Biomethane Business Rules Overview

13th December 2021

We will start at 15:02 to allow participants to finish previous meetings and join the call.

Logistics

- Webinar should last for approximately 90 minutes
- All callers will be placed on mute and cameras switched off
- Please ask questions via the chat functionality
- Slides will be circulated after the webinar

Agenda

- Background
- Business Rules Overview (Distribution)
- Business Rules Overview (Transmission)
- Next Steps
- Q&A

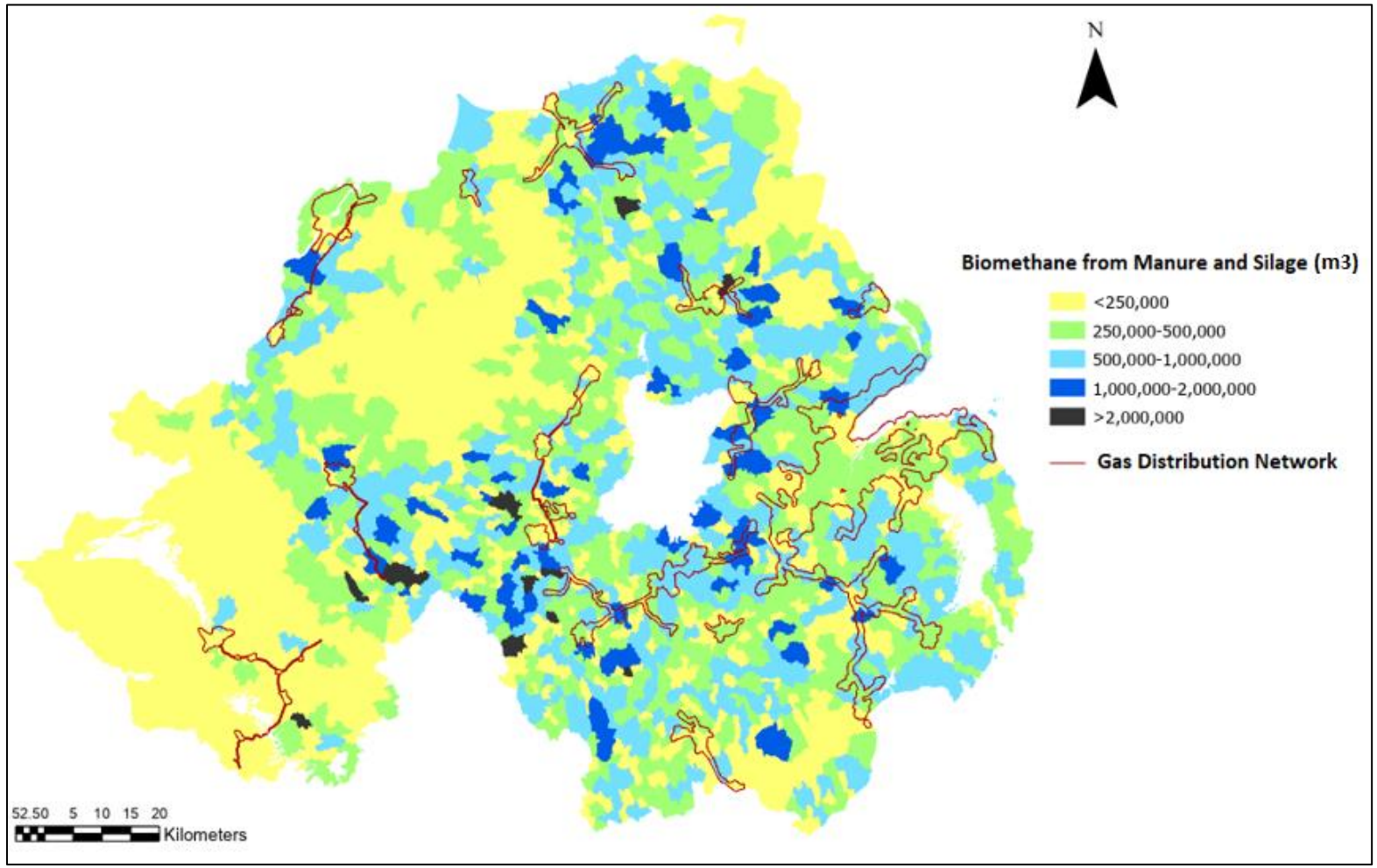
Background

Biomethane Potential in Northern Ireland

CASE Project

- Collaborative research project featuring:
  - Centre for Advanced Sustainable Energy
  - Phoenix Natural Gas
  - Queens University Belfast
  - Agri-AD
  - Enerchem Solutions
  - Agri-Food & Biosciences Institute
- Assessing the opportunity for NI's agricultural sector to support biomethane production
- Full report expected to be finalised by January 2022

