- (b) any act of God;
- (c) radioactive contamination, ionising radiation or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, or radioactive, toxic, explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof;
- (d) strikes, works to rule or go-slows;
- (e) earthquake, tidal wave, flood, storm, cyclone, typhoon, tornado or lightning, landslide or landslide or adverse weather or climatic conditions;
- (f) fire or explosion;
- (g) epidemic or plague;
- (h) unlawful, illegal, criminal or negligent acts of Third Parties;
- (i) equipment failure; or

- (j) any event or circumstances of a nature analogous to the foregoing.

12.3

- (a) If, by reason of one or more Force Majeure Events, an Operator is wholly or partially unable to carry out its obligations under this Agreement, the affected Operator shall give the other Operator notice of the Force Majeure Event(s) as soon as reasonably practicable, describing the Force Majeure Event(s) and the obligations affected together with an estimate of the period of time that the affected Operator will be unable to perform such obligations and any other relevant matters.
- (b) Failure by the affected Operator to give notice of a Force Majeure Event to the other Operator as required by Clause 12.3(a) shall not prevent the affected Operator from giving such notice at a later time; provided however that, in such case, the affected Operator shall not be excused pursuant to Clause 12.5 from any failure or delay in complying with its obligations under or pursuant to this Agreement during the period up until the notice required by Clause 12.3(a) has been given.

12.4 The affected Operator shall use all reasonable efforts to mitigate the effects of a Force Majeure Event, including the payment of all sums of money which are reasonable and cost-effective in the light of the likely efficacy of the mitigation measures. This Clause 12.4 shall not oblige the affected Operator to settle any labour dispute.

12.5 So long as the affected Operator has given notice pursuant to Clause 12.3(a) and at all times since the occurrence of the Force Majeure Event complied with its obligations under Clause 12.4 and continues so to comply, then:

- (a) the affected Operator shall not be liable for any failure or delay in performing its obligations (other than the obligation on the part of either Operator to make any payments to the other Operator under or pursuant to this Agreement) to the extent that such failure or delay has been caused or contributed to by one or more Force Majeure Event(s) or its or their effects or by any combination thereof; and
- (b) the time limits and deadlines for the performance by the affected Operator of its obligations under this Agreement (other than the obligation on the part of either Operator to make any payments to the other Operator under or pursuant to this Agreement) which are affected by such Force Majeure Event shall be extended Day to Day for so long as the relevant Force Majeure Event or its effects continue.

13. ASSIGNMENT

13.1 Neither Operator shall assign its rights and obligations under this Agreement in whole or in part without the prior written consent of the other Operator provided however

that such consent shall not be unreasonably withheld or delayed in the case of an assignment by the Delivery Facility Operator to a successor operator responsible for the operation of the DFO Delivery Facility or in the case of an assignment by the Transporter to a successor as licensee under the Transportation Licences for the operation of the Transportation System.

Any successor as Delivery Facility Operator or Transporter shall enter into an Agreement with the other Operator agreeing to be bound by the terms of this Agreement.

For the avoidance of doubt any assignment or otherwise of the Delivery Facilities Site and other property or equipment relevant for the purpose of this Agreement shall not relieve the Delivery Facility Operator from its obligations (including its obligations of indemnity) and otherwise pursuant to this Agreement.

- 13.2 Notwithstanding anything to the contrary in clause 13.1 nothing shall prevent the Transporter from assigning the benefit or transferring the burden of this Agreement to an Affiliate, such Affiliate to have all the necessary consents, licences, permits, approvals, authorisation and any such other requirements necessary for the completion by it of its obligations under this Agreement and the Transporter shall not require the consent of the DFO in respect of any such assignment.

14. TERMINATION

- 14.1 Subject to the prior approval of the Regulator (the requirement for which approval may be expressly waived in writing by the Regulator), either Operator (the “first Operator”) shall have the right to terminate this Agreement on not less than one (1) month’s written notice to the other Operator on or at any time after the occurrence of any of the following events or circumstances:
- (a) the other Operator is in material breach of any of its obligations under this Agreement and the Operator in material breach has failed to remedy such material breach (if the material breach is capable of being remedied) within such period as is reasonably specified for that purpose in a notice (“Default Notice”) issued by the first Operator to the Operator in default. Any such Default Notice shall specify the material breach giving full particulars (in reasonable detail) of the remedy and the period (which shall not be less than two (2) months) within which to remedy the material breach; or
 - (b) a Force Majeure Event has subsisted for a continuous period of two years; or
 - (c) it or the other Operator ceases to have any legal or regulatory approvals necessary for it to perform its role as Operator of its System.

14.2 Either Operator may terminate this Agreement on ten (10) days' written notice if a receiver, examiner or administrator is appointed of the whole or any part of the other Operator's assets or forthwith if the other Operator is struck off the Register of Companies in the jurisdiction where it is incorporated or an order is made or a resolution is passed for winding up the other Operator (unless such order or resolution is part of a voluntary scheme for the reconstruction or amalgamation of the Operator as a solvent corporation and the resulting corporation, if a different legal Person, undertakes to be bound by this Agreement), or if anything analogous to the foregoing occurs in any applicable jurisdiction.

14.3 This Agreement shall absolutely cease and terminate on the expiry of any notice period specified in any notice of termination issued pursuant to this Agreement unless any such notice of termination is withdrawn prior to its expiry. Termination shall be without prejudice to the prior rights or liabilities of the parties hereunder provided however neither party shall have any liability to the other as a result of such termination.

15. CYBER-SECURITY

15.1 The Transporter as operator of the Transportation System is an operator of essential services within the meaning of Applicable NIS Law.

15.2 The Transporter may identify and publish standards which will be adopted and/or applied by the Transporter in connection with the operation of its network and information systems and the DFO shall ensure that any standards and specification adopted by the DFO in the operation of the Delivery Facility and the physical connection of the DFO Delivery Facility to the Transportation System (including for avoidance of doubt the connection and interaction between the DFO's information technology (IT) and operational technology (OT) and those of the Transporter) are compatible with any standards published by the Transporter in accordance with this clause 15.

