

**UNC Workgroup 0808 Minutes
Reverse Compression
Thursday 28 July 2022
via Microsoft Teams**

Attendees		
Alan Raper (Chair)	(AR)	Joint Office
Helen Bennett (Secretary)	(HB)	Joint Office
Vera Li	(VL)	Joint Office (Observing)
Ben Hanley	(BH)	Northern Gas Networks
Ben Mulcahy	(BM)	Northern Gas Networks
Claire Louise Roberts	(CLR)	ScottishPower
Clare Manning	(CM)	E.ON Energy
Dave Addison	(DM)	Xoserve
David Mitchell	(DM)	SGN
Helen Fitzgerald	(HF)	Wales & West Utilities
Hursley Moss	(HM)	Cornwall Insight
Joel Martin	(JM)	SGN
John Baldwin	(JB)	CNG Services Ltd
Kate Lancaster	(KL)	Xoserve
Louise Hellyer	(LH)	Totalenergies Gas & Power
Mark Jones	(MJ)	SSE
Oorlagh Chapman	(OC)	Centrica
Richard Pomroy	(RP)	Wales & West Utilities
Steve Mulinganie	(SM)	Gazprom
Tim Davis	(TD)	Barrow Shipping Limited
Tracey Saunders	(TS)	Northern Gas Networks

Copies of all papers are available at: <https://www.gasgovernance.co.uk/0808/280722>

The Workgroup Report is due to be presented at the UNC Modification Panel by 15 September 2022.

1.0 Introduction and Status Review

1.1. Approval of Minutes (23 June 2022)

The minutes from the previous Workgroup were approved.

1.2. Approval of Late Papers

There were no late papers to consider.

1.3. Review of Outstanding Actions

0105: DNs to provide justification for an Authority Direction Governance route based on v1.0 of the Modification.

Update: Richard Pomroy (RP) commented that Authority Direction *Modification 0363V - Commercial Arrangements for NTS Commingling Facilities* was introduced to provide the National Transmission System (NTS) the ability to take biomethane off the system and put it back on and could be a useful precedent for the governance route of this Modification 0808.

David Mitchell (DM) commented that the provision to remove Entry and Exit charges would mean this Modification will need to follow the Authority Direction governance route.

Alan Raper (AR) clarified this Modification does tend to lean towards an Authority Direction governance route and noted that Workgroup will make the recommendation to UNC Panel and ultimately it is for Panel to decide.

Steve Mulinganie (SM) agreed and suggested putting comments in the Workgroup Report according to those parties promoting Authority Direction or Self Governance. **Carried Forward.**

0106: DNOs to supply list of mandatory items for ancillary agreements and items which that may be required in an ancillary agreement.

Update: It was noted that Biomethane is a contributor to net zero. **Carried Forward**

2.0 Amended Modification

Tim Davis (TD) advised amendments to the Modification have not been completed as yet as he is aware that a list has been provided to Joint Office from the Legal Text provider, but this came in too late to amend the Modification in time for this meeting.

Richard Pomroy (RP) was invited to present the material that Wales & West Utilities (WWU) provided for the meeting, the material covered the following:

Please note these minutes do not replicate/include detailed content provided within the presentation slides, therefore it is recommended that the published presentation material is reviewed in conjunction with these minutes. Copies of all papers are available at: www.gasgovernance.co.uk/dist/280722

The Issue - Slide 2

RP advised that WWU have made pressure adjustments to pressure settings to over 20 of their sites in order to assist gas entering the system and have re-negotiated Connected System Exit Point (CSEP) pressures.