Biomethane – CASE Spatial Quantification

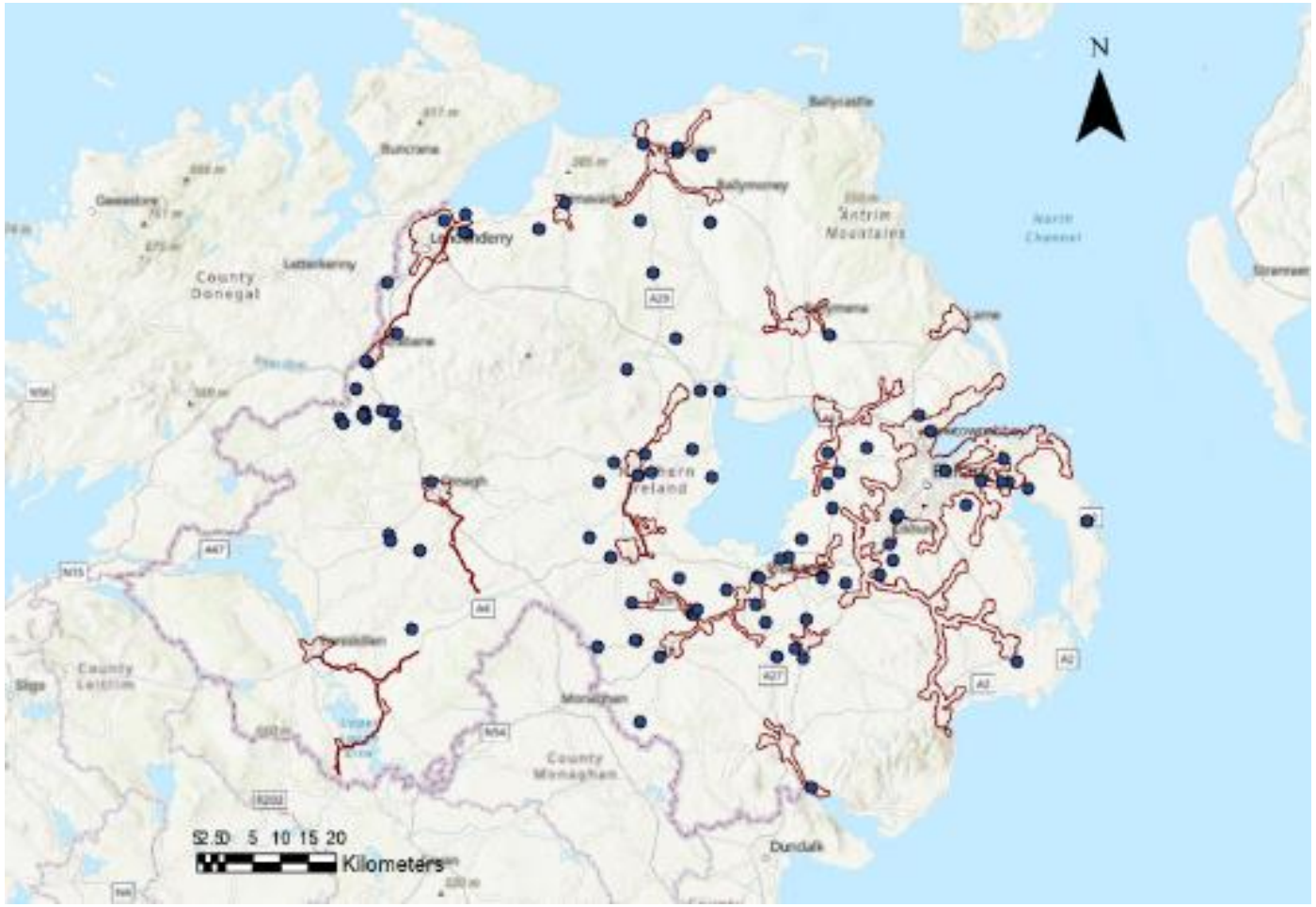


Key initial (and still subject to change) results are:

- The total amount of biomethane that could be produced from livestock manure and underutilised grassland in Northern Ireland **could displace up to 80-90% of NI Distribution Network demand** (depending on propane enrichment)
- If Belfast demand was removed, biomethane production potential is nearly double non-Belfast Distribution Network demand.
- This value does not include potential feedstock from household/industrial/food waste or dedicated energy crops.
- C.85% of the feedstock used to produce this biomethane is **located within 10km of Northern Ireland's Gas Distribution Network** – see map

Source: Anderson, A (2021). The Sustainability of Organic Nutrient Recycling in Northern Ireland: Mapping the spatial distribution of manure nutrient surpluses at a townland scale, to support new beyond the farm-gate strategies for sustainable manure management and renewable energy production. Differentiation report accepted for PhD Research, Queen's University Belfast