15.3 Without prejudice to clause 15.2 in developing, supporting, and maintaining the Industrial Control System (ICS) networks, devices, programmes, and data and in connection with the performance of the Agreement, the DFO will ensure that security measures are implemented in its IT/OT infrastructure which complies with the following provisions:

- (a) The DFO will pay special attention to the adequate segregation of duties in IT and OT environments (e.g. the development, test and production environments) and shall implement the "least privilege" principle as a basis for sound identity and access management. The "least privilege" principle refers to the concept and practice of restricting access rights for users, accounts, and computing processes to only those resources of the DFO that

are absolutely required to perform the obligations of the DFO under this Agreement.

- (b) The DFO shall ensure that it has appropriate security solutions in place to protect IT, OT and the ICS Solutions, networks, devices, programmes, data, websites, servers and communication links against abuse or attacks and to identify any potential abuse and attacks. The DFO will strip servers of all superfluous functions in order to protect (harden) them and eliminate or reduce vulnerabilities of applications at risk. Access by the various applications to the data and resources required shall be kept to a strict minimum following the “least privilege” principle (as per the above).
- (c) The DFO will put appropriate processes in place to monitor, track and restrict access to: (1) the ICS application data; and (ii) logical and physical critical resources, such as networks, devices, systems, databases, security modules, etc. The DFO will create, store and analyse appropriate logs and audit trails in relation to such monitoring or access.

15.4 The DFO will ensure that data minimisation is an essential component of the core functionality of any security measures and that the gathering, routing, processing, storing and/or archiving, and visualisation of personal data and commercially sensitive data or information is kept at the absolute minimum level.

15.5 Security measures for the ICS will be tested to ensure their robustness and effectiveness. All changes shall be subject to a formal change management process ensuring that changes are properly planned, tested, documented and authorised. On the basis of the changes made and the security threats observed, tests shall be repeated regularly and include scenarios of relevant and known potential attacks.

15.6 The DFO will notify to the Transporter any potential cyber security incident that has the potential to affect the ICS, the IT and/or the OT will provide all reasonable assistance, and comply with all reasonable security and incident response and recovery measure, as may be required by the Transporter in order to ensure that the performance of the Agreement and/or and ICS, will be in compliance with Applicable NIS law. The DFO will not unreasonably refuse a change request by GNI where such change is required to meet with any obligation imposed on GNI by Applicable NIS Law or any standard. The DFO shall also ensure that any of its permitted sub-contractors shall agree to comply with these measures.

15.7 The DFO will provide all reasonable assistance as may be required by the Transporter in order to ensure that the performance of the Agreement and/or ICS will be in compliance with the Model Set of Security Principles set out in the Draft Consultation Paper on the NIS Directive Security Measures and Incident Reporting for Operators of Essential Services published by the Department of Communications, Climate Action & Environment.

15.8 The DFO's security measures for the ICS will be periodically audited to ensure their robustness and effectiveness. The frequency and focus of such audits should take into consideration, and be in proportion to, the security risks involved. Trusted and independent (internal or external) experts (that are not involved in any way in the development, implementation or operational management of the ICS provided) shall carry out the audits.

16. LAW

16.1 This Agreement shall be governed by and construed in accordance with Irish law and, subject to Clause 11, the Operators hereby submit to the exclusive jurisdiction of the Irish courts.

17. NOTICES

17.1 Where any notice or other communication is to be given or made by either Operator to the other under this Agreement:

- (a) such communication shall be in the English language and in writing and (i) may be delivered to the recipient or sent by first class prepaid letter post to the address of the recipient as set out in Clause 17.1(d) or (ii) by e-mail ~~facsimile~~ transmission to the recipient Operator's e-mail address ~~facsimile transmission number~~ as set out in Clause 17.1(d), or to such other address or number as may be notified in writing by that Operator from time to time for this purpose;
- (b) such communication shall be deemed to have been given or made and delivered, if by post, on the second Business Day after posting, if by delivery, when left at the relevant address (or on the first Business Day thereafter if left on a non-Business Day), and, subject to Clause 17.1(c)(ii), if by e-mail ~~facsimile~~ transmission between the hours of 09.00 hours and 17.00 hours on a Business Day, at the time of receipt by the sender of confirmation of complete transmission and, otherwise, on the first Business Day after transmission;
- (c) where a communication by e-mail ~~facsimile~~ is received in an incomplete or illegible form:
 - (i) if the recipient so requests (by telephone or otherwise), the sender shall promptly retransmit the communication to the recipient; and
 - (ii) provided that the request for retransmission was made within twenty-four (24) hours after the deemed time of receipt, in accordance with Clause 17.1(b), of the first e-mail ~~facsimile~~, the communication shall not be deemed to have been received until such time (whether or not between 09.00 hours and 17.00 hours) of receipt by the sender of confirmation of such retransmission.

- (d) For the purposes of Clause 17.1(a):
- (i) Notices and other communications to the Transporter (other than operational communications) shall be sent to:
Gas Networks Ireland
Gasworks Road, Cork
Attention: Company Secretary
Copy by email to: [GNI to update.]
Email address: [Transporter to insert]
Telephone Number: 0214534000
 - (ii) Notices and other communications to the Delivery Facility Operator (other than operational communications) shall be sent to:
Attention: [DFO to insert]
Email address: [DFO to insert]
Telephone Number: [DFO to insert]

17.2 Operational communication shall be sent issued in accordance with clause 4 and Schedule 3 clause 5 or in such other manner as may be prescribed by the Transporter from time to time.

18. COUNTERPARTS

18.1 This Agreement may be signed in any number of counterparts, each of which, when signed and delivered, shall be an original but with all the counterparts together constituting the same document.

19. NO PARTNERSHIP

19.1 The rights, duties, obligations and liabilities of the parties to this Agreement shall be several and not joint or collective, and each party shall be responsible only for its obligations as set out herein, it being the express purpose and intention of the parties that this Agreement shall not be construed as creating any partnership or association or as (except as expressly stated) authorising either of the parties to act as agent, servant or employee for any other party for any purpose whatsoever.

20. SURVIVAL

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

21. WAIVER

- 21.1 The failure to exercise or delay in exercising a right or remedy provided by this Agreement or by law does not constitute a waiver of the right or remedy or a waiver of other rights or remedies.
- 21.2 No waiver by any Operator of any provision of this Agreement shall be binding unless made expressly and expressly confirmed in writing. Any such waiver shall relate only to such matter, non-compliance or breach to which it expressly relates and shall not apply to any subsequent or other matter, non-compliance or breach and shall not affect the other terms of this Agreement.

22. SUCCESSORS AND ASSIGNS

- 22.1 This Agreement shall be binding upon and ensure for the benefit of the Operators and their respective successors and permitted assigns.