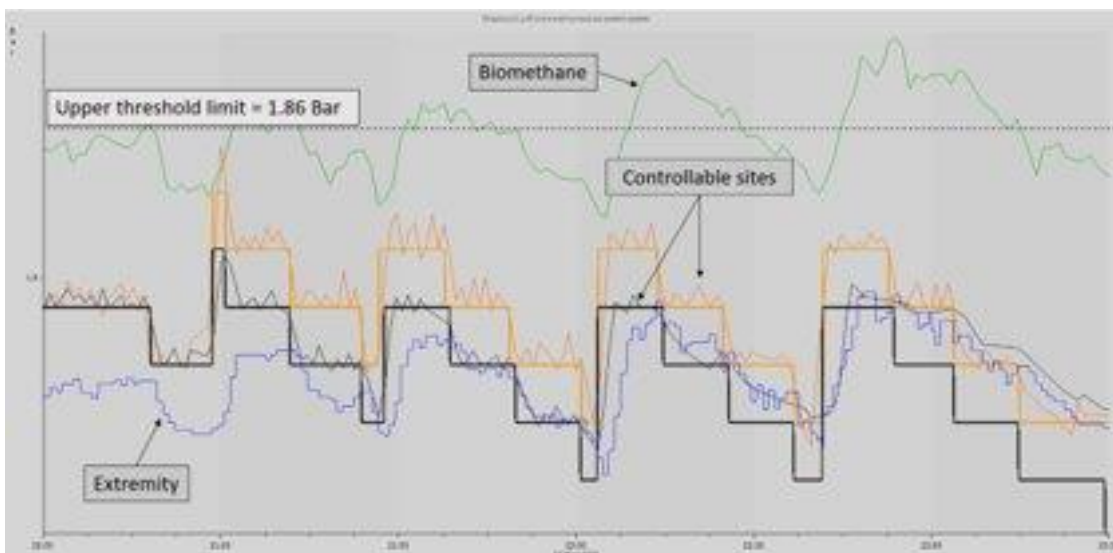
Purpose - Slide 3

RP explained that the purpose is to prove the concept of a network solution that can be replicated in capacity-restricted areas and that WWU are exploring ways to optimise the gas network's supply and demand through certain applications, (as quoted on Slide 3).

Smart Pressure Control Trial Overview - Slide 4

RP explained that rather than continually changing pressures, the preference is to automate them, so it is responsive to the situation in the network in almost real time. He also confirmed that WWU have installed automated controls on their Pressure Reduction Installations, (PRIs).

BIO Site breaching upper limit - Slide 5



RP explained the dotted black line is the pressure at which the biomethane plant was allowed to inject.

Helen Fitzgerald (HF) commented that both of the demands, entry and exit, can be intermittent and need to be balanced. This is done by sending a notice to controlling sites to turn pressure up or down.

AR sought clarification, with reference to the Biomethane thin green line represented on the graph, when that goes above the Upper threshold limit (the black dotted line), are these candidates to reverse compression? HF confirmed this and clarified that WWU are trying to automate as much of the pressure controls as possible.

Ancillary Document and questions Dave Mitchell

AR showed onscreen the Modification 0808 Reverse Compression Workgroup Discussion Points, provided by SGN, and noted it is a list that SGN feels need to be included in the Network Connection Agreement / Ancillary Agreement and some considerations which may need to be included in the Modification solution to aid the legal text production.

1. *Communications between 3rd party & GDN – planned exit and entry flows from and onto the network. How would this work in terms of communication channels?*
2. *Site management – agreement would need to cover non-operational windows when GDN required site to be turned down / off for network maintenance activities.*
3. *Gas quality – agreement would need to cover any mandatory requirements in relation gas quality monitoring and rules around operation of the asset. Possible G8 risk workshop.*
4. *Site operation – agreement would detail how the site is operated, i.e. would it be manually triggered by the biomethane site or automatically by a control system which monitors the biomethane site flow rate?*
5. *The GDN may require the installation of a ROV to control gas flow off/on to the network.*
6. *Asset responsibility – delineated lines of ownership and operational responsibility.*
7. *Exit and entry rates (Scm/h)*
8. *End of life decommissioning responsibilities + impact of conversion of network to hydrogen.*

Questions for the proposer:

1. *Under the Modification Proposal gas will leave the network, will the 3rd party asset operator become an GT licence holder? If not there are legal questions relating to title and risk to the gas passing from the Transporter to a third party.*
2. *Under current arrangements title and risk to gas is with the transporter at the point the gas enters the network and passes to a gas supplier at the point the gas exits the network. How will these arrangements be dealt with under MOD 808 - see UNC MOD 363 as this previously dealt with a similar issue. The Gas Act outlines how gas should leave the network please see the Gas Act Paragraph 5 that covers the Prohibition on Unlicensed activities <https://www.legislation.gov.uk/ukpga/1986/44/section/5>*
3. *Our interpretation is that the operator of the reverse compression facility would need to become an iGT to take the gas from the network, otherwise there are legal questions relating to the risk of gas passing from the Transporter to the third party. To navigate this point the proposer will also need to potentially raise an iGT mod to add gas Entry to the iGT UNC if they decide to pursue the iGT route for taking gas from the network.*
4. *Lack of metering at exit and entry points could lead to loss of gas scenario (albeit acknowledge we wouldn't expect gas fired compressors to be used....) – there may a loss of gas issue and this would need to be evaluated and possibly included in the unidentified gas figure?*
5. *What would happen to the assets if the network is converted to Hydrogen?*

Connections Agreement – pre ancillary agreement:

1. *Third party to provide provision asset location - Capacity / locational study to determine feasibility of specified asset location – GDN Network Planning analysis review.*
2. *Network analysis review to determine whether exit rate is acceptable and entry rate is acceptable.*
3. *Network view longevity of asset location in terms of continued economic and efficient management of the network to sustain 3rd party asset.*

Joel Martin (JM) noted that there will be a need for some communication for flows on and off the network, in case there are any issues on that particular day.