Majority of existing AD plants are located close to the gas network



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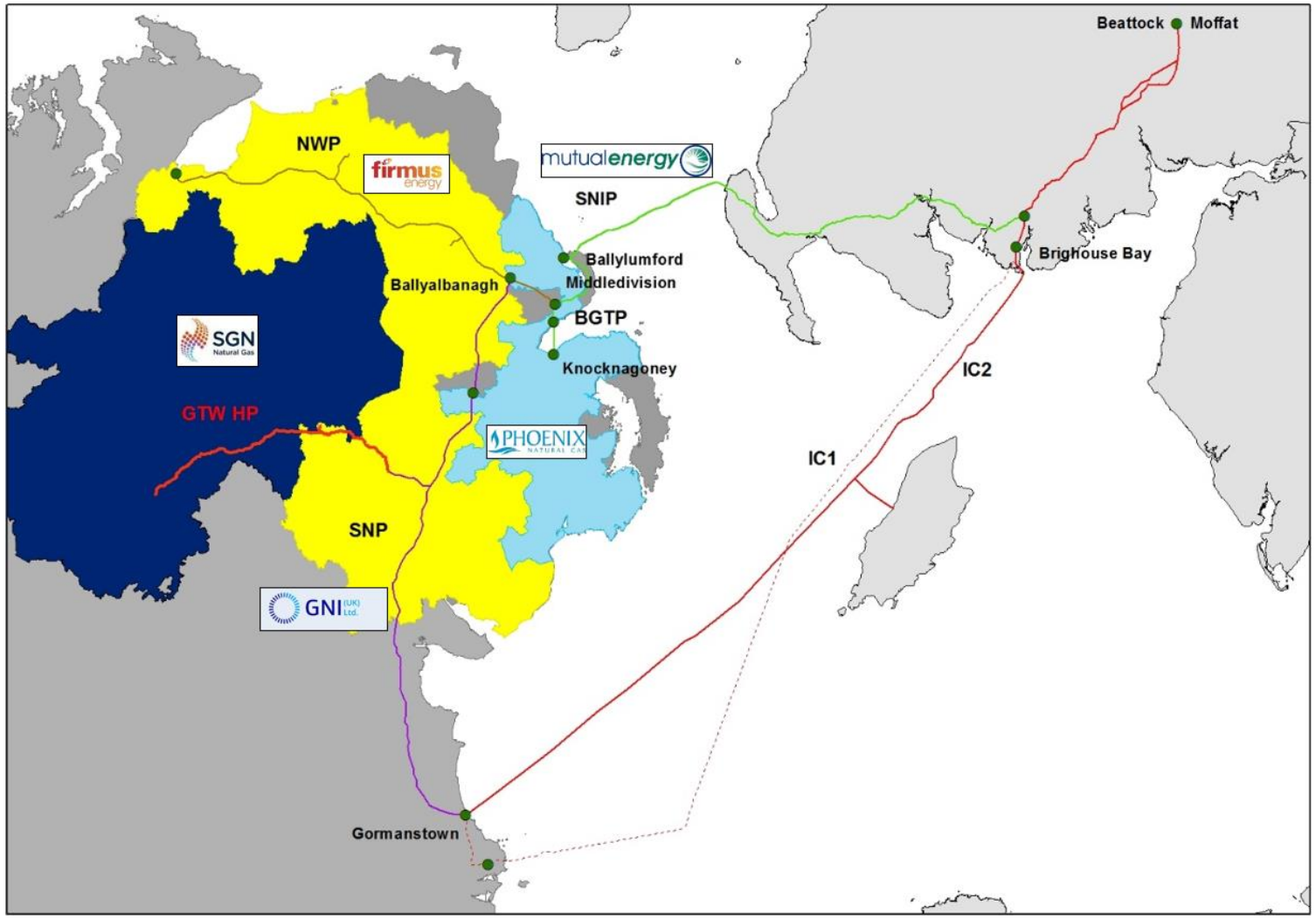
Participants in Project



Transmission Participants	Distribution Participants
GMO Northern Ireland	firmus energy
GNI (UK) Ltd.	PHOENIX NATURAL GAS
mutualenergy	SGN Natural Gas

Objective and Key Considerations

- **Primary Objective:**
  - Achieve framework by April 2022 setting out the arrangements to accommodate the introduction of biomethane injection in NI

- **Key Considerations:**
  - Alignment with existing framework where reasonable
    - trade off between timely implementation and functionality
  - Avoidance of unnecessary complexity of regulatory arrangements and network operations
  - Cost efficiency
  - Protection of consumer interests
  - Least regrets approach in light of imminent publication of energy strategy

Workstreams

- Since October 2019, the Utility Regulator has overseen a programme of work comprising Technical and Regulatory workstreams to coordinate the development of the arrangements to accommodate the introduction of biomethane injection in NI

Technical Workstream	Regulatory Workstream
- Capacity studies - Safety cases and exemptions with HSE(NI) - Telemetry controls (SCADA) - Commissioning and maintenance arrangements - Network agreements and literature	- Network Code modifications - Information sharing arrangements - Connection Policies - Licence Modifications

Activities Conducted to Date

- Researching arrangements for biomethane injection in GB and ROI to learn best practice
  - Utilising GB documents as a template for NI
- Engagement with producers to understand their projects
- Engagement with Department for the Economy (DfE) to address gas quality arrangements for NI
- Engagement with incentive schemes to understand their operation
  - Renewable Fuel Obligation Scheme, Green Gas Certificates, etc.
- Working with Action Renewables on a Green Gas Incentive Scoping Paper to scope out options for a biomethane production incentive
  - KPMG has been appointed as the external consultant
  - Will provide a detailed analysis of the costs/benefits of potential support mechanisms – which will then be fed into DfE
  - Project expected to be completed in February/March 2022

Department for the Economy

Department for Transport

action renewables

KPMG

Business Rules Overview (Distribution)

Overview

- The Business Rules set out principles for the Distribution Network Code to introduce Biomethane System Entry Points

- Biomethane injection into a Distribution Network will be a secondary source of supply into the Distribution Network and hence reduce the quantity of gas required from the Transmission Network. The Business Rules therefore set out a proposal to introduce aggregate balancing across the Distribution and Transmission networks in Northern Ireland.