23. SUB-CONTRACTING

Either Operator may procure that some (but not all) of the obligations of such Operator pursuant to this Agreement shall be performed and that certain of the rights of such Operator pursuant to this Agreement may be exercised by its agents, Affiliates or contractors under its overall supervision and control. Where any of the rights or obligations of an Operator (the "first Operator") are so exercised or performed or **REQUIRED TO BE SO EXERCISED OR PERFORMED, THE FIRST OPERATOR SHALL NOT BE RELIEVED OF** liability in respect thereof pursuant to this Agreement and the other Operator shall have no recourse to such agents, Affiliates or contractors in respect thereof and the sole recourse of such other Operator shall be to the first Operator in accordance with this Agreement.

24. SEVERANCE

- 24.1 Each provision and each part of each provision of this Agreement is separate, severable and enforceable. If at any time any provision (or part of a provision) is adjudged by any court or body of competent jurisdiction to be void or unenforceable, neither the validity, legality and enforceability of the remaining provisions of this Agreement in that jurisdiction nor any provision of this Agreement in any other jurisdiction shall be in any way affected or impaired by that judgment.
- 24.2 If all or any part of a provision of this Agreement transpires not to be enforceable against any of the Parties, that non-enforceability shall not render that provision unenforceable against any other Party.

24.3 If any invalid, unenforceable or illegal provision would be valid, enforceable or legal if some part of it would be deleted or modified, the provision shall apply with whatever deletion or modification is necessary to give effect to the commercial intention of the parties. The Parties consent to a court or body of competent jurisdiction giving effect to a provision in such modified form as may be decided by that court or body.

In witness whereof this Agreement is executed the day and year first above written:

For and on behalf of

Gas Networks Ireland

For and on behalf of

[Insert name of counterparty]

Schedule 1 Connected System Point and Delivery Facility Site

[Site specific drawing required; to include the entirety of the plant upgrading equipment?]

⁵

⁵ Site specific.

Schedule 2 General

1. Scope

- 1.1 This Schedule 2 sets out provisions applying to the delivery of Natural Gas at the Connected System Point.

2. Interpretation

- 2.1 Unless expressly otherwise provided, references in this Schedule 2 to rates of delivery of Natural Gas are to the instantaneous rate (expressed in kWh/hour or kCM/hour) of such delivery at the Connected System Point and a reference to a rate of delivery is to such rate of delivery in aggregate at the Connected System Point.

3. Certain Connected System Point Provisions

- 3.1 For the purposes of this Agreement:
- (i) the provisions of Schedule 5 as to the measurement of flow (and determination of volume) and the determination of Calorific Value and quality of Natural Gas delivered shall apply;
 - (ii) Schedule 5 specifies or refers to the measurement equipment and quality monitoring and control equipment which is (and is required to be) installed in respect of the Connected System Point.
- 3.2 For the purposes of this Agreement where the Transporter intends to undertake pipeline maintenance and / or inspection of equipment either referred to in Schedule 5 or maintenance or inspection of any localised part of the Transportation System which would require particular rates of delivery at the Connected System Point, it shall request that the DFO co-operate so far as is practicable with any reasonable requirement of the Transporter as to the rate of delivery of Natural Gas into the Transportation System at the Connected System Point.

4. Delivery & Offtake Pressure

- 4.1 Delivery Pressure
- 4.1.1 The Delivery Facility Operator shall provide a pressure of Natural Gas at the Connected System Point up to a maximum of [12 barg]⁶ or such lower number established under clause 4.1.3 of this Schedule 2.
- 4.1.2 Without prejudice to clause 4.1.1 of this Schedule 2:

⁶To be confirmed on a site specific basis.

- (i) the Delivery Facility Operator has advised that, in normal operating conditions when Natural Gas is being delivered at the Connected System Point, the operating pressure range of the DFO Delivery Facility will be between [5.5-12] barg and;
- (ii) the Transporter has advised that in normal operating conditions, when:
 - (a) Natural Gas is being delivered at the Connected System Point in accordance with the terms of this Agreement; and
 - (b) the DFO Delivery Facility is operating within the operating pressure range referred to in clause 4.1.2(i) of this Schedule 2;

4.1.3 The Delivery Facility Operator shall ensure that Natural Gas is not tendered for delivery at a pressure at the Connected System Point in excess of [12 barg]⁷ or such lower number established as the maximum operating pressure under IS EN 12186 as notified from time to time by the Transporter to the Delivery Facility Operator.

4.1.4 The Delivery Facility Operator shall ensure that Natural Gas tendered for delivery at the Connected System Point shall be at a temperature of between [0 – 20 degrees] *[agreed in writing between the Transporter and the DFO] other temperatures up to 38 Deg. C. the max temperature allowed by the Code of Operations, may be considered by GNI if requested by the DFO. Acceptance of a higher temperature depends on inter alia a review of the downstream network i.e. to verify that the network Maximum Operating Pressure (MOP) will not be impacted by the applicable derating factor applicable to PE for temperatures above 20 Deg. C. as per I.S. EN 1555-S Annex A].*⁸

5. Gas Quality

5.1 If the Delivery Facility Operator or the Transporter, as the case may be, becomes aware that the composition of Natural Gas which is being tendered or will be tendered for delivery at the Connected System Point is not in compliance with the Gas Quality Specification, the Delivery Facility Operator or the Transporter, as the case may be, will so notify the other Operator as soon as possible after becoming so aware.

5.2 Where the composition of Natural Gas tendered for delivery at the Connected System Point is not in compliance with the Gas Quality Specification, the Delivery Facility Operator shall immediately secure that the flow of Natural Gas at the Connected System Point is discontinued.

5.3 Where the Delivery Facility Operator does not immediately secure that the flow of Natural Gas at the Connected System Point is discontinued in accordance with clause 5.2 of this Schedule the Delivery Facility Operator

⁷ To be confirmed on a site specific basis.

⁸ To be confirmed on a site specific basis.

acknowledges that the gas will be automatically diverted back to the DFO⁹ Delivery Facility.

- 5.4 Where the Transporter Measurement and Control Equipment does not automatically divert the gas back to the DFO Delivery Facility in accordance with clause 5.3 of this Schedule the Transporter Measurement and Control Equipment operates to automatically close the ROV.

Following any closure of the ROV manual intervention by the Transporter will be necessary to reopen the ROV.