- Separate to the development of the Business Rules, DNOs will be developing their Connection Policies to reference the procedures for applying for a connection to a Distribution Network. The technical / construction specifications will then be contained within a Connection Agreement between the DNO and Delivery Facility Operator (DFO).

- The operation of biomethane injection points will be managed via a Network Entry Agreement between the DNO and the DFO (this will include technical requirements in relation to calorific value (CV), odorisation, emergencies, gas quality and any ongoing costs etc.)

Proposed Arrangements (Distribution)

Subject	Proposal
Classification of Distribution Biomethane System Entry Points	• Distribution Biomethane Injection will be classified as a subtype of System Entry points in the Code • Arrangements in the Code will facilitate both single production facilities and hub arrangements • Biomethane System Entry Point must have a Registered Gas Supplier before the site can be commissioned • There must be a Gas Supplier registered to the Biomethane System Entry Point at all times (under both the Distribution and Transmission Codes), otherwise the arrangements will be suspended (or terminated if applicable) • Details of the Registration Process will be included within the Code • The Gas Supplier must also complete the registration with GMO NI – this will require coordination with the Transporter (GMO NI)

Proposed Arrangements (Distribution)

Subject	Proposal
Capacity at a Biomethane System Entry Point	• Current arrangements for the allocation of System Entry Capacity will remain unchanged (i.e. aggregate SMP Capacity) • The NEA will set out the System Entry Capacity treated as allocated to the Gas Suppliers • There will be no consequence of holding capacity at a Biomethane Entry Point (i.e. no associated Conveyance Charges)
Charging	• At present, the intention is that entry commodity, capacity or customer charges shall not be applied at Biomethane System Entry Point (as is the case for other Distribution System Entry Points) • Any change to this will be subject to a future industry consultation and must be approved by the Utility Regulator • Gas Suppliers registered at a Distribution Biomethane System Entry point will be liable for disbursement charges (i.e. Imbalance Charges and Balancing Gas Costs) under the NI Network Code

Proposed Arrangements (Distribution)

Subject	Proposal
Demand Forecasting, Nominations & Renominations	• Gas Suppliers registered at a Biomethane System Entry Point will forecast the entry flows and make Biomethane Delivery Nominations / Renominations to the DNO (similar to the process for Daily Metered Nominations) • The DNO will determine the Transmission Delivery Nomination Required (TDNR) for each Gas Supplier (in line with current Demand Forecast times) TDNR = (NDM Nom + DM Nom + Shrinkage) – Sum of Biomethane Delivery Nominations TDNR = 0, if (NDM Nom + DM Nom + Shrinkage) < Sum of Biomethane Delivery Nominations • The DNO will provide this information to the Transporter via Delphi • Gas Suppliers will be advised under the NI Network Code to nominate in line with the Total Transmission Delivery Nomination (i.e. the aggregate of their TDNR for all Distribution Networks)

Proposed Arrangements (Distribution)

Subject	Proposal
Daily Quantities (Allocations)	• The daily Distribution allocation (UDQO) will continue to be determined as it is currently, i.e.: Total Allocation (UDQO) = DM Allocation + NDM Allocation • However, the UDQI (Users Daily Quantity Inputs) will need to be amended to distinguish between quantities input at the Transmission Entry Points and the quantities input at the Biomethane System Entry Points. The provisional UDQI will be determined at D+1 as; a) A Gas Supplier's provisional Biomethane Daily Quantity Delivered (BDQD) - will be the metered quantity at the BSEP; and b) Gas Supplier's provisional Transmission Daily Quantity Delivered (TDQD) - will be: provisional TDQD = provisional UDQO + Users (initial) Daily Shrinkage Quantity – provisional BDQD and **where this is a negative number, the provisional TDQD = zero** provisional UDQI = provisional TDQD + provisional BDQD

Proposed Arrangements (Distribution)

Subject	Proposal
Daily Quantities (Allocations)	• The DNO will provide the following information for each Gas Supplier to the Transporter at D+1: a) provisional UDQO (i.e. provisional DM and NDM quantities, provided separately) b) Gas Supplier's (initial) Daily Shrinkage Quantity c) the sum of a) and b) above, i.e. Initial DN Exit Allocations d) provisional BDQD (or total BDQD if the User is registered at more than one BSEP on the Distribution Network) e) provisional TDQD determined <u>Month end process</u> • Following the month end reconciliation process, DNO will provide to the Transporter: a) final UDQO (i.e. sum of final DM and NDM quantities) and its components b) Gas Suppliers (allocated) Daily Shrinkage Quantity c) final BDQD (and total BDQD if the User is registered at more than one BSEP on the Distribution Network) d) final TDQD • No further changes will be made to the Final Exit Allocations under the NI Network Code. Only in the event of a significant and material error would there be any changes to the disbursement charges under the NI Network Code

Proposed Arrangements (Distribution)

Subject	Proposal
Entry requirements and non-compliant gas	• Delivery of gas at a Biomethane System Entry Point will have to comply with all the relevant requirements of section G of the Distribution Network Code, as for other System Entry Points. Biomethane being tendered for delivery to the system will need to meet the same GS(M)R standards as contained in the Annex G with the exception of the Oxygen Limit, which is subject to ongoing discussion between the technical working group and HSENI. • Distribution Network Code will set out entry conditions and treatment of non-compliant gas at a Biomethane System Entry Point
Title to Gas on the Distribution Network	• To the extent that it is necessary to determine, title and risk to gas on entry to the Distribution Network from the Transmission Network will be allocated to Gas Suppliers in proportion to their Final TDQD as determined by the DNO at the relevant System Entry Point under the NI Network Code and will pass to the DNO at the relevant System Entry Point. • To the extent that it is necessary to determine, where a Gas Supplier registered at a BSEP has an individual position in respect of a Gas Flow Day such that its BDQD exceeds its final UDQO + Shrinkage quantities (and its TDQD is therefore zero), it shall be treated as putting gas into the NI Gas Transmission Network at the relevant DN Exit Point(s). The quantity treated as transferring title and risk to gas in the NI Gas Transmission Network as a result of this position will be determined by calculating the difference between their total BDQD and their DN Exit Allocations (final UDQO + Shrinkage quantities) in respect of a Distribution Network.

Proposed Arrangements (Distribution)

Subject	Proposal
Maintenance	• A Biomethane System Entry Point will be a subcategory of System Entry Point which means that provisions concerning maintenance at System Entry Points would also apply
Emergencies	• Biomethane System Entry Points will be subject to the provisions of section J of the Distribution Network Code regarding Emergencies
Invoicing & Payment	• There will be no invoicing as regards Biomethane System Entry Points under the Distribution Network Code
Dispute Resolution	• Section N (Dispute Resolution) will apply in respect of Gas Suppliers at Biomethane System Entry Points as for at any other point on the Distribution Network

Proposed Arrangements (Distribution)

Subject	Proposal

Metering at a Biomethane System Entry Point	• Section M of the Distribution Network Code (Metering) will be expanded to set out the standards for measurement requirements
	
	• Measurement equipment will include:
	  • Gas quality (calorimeter/ gas chromatograph);
	  • Metering equipment;
	  • Communication system;
	  • Dedicated flow computer; and
	  • any other associated equipment required to fulfil the DFOs obligations under the NEA.
	
	• Measurement equipment and associated computer and communications equipment will be installed, commissioned, maintained and operated by the DFO, to meet the requirements of the Measuring Instruments Gas (Meters) Regulations 2006, the Gas Safety (Management) Regulations (Northern Ireland) 1997, the Gas Order (Northern Ireland) 1996 and the principles of the Gas (Calculation of Thermal Energy) Regulations 1996 (as appropriate)

Business Rules Overview (Transmission)

Introduction

- The following slides outline the proposals for the conveyance arrangements for biomethane injection into the Transmission network

- There are no active connection enquiries for biomethane injections into the Transmission network therefore the Transporter will not incorporate the arrangements into the NI Network Gas Transmission Code (Code) or add the required functionality to the Delphi IT system until required

- However, the Transporter will be progressing with changes to facilitate Aggregate Balancing and to accommodate the additional information exchanged and to be published as a result of biomethane injection in the Distribution networks
  - These will be referred to as *Distribution-related arrangements*

- The proposals are subject to change based on stakeholder feedback and systemisation requirements

Proposed Arrangements (Transmission)

Subject	Proposal
Agreements	• Connection Agreement — Between Relevant Transporter and DFO — Technical/construction specifications — Costs associated with connecting • Network Entry Agreement (NEA) — Between Relevant Transporter and DFO — The operation of injection point(s) — Other aspects of the technical requirements • Ancillary Agreement — Between Relevant Transporter, DFO and Shippers — Multiple Shipper arrangements at an injection facility i.e. allocations — As there are no proposed Biomethane Non-IP Entry Points, specific provisions for an Ancillary Agreement have not been developed at this time

Proposed Arrangements (Transmission)

Subject	Proposal
Classification of Biomethane Entry Points	• Will be classified in the Code as 'Biomethane Non-IP Entry Points' • A Biomethane Non-IP Entry Point will accommodate: — A single production facility using a dedicated connection point — Multiple production facilities using an injection hub arrangement • Multiple Shippers will be accommodated *Distribution-related requirements* • Biomethane entry points on any Distribution Network shall be grouped together under the Code • Classified as notional Distribution Biomethane Entry Points (DBEPs) • There shall be one notional DBEP in respect of each of the 3 Distribution Networks: — Belfast DBEP — Ten Towns DBEP — West DBEP

Proposed Arrangements (Transmission)

Subject	Proposal
Registrations	• A Shipper will need to register at Biomethane Non-IP Entry Point before it can flow gas • A Shipper must hold at least one other Registration i.e. at an Exit Point — Shipper required to balance its inputs and outputs *Distribution-related requirements* • A Shipper must be registered at the relevant notional DBEP under the Code — For the purposes of disbursement charging only • Evidence that it has applied to be registered at a Biomethane System Entry Point with the relevant DNO is required • Where the relevant DNO will notifies the Transporter that a Shipper ceases to be a registered User at a Biomethane System Entry Point under the DNO Code, the Transporter will deregister the Shipper at the DBEP — A similar process will happen with suspension of registrations

Proposed Arrangements (Transmission)