⁹ Will automatic diversion apply at all RNG Entry?

Schedule 3 Flow and End of Day Quantity

The Transporter may at any time and from time to time decide that the following provisions of this Schedule 3, Section 1 (excluding 1.1) (General), Section 2.3 to 2.10 (Daily Flow Notifications), Section 4 (D+ 1 Information Exchange) Section 5 (or such one or more of them) shall be suspended (in whole or in part) for such period or periods as may be determined by the Transporter from time to time.] The Transporter reserves the right to restore the application of all or any of the suspended provisions of this Schedule 3 on not less than 6 months (or such lesser period as may be agreed between the Transporter and the Delivery Facility Operator) notice by the Transporter to the Delivery Facility Operator.¹⁰

1. General

- 1.1 The quantities and rates at which Natural Gas is delivered at the Connected System Point and changes in such quantities and rates shall be limited in accordance with this Schedule 3.
- 1.2 Each Operator shall be entitled to take any operational step available to it to ensure that the requirements of this Schedule 3 are complied with in respect of the rate of delivery of Natural Gas at the Connected System Point.
- 1.3 For each and every Day D, the Delivery Facility Operator shall if so requested by the Transporter notify the Transporter of the End of Day Quantity of Natural Gas to be delivered at the Connected System Point by way of a Daily Flow Notification (DFN). The DFN shall be in a form substantially similar to the pro forma set out in Appendix 1 to this Schedule 3.
- 1.4 The Transporter may issue Rejection Notices to the Delivery Facility Operator in response to such Daily Flow Notifications and/or otherwise in accordance with this agreement.
- 1.5 The Delivery Facility Operator shall, as soon as reasonably practical notify the Transporter of any Curtailment and the anticipated consequences of such Curtailment with respect to the delivery of Natural Gas at the Connected System Point on a Day.
- 1.6 The Transporter shall, as soon as reasonably practical notify the Delivery Facility Operator of any Constraint and the anticipated consequences of such Constraint with respect to the delivery of Natural Gas at the Connected System Point on a Day.
- 1.7 Notifications of a Constraint and a Curtailment shall be in a form substantially similar to the pro forma set out in Appendices 2 and 3 respectively to this Schedule 3.

¹⁰ This drafting means the Transporter must tell the DFO which particular provisions it will disapply. Check on project by project basis if GNI will be in a position to provide 6 months notice?

2. Daily Flow Notification

- 2.2 The Delivery Facility Operator shall provide to the Transporter Daily Flow Notifications no later than 17:00Hrs on each Wednesday for each of the 7 consecutive gas flow Days commencing on the following Sunday or otherwise as required by the Transporter.

The Delivery Facility Operator shall issue further or other DFN's in accordance with the remaining provisions of this Schedule unless and for so long the Transporter suspends the requirement for such further or other DFN's. Each DFN submitted up to 12:00 hours on Day D-1 hereinafter being referred to an Initial Daily Flow Notification. Changes to the DFN should be provided to the Transporter at the earliest practicable opportunity but no later than 12.00 hours on Day D-1.

- 2.3 A Daily Flow Notification for Day D, which shall be substantially in the form set out in Appendix 1 to this Schedule 3, shall contain:

- (a) the End of Day Quantity for Day D.
- (b) the Hourly quantity

The Daily Flow Notification shall be identifiable by the date and time at which it is sent by the Delivery Facility Operator to the Transporter.

- 2.4 The Delivery Facility Operator may issue one or more revised Daily Flow Notifications for Day D subject to the following:

- (a) a revised Daily Flow Notification for Day D may be submitted up to 02:30 hours on Day D except in the case where
 - (i) the Transporter has advised the Delivery Facility Operator of a Constraint, and/or
 - (ii) the Delivery Facility Operator has advised the Transporter of a Curtailment.
- (b) not more than one revised Daily Flow Notification may be submitted in each hour;
- (c) a revised Daily Flow Notification shall be issued as soon as reasonably practicable following notification of a Constraint or a Curtailment;
- (d) a revised Daily Flow Notification shall:
 - (i) specify the revised expected End of Day Delivery Quantity for Day D
 - (ii) shall take account of the quantity of Natural Gas delivered for the period up to the hour which expires immediately prior to the issuance of the revised Daily Flow Notification and shall give the revised quantities for the remaining hours of the Gas Day; and
 - (iii) each revised Daily Flow Notification shall specify the date and time it is sent.

- 2.5 The Transporter may reject any Daily Flow Notification and shall advise the Delivery Facility Operator as soon as reasonably practicable, outlining the reason for such rejection. Both Operators shall endeavour to address the reason for rejection following which the Delivery Facility Operator shall submit a revised Daily Flow Notification.
- 2.6 The Delivery Facility Operator shall take into account its own operational requirements, including operational lead times, when generating a Daily Flow Notification.
- 2.7 The Delivery Facility Operator shall issue a revised Daily Flow Notification as soon as reasonably practical after the rejection by the Transporter of a revised Daily Flow Notification and/or following receipt of a Constraint Notice.
- 2.8 Each revised Daily Flow Notification which is accepted by the Transporter shall supersede each previously issued Daily Flow Notification unless it is rejected by the Transporter pursuant to paragraph 2.5.
- 2.9 If the Transporter has not suspended the requirement for issue of DFN's or has notified the DFO that Daily Flow Notifications are required in respect of any Day or period and the Transporter does not receive a Daily Flow Notification from the Delivery Facility Operator, it shall use reasonable endeavours to contact the Delivery Facility Operator to ascertain if a Daily Flow Notification is available. If no Daily Flow Notification is received by the Transporter by 12.00 hours on D-1 the Transporter shall assume a zero quantity shall be delivered at the Connected System Point.
- 2.10 If the Delivery Facility Operator fails to issue a revised Daily Flow Notice following the issuing by the Transporter of a Constraint Notice or a Rejection Notice both Operators shall use reasonable endeavours to flow the End of Day Delivery Quantity advised in the Constraint Notice by the Transporter.

3. Rates of Delivery

- 3.1 Unless expressly otherwise provided, references in this Schedule 3 to rates of delivery of Natural Gas are to the instantaneous rate (expressed in kWh/hour) of such delivery at the Connected System Point.