Subject	Proposal
Capacity	• At a Biomethane Non-IP Entry Point, the Code will provide for: — Annual Non-IP Entry Capacity — Monthly Non-IP Entry Capacity — Daily Non-IP Entry Capacity • Capacity will be allocated on a 'First Come First Served' basis on either Delphi or PRISMA • Application windows: — Annual (GY+1 to GY+15): 1st June and 31st August — Monthly (M+1): 1st calendar Day of the Month M and up to the Day in month M which is 8 days prior to the start of M+1 — Daily: Start of the calendar Day which is 7 days prior to the Gas Flow Day D to 03:00 on D • Once capacity is allocated, it shall be non-returnable • However, a Shipper holding Annual Non-IP Entry Capacity shall be entitled to offer its capacity for future Gas Years for surrender, during the period 1st March to 30th April — Surrenders shall only take effect to the extent that there is another Shipper applying for Annual Non-IP Entry Capacity at the relevant Biomethane Non-IP Entry Point • Transfers of Non-IP Entry Capacity at a Biomethane Non-IP Entry Point between Shippers shall be facilitated • Non-IP Entry Capacity Overruns shall apply — Overrun charge = Applicable Multiplier x P_{daily} x Overrun Quantity

Proposed Arrangements (Transmission)

Subject	Proposal
Demand Forecasting	• Shippers at a Biomethane Non-IP Entry Point will not be required to submit forecasts of their supplies into the network on a daily basis *Distribution-related requirements* • A Shipper at a DBEP will be required to provide its daily forecast flows at the DBEP to the DNOs under the Distribution Codes • The DNOs will provide this information to the Transporter who will publish these on Delphi along with the Transportation Delivery Nomination Required (TDNR) as per the example below:

Distribution Forecasts						
DNO	NDM Forecast (kWh)	DM Forecast (kWh)	Shrinkage Forecast (kWh)	Total Forecast (kWh)	Biomethane Delivery Nomination (kWh)	Transmission Delivery Nomination Required (kWh)
FEDL_DNO	100,000	200,000	700	300,700	0	300,700
PNGL_DNO	2,000,000	550,000	7,500	2,557,500	50,000	2,507,500
SGN_DNO	25,000	250,000	500	275,500	75,000	200,500
Total	**2,125,000**	**1,000,000**	**8,700**	**3,133,700**	**125,000**	**3,008,700**

Proposed Arrangements (Transmission)

Subject	Proposal
Nominations	• Nominations will be submitted on Delphi • Nominations will be single sided – no matching is required • Existing principles continue to apply i.e. timings *Distribution-related requirements* • Shippers will be required to nominate at a DBEP under the Distribution Codes but not under the Transmission Code

Proposed Arrangements (Transmission)

Subject	Proposal
Balancing	• A Shipper's Aggregate NI Imbalance (ANII) will continue to be calculated using the following formula: — Aggregate NI Imbalance position $_D$ = Aggregate NI Entry Allocation $_D$ - Aggregate NI Exit Allocation $_D$ • However, Biomethane Non-IP Entry Point Allocations and DBEP Entry Allocations will be included in a Shipper's Aggregate NI Entry Allocation: — Aggregate NI Entry Allocation $_D$ = ∑ Final IP Entry Allocations $_D$ + ∑ Final Biomethane Non-IP Entry Allocations $_D$ + ∑ Final DBEP Allocations $_D$ + ∑ Trade Buy Allocations $_D$ • Aggregate NI Exit Allocations shall comprise the same components as currently: — Aggregate NI Exit Allocation $_D$ = ∑ Final Exit Allocations $_D$ + ∑ Final VRF IP Exit Allocations $_D$ + ∑ Trade Sell Allocations $_D$ — However, for DN Shippers the ∑ Final Exit Allocations $_D$ shall now be the Final DN Exit Allocations as determined by the DNOs • The ANII will now reflect a Shipper's aggregate imbalance across both the Transmission and all the Distribution Networks

Aggregate Imbalance Example 1

Aggregate Entry Allocations	Quantity	Notes
∑ Final IP Entry Allocations $_D$	100	All gas sourced from GB
∑ Final Biomethane Non-IP Entry Allocations $_D$	0	
∑ Final DBEP Allocations $_D$	0	
∑ Trade Buy Allocations $_D$	0	
Aggregate NI Entry Allocation $_D$	**100**	

Aggregate Exit Allocations	Quantity	Notes
∑ Final Exit Allocations $_D$	95	Provided by DNOs
∑ Final VRF Exit Allocations $_D$	0	
∑ Trade Sell Allocations $_D$	0	
Aggregate NI Exit Allocation $_D$	**95**	

Aggregate Imbalance Position	Quantity	Notes
Aggregate Imbalance Position $_D$	**5**	**Shipper is credited for full imbalance across NI Network**

Aggregate Imbalance Example 2

Aggregate Entry Allocations	Quantity	Notes
∑ Final IP Entry Allocations $_D$	80	Some gas sourced from GB
∑ Final Biomethane Non-IP Entry Allocations $_D$	0	
∑ Final DBEP Allocations $_D$	20	Residual amount sourced from biomethane injection
∑ Trade Buy Allocations $_D$	0	
Aggregate NI Entry Allocation $_D$	100	

Aggregate Exit Allocations	Quantity	Notes
∑ Final Exit Allocations $_D$	75	Provided by DNOs
∑ Final VRF Exit Allocations $_D$	10	Shipper has traded with another Shipper in GB
∑ Trade Sell Allocations $_D$	10	Shipper has traded with another Shipper at the NIBP
Aggregate NI Exit Allocation $_D$	95	