The maximum rate at which Natural Gas may be delivered to the Transportation System at the Connected System Point is [47.52] kcm per Day] with a maximum instantaneous flow rate of the equivalent of [1.98] kcm per hour with an assumed mean gross calorific value for that Day of [36.9] MJ/M.¹¹

In the event that the gross calorific value for a day or hour is greater than 36.9 MJ/m³ the value attributable to the relevant Maximum Daily Flow Forward rate shall be adjusted accordingly.

4. D+1 Information Exchange

- 4.1 The Metered Quantity shall be determined as described in Schedule 5 Section 1. For the avoidance of doubt the Metered Quantity [shall] [save where otherwise provided

¹¹ All rates to be confirmed on a site specific basis.

in the Code of Operations] exclude any quantity which fails to meet the Gas Quality Specification.

4.2 The DFO may derive information regarding Natural Gas Delivered to the Transportation System at the Connected Systems Point from the Repeat Signals.

4.3 The DFO acknowledges the Metered Quantity shall be allocated to a Shipper(s) pursuant to the Code of Operations.

5. Communication and Exchange of Information

5.1 All operational communications between the Transporter and the Delivery Facility Operator, including DFNs, Constraint Notices, Curtailment Notices, Delivery Facility Flow Advices and Rejection Notices shall be by agreed electronic means.

5.2 The Transporter may disclose to Shippers any notice of a Curtailment at the Connected System Point and/or the contents of such notices given by the Delivery Facility Operator to the Transporter.

5.3 Each Operator will notify the other Operator of any relevant operational requirements, including maintenance and outages as soon as reasonably practicable.

5.4 Each Operator shall comply and with any applicable Local Operating Procedure and the Communications Plan in respect of operational communications.

6. Procedures

6.1 The Transporter's Local Operating Procedures relevant to the Transportation Entry Facilities are listed in Schedule 7 to give effect to this Schedule 3 and the other Schedules of this Agreement.

Daily Flow Notification

From:
To: Gas Networks Ireland

Date Received	dd/mm/yyyy
Time Received	hh:mm

Gas Day	
DFN No.	

CV (MJ/m3)	
-------------------	--

Hour	Delivery (kWh)
05:00	
06:00	
07:00	
08:00	
09:00	
10:00	
11:00	
12:00	
13:00	
14:00	
15:00	
16:00	
17:00	
18:00	
19:00	
20:00	
21:00	
22:00	
23:00	
00:00	
01:00	
02:00	
03:00	
04:00	
EODQ	



Constraint Notice	
From:	GNI Grid Control – Transporter
To:	Connected System Operator
Gas Day:	
<p>Due to a constraint on the GNI Transportation System, the End of Day Delivery Quantity (EODQ) for the above Gas Day has been reduced to:</p> <p style="text-align: center;">_____ kWh, Effective at ____:____ Hours</p> <p style="text-align: center;">NOTE: The Maximum permitted flow rate is: XXX kWh per hour</p>	
Signature: _____ Control	Date: _____ GNI Grid

Appendix 3 Curtailment Notice

Curtailment Notice

From: Delivery Facility Operator¹²

To: Gas Networks Ireland

Date Received: *dd/mm/yy*

Time Received: *hh/mm*

Curtailment Notice No.

Comment Reason:

Connected System Point	Preferred Hourly Flow Rate
Unit	kWh
05:00	
06:00	
07:00	
08:00	
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	
00:00	
01:00	
02:00	
03:00	
04:00	
EODQ	

¹² Is location of Delivery Facility also to be identified?

Schedule 4 Gas Quality Specification - DX Connected¹³

1. Applicable Quality Specification of Natural Gas for Delivery to the Transportation System

1.1 Natural Gas made available for delivery at the Connected System Point shall meet the Gas Quality Specification. The Gas Quality Specification at the date of this Agreement is:

QUALITY SPECIFICATION OF NATURAL GAS AT CONNECTED SYSTEM POINT

The quality specification for gas tendered for delivery at the Connected System Point shall meet the applicable gas quality specification as described in the Code of Operations and the quality specification as set out below. If at any time (as a result of a modification to the Code of Operations, changes to EN 16723-1&2, or otherwise) the gas quality specification set out below would breach the specification in the Code of Operations by the exclusion of any parameter in the Code of Operations or of the applicable limit values of any one or more parameters, the applicable limit values as prescribed in the Code shall apply.

Parameter	Units	Limit value	Notes
Hydrogen sulphide content	mg/m ³	≤5	As per GNI Code of Operations
Total Sulphur content (including H ₂ S)	mg/m ³	≤30	As per EN 16723-2
Hydrogen content	% mol/mol	<0.1	As per GNI Code of Operations
Oxygen content	% mol/mol	≤1.0	≤1.0% is allowed into the Distribution Network for Biomethane injection as per GNI Code of Operations. However, If Within Grid Compression (WGC) is required to remove gas flow constraints, the lower Transmission Network rate of ≤0.5 % shall be applied at the Transportation Entry Facility (BNEF).
Hydrocarbon dew point	°C	≤-2	As per GNI Code of Operations (up to 85 barg)
Water (Moisture) content	mg/m ³	≤50	As per GNI Code of Operations
Wobbe index (high limit)	MJ/m ³	51.41	As per GNI Code of Operations

¹³ (Review on site specific basis.)

Wobbe index (low limit)	MJ/m ³	46.5	As per GNI Code of Operations.
Relative Density (high value)		<0.70	As per recent GS(M)R changes
Gross calorific value (high limit)	MJ/m ³	42.3	As per GNI Code of Operations
Gross calorific value (low limit)	MJ/m ³	36.9	As per GNI Code of Operations
Carbon dioxide content	% mol/mol	<2.5	As per GNI Code of Operations. See Note 1 below
Organo-halides	mg/m ³	<1.5	As per GNI Code of Operations
Radioactivity	Becquerels/g	<5	As per GNI Code of Operations
Ethane	% mol/mol	<12	As per GNI Code of Operations
Nitrogen	% mol/mol	≤5	As per GNI Code of Operations
Contaminants & Odour	-	-	As per GNI Code of Operations see Note 2 and 3 below.
[Siloxanes content (as Si)]	mg/m ³	0.3	This is the lower limit value of a range of values cited in 15 EN 16723-1 - 2016.
Ammonia	mg/m ³	10	This is the value cited in EN 16723-1.
Amines	mg/m ³	10	This is the value cited in EN 16723-1. Compliance is dependent on the type of amine present.
Carbon monoxide	% mol/mol	0.1	This is the value cited in EN 16723-1, which in turn is that required to ensure that conveyed gas does not exceed the limit value in the CLP Regulation (EC) 1272/2008 and hence require place an obligation on gas transporters to produce a safety data sheet on any toxic component that exceeds 0.1 % mol/mol.]