Aggregate Imbalance Position	Quantity	Notes
Aggregate Imbalance Position $_D$	5	Shipper is credited for full imbalance across NI Network

Proposed Arrangements (Transmission)

Subject	Proposal
Allocations	• Allocations will be based on metered quantities • Initial Entry Allocation on D+1 • Final Entry Allocation on D+5 • Where there are multiple Shippers, allocations will be determined in accordance with the provisions of an Ancillary Agreement • A Shipper's Biomethane Non-IP Entry Allocations will be counted as part of its Aggregate NI Entry Allocation *Distribution-related requirements* • The Relevant DNO will provide the Transporter with Shipper's allocation data • The DN Exit Allocation is the sum of the DM, NDM and Shrinkage for that User • For each DN Shipper, and in respect of each DN, Delphi will calculate Adjusted (Transmission) DN Exit Allocations, for the purposes of Transmission commodity charging, as follows: — *Adjusted T-DN Exit Allocation = Total DN metered quantity x (Shipper's TDQD ÷ sum of all Shippers' TDQD)* • The DNOs will provide the best available data on M+6 for the Transporter to determine Final Allocations • Scheduling Charges at a DN Exit Point will use allocations using TDQD minus BDQD

Allocations Example 1

- Shipper A: NI demand, sources gas from Transmission and biomethane from Distribution
- Shipper B: NI demand, sources all gas from Transmission

Allocations	Shipper A	Shipper B	Total	Notes
DN Exit Allocation	50	30	**80**	Equals total of Metered Quantities from Transmission and from Biomethane injected into Distribution
DN Biomethane Entry Allocation (BDQD)	25	0	**25**	Equals Biomethane Metered Quantity
Transmission Metered Quantity	--	--	**55**	Equals aggregate DN Exit Allocations minus aggregate BDQD
Demand (full or in part) supplied by T	*Yes*	*Yes*	--	
Transmission Daily Quantity Delivered	25	30	**55**	DN Exit Allocations minus BDQD, zero if negative
Pro Rata Share of Metered Quantity	45%	55%	**100%**	
Initial/Final Adjusted T-DN Exit Allocation	25	30	**55**	Total equals the Transmission Metered Quantity

Allocations Example 2

- Shipper A: NI demand, sources gas from Transmission and biomethane from Distribution
- Shipper B: NI demand, sources all gas from Transmission
- Shipper C: Injects biomethane to VRF to out of the Transmission network, no NI demand

Allocations	Shipper A	Shipper B	Shipper C	Total	Notes
DN Exit Allocation	50	30	0	**80**	Equals total of Metered Quantities from Transmission and from Biomethane injected into Distribution
DN Biomethane Entry Allocation (BDQD)	25	0	10	**35**	Equals Biomethane Metered Quantity
Transmission Metered Quantity	--	--	--	**45**	Equals aggregate DN Exit Allocations minus aggregate BDQD
Demand (full or in part) supplied by T	*Yes*	*Yes*	*No*	--	
Transmission Daily Quantity Delivered	25	30	0	**55**	DN Exit Allocations minus BDQD, zero if negative
Pro Rata Share of Metered Quantity	45%	55%	0%	**100%**	
Initial/Final Adjusted T-DN Exit Allocation	20	25	0	**45**	Total equals the Transmission Metered Quantity

Proposed Arrangements (Transmission)

Subject	Proposal
Transmission System Constraints, Exceptional Events and Emergencies	• The same rights and obligations exist i.e. flow orders may be issued and revised nominations requested • Other provisions of the Code concerning emergencies and their consequences will all also apply
Entry Requirements	• Delivery of gas at a Biomethane Non-IP Entry Point will have to comply with all the relevant requirements on other Entry Points • Biomethane delivered to the Transmission Network will need to meet the same GS(M)R standards as contained in the Code Appendix 3 — The Transporter is currently reviewing whether there are circumstances in which it may be appropriate to amend the oxygen limit and whether a safety case revision might therefore be required • The Transporter shall have the right to refuse to accept delivery/accept part of a delivery and to take steps to limit the delivery of non-compliant gas, — Including operating the Remote Operable Valve at the point, pursuant to the NEA • The Transporter will inform Shippers if it becomes aware that non-compliant gas has entered the Transmission Network

Proposed Arrangements (Transmission)

Subject	Proposal
Title to Gas	• Title and risk to gas shall be allocated to Shippers in proportion to their Final Entry Allocations at the relevant Biomethane Non-IP Entry Point and shall pass to the Transporter at the Biomethane Non-IP Entry Point *Distribution-related requirements* • Title and risk to gas on exit at the Transmission Network at a DN Exit Point shall be transferred from the Transporter to Shippers in proportion to their Final TDQD as determined by the Relevant DNO • When a Shipper's Biomethane Entry Allocations at a DBEP exceed its DN Exit Allocations, it shall be treated as putting gas into the Transmission Network at the relevant DN Exit Point(s) and simultaneously transferring title and risk in such quantity of gas to the Transporter
Measurement and Testing	• Code will set out the specification of the measurement equipment to be installed and maintained by the DFO — Will include relevant technical standards and specified in the NEA • The Biomethane Non-IP Entry Quantity shall be the quantity determined by the measurement equipment • Estimates will be used in the absence of reliable readings

Proposed Arrangements (Transmission)