- * “Within Grid Compression” or “WGC” means where gas is compressed from a lower pressure tier network to a higher pressure tier network (generally Dx to Tx) to reduce network inlet constraints on lower pressure tier networks.

Note 1 The diverter and ROV are set to a CO₂ limit of 2.5%.

[Where the CO₂ limit of 2.5% is exceeded Local Operating Procedures (LOPs) are to be used by the DFO to advise the Transporter on remediation requirements and expected duration to reduce the CO₂ content to $\leq 2.5\%$. Following receipt of same, the CO₂ set point limits can be adjusted temporarily by the Transporter up to a limit of 4% where the total inerts in the gas (including up to 4% CO₂) is less than 8% while the DFOs plant issues are being resolved. In line with European Gas Quality Standard IS EN 16726 the absolute maximum CO₂ limit to which the CO₂ set point limits may be adjusted is 4% provided the Transporter is satisfied that there would be no adverse effect on sensitive downstream plant and customers. The expectation is that the DFO will make every effort to resolve these issues causing the increased CO₂ in a timely manner (days), so as to allow for the resetting of the CO₂ limits back to its original 2.5 Mol % setting.

“inerts” in natural gas means carbon dioxide(CO₂), nitrogen(N₂), helium(He),Argon(Ar), and oxygen(O₂).

Note 2 Natural Gas shall not contain solid liquid or gaseous material which may interfere with the integrity or operation of pipes or any Natural Gas appliance which a consumer or transporter could reasonably be expected to operate. With respect to Mist, Dust, Liquid, gas delivered shall be technically free in accordance with BS3156 11.0.

Note 3 Natural Gas shall have no odour that might contravene the obligation of the Transporter to transmit gas which possesses a distinctive and characteristic odour. or which adversely affects the Transporters odourisation, equipment or standard odourisation processes.

- such other specification determined by the Transporter acting as an RPO

2. Non-Compliance with Specification

2.1 The provisions of paragraph 5 of Schedule 2 shall apply whenever Natural Gas delivered, tendered or offtaken at the Connected System Point does not comply with the Gas Quality Specification or the specification for Natural Gas offtaken at the Connected System Point as prescribed pursuant to this Agreement.

3. Odourisation

The Transporter is responsible for odourising the biomethane at the Transportation Entry Facilities The gas quality measurement data will be derived from the Transporter’s Measurement and Control Equipment.

Schedule 5 Gas Quality Monitoring Control Equipment and Measurement Provisions

Section 1

Metering

1. General

The quantities of Natural Gas delivered to the Transportation System at the Connected System Point shall be determined by the Transporter Measurement and Control Equipment.

2. Uncertainty and Error in Forward Flow

In all delivery conditions at the Connected System Point:

- (i) the total Uncertainty in the measurements of the volume flow rates and energy flow rates of the Transporter Measurement and Control Equipment shall, at all flow rates from ~~six per cent (6%)~~ twenty per cent (20%) to one hundred per cent (100%) of the directional Maximum Daily Forward Flow Rate (as defined in Section 1, Para 3 of this Schedule 5), be within the Permitted Range; and
- (ii) the Transporter Measurement and Control Equipment shall be free of Constant Systematic Error and Variable Systematic Error in respect of both volume flow rates and energy flow rates;
- (iii) the methods specified in EN 1776; EN 16314; EN 12261 shall be used for the calculation of Uncertainty in the measurement of volume flow rates and for the calculation of Constant Systematic Errors and Variable Systematic Errors in volume flow rates in each case in respect of the Meter and as referred to in Section 1, Para 3 of this Schedule 5;
- (iv) the methods specified in EN:1776; EN16314 and BS ISO TR 5168:2005 shall be used for the calculation of Uncertainty in the measurement of energy flow rates and for the calculation of Constant Systematic Errors and Variable Systematic Errors in energy flow rates in each case in respect of the Meter or Transporter Measurement and Control Equipment and as referred to in Section 1, Para 3 of this Schedule 5.

3. Connected System Point Measurement Equipment Permitted Ranges

The Permitted Range in respect of the Meter is as set out in Table 1 below for all Forward Flow rates from ~~six per cent (6%)~~ twenty per cent (20%) to one hundred per cent (100%) of the Maximum Daily Forward Flow Rate.

TABLE 1 –CONNECTED SYSTEM POINT MEASUREMENT UNCERTAINTY (Forward Flow)

Quantity	Permitted Range (at flow rates from 6% to 100% of Maximum Daily Forward Flow Rate)
Volume flow Rates (KCM/Day)	±1.0%
Energy flow rates (kWh/hour)	±1.1%

Section 2
The Transporter Measurement and Control Equipment

The Transporter Measurement and Control Equipment shall determine whether gas tendered for delivery is compliant with the Gas Quality Specification.

Section 3

Validation

3. Validation of Transporter Measurement and Control Equipment

- 3.1 The Transporter shall, at its own expense, calibrate or validate, as appropriate, the Transporter Measurement and Control Equipment at regular intervals consistent with relevant standards and good engineering practice.
- 3.2 The methods specified in the approved validation procedures, (agreed between the Delivery Facility Operator and the Transporter), and more particularly set out in EN:1776; EN:16314 and EN 12261 and in the document entitled "Validation of Metering and Gas Quality Equipment", as may be amended from time to time (by agreement between the Delivery Facility Operator) and the Transporter, shall be used for the validation of the Transportation Measurement and Control Equipment.
- 3.3 The DFO may request that any element of the Transporter Measurement and Control Equipment be calibrated at any time in which case any such calibration shall be carried out as soon as determined by the Transporter. The costs and expenses of such calibration and of any adjustment or replacement of the Measurement and Control Equipment made as a result of any calibration made pursuant to this paragraph 3.3 shall, if the Transporter Measurement and Control Equipment is found either (a) to both read within the Permitted Range and not to be subject to any Constant Systematic Error or Variable Systematic Error or (b) (where applicable), to operate within specification, be paid by the DFO and, in any other case, by the Transporter.
- 3.4 Transporter may at its own expense adjust or replace the components of the Transporter Measurement and Control Equipment.
- 3.5 Immediately following calibration or validation pursuant to paragraph 3.2 or 3.3, the individual components of the Transporter Measurement and Control Equipment shall be adjusted or replaced by the Transporter as necessary so that the Transporter Measurement and Control Equipment complies with the provisions of Section 1, paragraph 2 (i) and (ii) above.
- 3.6 Where the Transporter Measurement and Control Equipment is found when calibrated or validated to be subject to either a Constant Systematic Error or a Variable Systematic Error or to be found to read outside the Permitted Range in respect of volume flow and/or energy flow, then:
 - (i) the Transporter Measurement and Control Equipment shall be assumed to have been subject to the Constant Systematic Error or Variable Systematic Error or to have been reading outside the Permitted Range (as appropriate) during the latter half of the period since the later of (a) the date when last calibrated or validated and found to be free of any Constant Systematic Error or Variable Systematic Error and within the Permitted Range and (b) since last adjusted to correct a previous Constant Systematic Error or Variable Systematic Error or to read within the Permitted Range and during the first half of such period not to be subject to either a Constant Systematic Error or Variable Systematic Error or to have been reading outside the Permitted Range (except in the case where it is proved that the Transporter Measurement and Control

Equipment has been subject to a Constant Systematic Error or Variable Systematic Error or to have been reading outside the Permitted Range (as appropriate) since some other date in which case the error shall be assumed to have applied since such date) it being acknowledged that information derived from any further or other meters installed by the Transporter downstream of the Entry Point at the Connected System Point may be treated by the Transporter as providing satisfactory evidence as to when the Management Equipment commenced to register outside the Permitted Range;

- (ii) for the purposes of paragraph 3.6, the quantities read as delivered from the Delivery Facilities on each Day at the Connected System Point during the period when the Connected System Point Transporter Measurement and Control Equipment is or is assumed in accordance with paragraph 3.6(i) above to have been subject to a Constant Systematic Error or Variable Systematic Error or to have been reading outside the Permitted Range (as appropriate) shall be adjusted by the Transporter in accordance with the provisions of paragraph 3.6(iii);
- (iii) The Transporter shall calculate the adjustment referred to in paragraph 3.6(ii) so as to provide a corrected value for volume flows and energy flows as if there had been no such Constant Systematic Error or Variable Systematic Error or as if the Transporter Measurement and Control Equipment had been reading within the Permitted Range and the Transporter shall notify the DFO of such adjustment.
- (iv) The amount by which the adjusted quantity determined to have been delivered on any Day pursuant to any calibration or validation or the resolution of any dispute in relation thereto differs from the quantity originally determined to have been delivered on such Day shall be treated as the Entry Point Adjustment Quantity in respect of the Connected System Point on such Day.

3.7 The Delivery Facility Operator will assist and support the Transporter when the Transporter wishes to validate the Transporter Measurement and Control Equipment from time to time. Reasonable notice will be given by the Transporter to the Delivery Facility Operator.

3.8 At the request of either the Transporter or the Delivery Facility Operator, the Transporter and the Delivery Facility Operator shall meet and discuss and endeavour to settle any dispute or failure to agree arising from the application of the provisions of this paragraph 3 and, if within thirty (30) Days after such request they shall have been unable to agree, the matter may be referred to an Expert for determination (at the request of either the Transporter or the Delivery Facility Operator) in accordance with the provisions of Clause 11.

Section 4

Measurement Failure

4.

4.1 If during any part of any Day, any part of the Transporter Measurement and Control Equipment is not operating in accordance with the requirements of this Agreement, the Remotely Operated Valve shall be closed. The valve will only be reopened by the Transporter in accordance with the relevant Local Operating Procedure for the operation of the Remote Operated Valve (see Schedule 7).

Section 5

Repeat Signals

5. Repeat Signals available to DFO

5.1 Transporter shall allow for the following repeat signals (Repeat Signals) to be made available to the Delivery Facility Operator where so requested by the Delivery Facility Operator:

- (i) Instantaneous volume flow;
- (ii) Instantaneous energy flow;
- (iii) Accumulated volume quantity
- (iv) Accumulated energy quantity
- (v) Gross Calorific Value (GCV)
- (vi) Wobbe Index (WI)
- (vii) Diverter Valve Status
- (viii) ROV Valve Status
- (ix) Diverter Alarm
- (x) ROV Alarm
- (xi) Delivery Pressure
- (xii) Delivery Temperature

Note: Repeat signals are not to be used for process control of the DFO's upgrading equipment.

5.2 ¹⁴Repeat Signals to be provided by DFO to Transporter.

The following repeat signals ("Repeat Signals") shall be provided by the Delivery Facility Operator to the Transporter. The DFO may be requested by the Transporter to provide additional Repeat Signals in accordance with the provisions of this Schedule.

[Go No Go. *[To be populated after completion of detailed designs and or on a site by site basis.]*]

5.3 Description of Repeat Signals

Repeat Signals referred to in 5.1 shall be derived directly from the Transporter Measurement and Control Equipment and transmitted without adjustment or alteration directly to DFO in a format agreed by both Parties.

¹⁴To be populated on a site specific basis.

Repeat Signals referred to in 5.2 shall be derived directly from the DFO's Measurement and Control Equipment and transmitted without adjustment or alteration directly to the Transporter in a format agreed by both Parties?¹⁵

Section 6

Measurement Equipment – Gas Quality Monitoring¹⁶

6. Gas Quality Monitoring and Measurement

- 6.1 The Transporters Measurement and Control Equipment used to measure gas quality shall include one or more automated on-line analysers (Gas Chromatograph) to measure the required gas parameters i.e. up to C6; as well as in-line sensors for Oxygen, Hydrogen Sulphide, Moisture, Wobbe Index, relative density Temperature and Pressure.
- 6.2 Impurities which are not normally found in Natural Gas to be delivered at the Connected System Point shall be measured by an accredited laboratory [or a laboratory approved by the Transporter]. Gas Quality laboratory reports shall be made available to the Transporter as soon as reasonably practical but no later than three (3) Business Days of receipt by the Delivery Facility Operator.
- 6.3 Gas Quality laboratory reports to include component trending analysis data and to be supplied to the Transporter (GNI) to give advance warning of potential future gas quality breaches.
- 6.4 The DFO is responsible at its own cost for carrying out spot sampling and laboratory analysis of the gas at a frequency schedule described in 6.5 below. The Transporter may from time to time carry out spot sampling at it's own cost to verify compliance.
- 6.5 Spot Sampling / laboratory analysis shall be done immediately after Commissioning and then periodically according to the following schedule.
- (i) Monthly, until two successive analyses suggests risk is low enough to change to quarterly.
 - (ii) Quarterly, until two successive analyses suggests risk is low enough to change to six monthly.
 - (iii) Continue at six monthly frequencies, once all sample results are within the gas specification limits as per Schedule 4 above and the Code of Operations.
 - (vi) If gas is found which fails to meet the Gas Quality Specifications, then sample frequency to revert back one step in above schedule.