Subject	Proposal
Maintenance	• Transporter will co-ordinate maintenance with the DFO in accordance with the provisions of the NEA and the Code • Transporter shall notify the Registered Shipper(s) of any Scheduled Maintenance which may affect the point during Gas Year Y+1 by the end of Gas Year Y • Where the Transporter is unable to accept gas tendered for delivery at a Biomethane Non-IP Entry Point as a result of Scheduled Maintenance, the Transporter shall be relieved of its obligations to accept gas for the duration of such maintenance
Shipper Forecast Information and the Ten Year Statement	• Shippers will be required to provide forecast capacity and flows forecast to be delivered at a Biomethane Non-IP Entry Point *Distribution-related requirements* • Registered Shippers at a DBEP will be required to provide the forecast flows at the DBEP

Proposed Arrangements (Transmission)

Subject	Proposal
Charges Payment & Tax	• Capacity charges will apply based on the NI Entry Capacity Reserve Price (taking into account any discount which may be applicable from time to time) • Commodity charges shall not apply • Biomethane flows at a Biomethane Non-IP Entry Point shall attract disbursement charges: — Imbalance and Scheduling Charges — Balancing Gas Costs • Imbalance charges shall be calculated in line with the existing approach • There shall be no balancing or scheduling tolerance associated with a Biomethane Non-IP Entry Point *Distribution-related requirements* • In respect of a DBEP, there shall be no capacity or commodity charges under the Code related to that point • Biomethane flows at a DBEP shall attract disbursement charges as follows: — Imbalance Charges — Balancing Gas Costs • There shall be no balancing tolerance associated with a DBEP • All charges shall be included on the existing Code Charges invoices and in accordance with the existing schedule for invoicing and payment

Proposed Arrangements (Transmission)

Subject	Proposal
Credit	• Shippers shall be required to ensure that they have sufficient Provided Level of Credit Support (PLCS) to cover the charges payable in respect of the Biomethane Non-IP Entry Point • The processes for calculating and placing credit shall be the same as currently *Distribution-related requirements* • Shippers at a DBEP will require sufficient PLCS to cover their disbursement charges in respect of the DBEP
Liabilities and Indemnities	• The existing provisions of section 19 of the Code shall apply • The obligation on Shippers not to make claims against an Adjacent Transporter shall be extended to apply also to the DFO at a Biomethane Non-IP Entry Point *Distribution-related requirements* • Shippers shall not be able to make claims under the Code against the DFO at any distribution-connected biomethane injection point notionally comprised in a DBEP
Force Majeure	• No changes are anticipated

Proposed Arrangements (Transmission)

Subject	Proposal
Termination	• Where a Shipper registered at a Biomethane Non-IP Entry Point is to be terminated as a party to the Code, the Transporter shall inform the DFO • Capacity which has previously been allocated to a Terminating Shipper will be made available to the market *Distribution-related requirements* • Where a Shipper registered at a DBEP is to be terminated as a party to the Code, the Transporter shall inform the Relevant DNO(s) • Where the DNO informs the Transporter that a Shipper registered at a DBEP is to be terminated as a party to the Distribution Code, the Transporter shall de-register the Shipper in respect of the DBEP

Systems Implementation and Transition Rules

- The changes outlined will require systems development of Delphi for full implementation
- The timescales for accomplishing this systems development are expected to extend beyond April 2022
- Therefore, the Transporter plans to implement an interim arrangement to manage the information exchange with the DNOs and make the necessary adjustments to allocations and charging for DBEP Shippers
- During the interim period:
  - DBEP Shippers will be able to see their D-1 individual BDNs and TDNR for a DN on Delphi each day subject to an update to the 'Forecasts' screen
  - TDQD and BDQD as determined by the DNOs will be unavailable to view on Delphi at D+1
  - Initial D+1 Exit Allocations will be determined using Pro-Rata to Nominations (TDNR if advice followed)
  - Final DN Exit Allocations and BDQD as determined by the DNOs for Imbalance charging and Final Adjusted T-DN Allocations determined by the Transporter for commodity charging, should be available in the billing backing data from M+10 when invoices are issued

Next Steps

Business Rules

- The Business Rules will be issued for consultation w/c 13th December 2021
- The consultation document contains questions to assist responses
- The consultation will close on 21st January 2022
- Please send responses to:
  - Distribution
    - christopher.doherty@phoenixnaturalgas.com
    - lmccarthy@firmusenergy.co.uk
    - mary.okane@sgn.co.uk
  - Transmission
    - shippercommunications@gmo-ni.com
- Finalised Business Rules will be published following consideration of stakeholder comments

Code Modifications

- Modifications to the Distribution and Transmission Codes will be developed based on the finalised Business Rules

- Proposed timelines:

  - Consultation publication: Mid February 2022

  - Submission for approval: Late March 2022

  - Approval: April 2022

  - Implementation: April 2022

Industry Engagement

- The DNOs and Transporter will provide updates on the Business Rules and Code Modifications on 9th February 2022 at GMOG and the Shipper Forum

- UR will be organising a wider Industry briefing to be held in late February / Early March

- The agenda is to be finalised but it is anticipated that the briefing will provide updates on:

  - The overall project
  - Changes to the regulatory framework
  - Connection arrangements

- Industry will also have an opportunities to ask questions on the subjects discussed

- The briefing date and registration details will be provided in due course

Q&A

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