6.6 Measurement Standards

¹⁵ To be confirmed on a project by project basis.

The gas quality samples should be tested in accordance with the relevant ISO industry standards. Without prejudice to the generality of the foregoing, the table below specifies certain of the current methods, standards and uncertainties for certain Gas Quality parameters.

Measurement Standards			
Parameter	Method	Standard	Uncertainty
Carbon Dioxide	Chromatography	ISO 6975	±0.07 mole%
Hydrocarbon Dew Point	Chromatography	ISO 23874	±1.0°C
Water Content	Sensor	ISO 18453	±3.0 mg/m ³
Water Dew Point	Calculation	ISO 18453	±0.5°C
Gross Calorific Value	Calculation	ISO 6976	±0.05 MJ/m ³
Wobbe Index	Calculation	ISO 6976	±0.05 MJ/m ³

6.7 Traceability

The measurement of the gas quality parameters shall be traceable to national standards from bodies such as United Kingdom Accreditation Service (UKAS), Physikalisch-Technische Bundesanstalt (PTB), National Physical Laboratory (NPL) and Nederlands Meetinstituut (NMI) and shall have acceptable certification to confirm.

6.8 Expert

At the request of either the Transporter or the Delivery Facility Operator, the Transporter and the Delivery Facility Operator shall meet and discuss and endeavour to settle any dispute or failure to agree arising from the application of the provisions of this Section 6 and if, within thirty (30) Days after such request they shall have been unable to agree, the matter may be referred to an Expert for determination (at the request of either the Transporter or the Delivery Facility Operator) in accordance with the provisions of Clause 11.]

6.9 Measurement Failure

If during any part of any Day, any part of the Transporter Measurement and Control Equipment used to measure gas quality is not operating in accordance with the requirements of this Agreement, the Transporter and the Delivery Facility Operator, in both

cases acting reasonably shall agree to use alternative means as are practicable in the circumstances.

6.10 Transporter Measurement and Control Equipment

The Transporter has technical and operational capability to close the remotely operated valve which forms part of the Transporter Measurement and Control Equipment. The Transporter shall have the right to close (manually automatically or remotely) the remotely operated valve (ROV) including:

- (i) if the quality of Natural Gas tendered for delivery at the Connected System Point does not meet the Gas Quality Specification.
- (ii) if there is a safety incident on site or downstream that would (in the reasonable opinion of the Transporter) be affected by the injection of RNG at the Connected Systems Point);
- (iii) if there is no gas nominated at the RNG Entry Point at the Connected Systems Point;
- (iv) if there is a requirement to shut the ROV due to planned or unplanned maintenance;

6.11 Reopening of ROV

The ROV may only be reopened when the Transporter is satisfied that it is technically and operationally appropriate to do so. The ROV shall be reopened in accordance with *[[insert]* LOP 3 or such other procedure as shall be notified to the Delivery Facility Operator by the Transporter,

Schedule 6 Technical Interpretation

1. In this Agreement, the following terms have the following meanings:

“bar means the bar as defined in ISO 1000-1981(e)

“barg” or **“bar gauge”** means the pressure in bar in excess of atmospheric pressure;

“Calorific Value” or **“CV”** means that number of Megajoules produced by the complete combustion at a constant absolute pressure of 1.01325 bar of one (1) Cubic Metre of Natural Gas at a temperature of fifteen degrees Celsius (15°C) with excess air at the same temperature and pressure as the Natural Gas when the products of combustion are cooled to fifteen degrees Celsius (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 Natural Gas and air before combustion; and for the avoidance of doubt Calorific Value shall be REAL as defined in ISO 6976-1 :1995;

“Constant Systematic Error” has the meaning given BS ISO 5168:1998;

“Cubic Metre” or **“m³”**, when applied to Natural Gas, means that amount of gas which at a temperature of fifteen degrees Celsius (15°C) and an absolute pressure of 1.01325 bar and being free of water vapour occupies one (1) cubic metre;

“Cubic Foot”, when applied to Natural Gas, means the quantity of Natural Gas which at sixty (60) degrees Fahrenheit and an absolute pressure of sixty (60) inches of mercury at seventy two (72) degrees Fahrenheit and the Natural Gas being saturated with water vapour and at the same temperature and pressure occupies one (1) cubic foot;

“degree Celsius” or **“C”** means the particular interval between the temperature expressed in Kelvin and the temperature 273.15 Kelvin as defined in ISO 1000-1981 (E);

“GWh” means 1,000,000 kWh;

“hour” means the hour as defined in ISO 1000-1981(E);

“Joule” means the joule as defined in ISO 1000-1981(E);

“kCM” means one thousand (1,000) Cubic Metres;

“kilogram” means the kilogram as defined in ISO 1000-1981(E);

“kW” means one thousand (1,000) Watts;

“kWh” means three million six hundred thousand (3,600,000) Joules;

“MCM” means one million (1,000,000) Cubic Metres;

“MMSCFD” means 10⁶ Cubic Feet per Day;

“Megajoule” or **“MJ”** means one million (1,000,000) Joules;

“metre” means the metre as defined in ISO 1000-1981(E);

“Relative Density” means the quotient of the gas density and the density of dry air of standard composition specified at the same state conditions, 15 degrees Celsius and 1.01325 bar;

“second” means the second as defined in ISO 1000-1981(E);

“Standard Cubic Meter” or **“SCM”** means a volumetric unit of gas which occupies a cubic meter measured at a temperature of 288.15k (15°C) and absolute pressure of 101.325 kPa (atmosphere).

“SI Units” means units of physical measurement under System Internationale;

“Uncertainty” has the meaning given in BS ISO TR 5168:1998;

“Variable Systematic Error” has the meaning given in BS ISO TR 5168:1998; and

“Watt” means one (1) Joule per second.

Schedule 7 Operating Procedures

[To be inserted on a case by case basis.]