When AR asked if there are any pressure triggers, when flows start and finish? JM advised, under a normal arrangement you would know the SOQ and SHQ and there would possibly be a NExA in place, but with this arrangement there would be less information on how the Site is going to operate and the associated volumes.

To cover points 1, 4 & 5, John Baldwin (JB) clarified that there would be an agreement between the compressor owner and the GDN and confirmed the gas leaving the system would be the same as the gas entering the system. He advised that he could provide the data to the GDN and agree the rules with the GDN as to when the compressor has to stop, the flows and pressures, and the status of when the compressor is operating.

JM commented that the flow-rate off the Network to provide sufficient demand would be variable in order to provide the pressure headroom. It was agreed that this needs more discussion with GDNs.

RP advised he has been liaising with his asset colleagues who advised that the compressor would need to be integrated into the WWU system and there would have to be enough capacity in the upstream system to take the gas. JB commented that the GDN will need to adjust the pressure of the medium pressure for this to work. RP clarified it is not an operation on its own, it needs to be integrated.

AR noted the GDN would have control of the compressor, or it would have an operating algorithm for the third-party to operate to.

It was agreed that there needs to be some principles of how this will work according to specific areas on the network.

JB clarified that the network would have to be able to accommodate the request and would only be done on a case-by-case basis, where the GDN agreed to the installation. If the network was unable to accommodate the reverse flow then the project would not go ahead.

Q3: It was confirmed that gas quality would go into an ancillary agreement on a site-by-site basis.

Q6: Asset responsibility would require site drawings, demarcation points, and would feed into one of the legal questions about gas title and risk, and Gas Act licenced activities. A drawing would need to be produced showing everything downstream and upstream.

In terms of operation, RP noted, the compressor would only be allowed to operate according to permissions, depending on the safety of the network, (which is dynamic), he said although the compressor is switched on and owned by the biomethane producer, you could argue it is controlled by the network, what does operation mean, and which party would be ultimately responsible for saying its operation?

It was noted that the Health and Safety Executive (HSE) would judge this as a new class of asset and that the owner of the compressor would have to hold a GT licence.

JB further clarified that low pressure up to the meter would be owned by the GDN, the Gas Transporter would only own the compressor and maybe a little bit of pipeline up to and out of the network.

RP suggested a proposed approach of having an Operating Agreement noting that this is a part of the GT network that happens to have an IGT owned asset within it which raises other questions.

AR clarified that at the exit point and entry point on the network, the gas gets handed over at the end of the pipe on the low pressure part of the system and re-enters at the higher pressure tier of the network.

A question was raised if CSEP NExA or an Ancillary Document would be required. AR clarified the key aspect is there is no consumption, therefore the key difference between this and a CSEP NExA is that gas comes off the Network, nothing happens to it, then the gas comes back on the network.

AR noted that if this is going to be covered in an Ancillary Agreement there should be some scene setting in UNC, probably drawing on the ancillary agreements provisions, as referenced in Sections I and J.

When AR asked if a Shipper needs to be involved in this process, JM confirmed that as this does not affect energy balancing, a Shipper will not need to be involved.

AR agreed the high-level agreements need to be set out in the Modification, what is it; what it does and how will it be covered off.

Tracey Saunders (TS) asked, if the compressor is running to allow the biomethane site to have capacity on that area of the Network, what if there is another biomethane site on that area of the Network, how would you know who is using the capacity? JB clarified that if the GDN sets the pressures it is unlikely a second party is going to want to put the gas in with someone else's set pressures and only rely on fortuitously available arrangements to be able to be able flow their biomethane.

JB advised there may need to be an amendment to the IGT arrangement as there is no new energy being introduced.

It was confirmed that this Modification was mentioned at the recent IGTAD meeting held on 25 July 2022, for them to be aware of it.

TD commented that there had been no discussion at Workgroup about the content of the actual Modification raised and added, that if this is to be classed as an IGT process, maybe it would not require a Modification.

When JM asked if this can this be incorporated into a CSEP NExA, AR suggested it could be a new type of agreement, perhaps a Network Exit & Re-entry Agreement (NERA).

It was further questioned if a Modification is need or just an agreement as to how to manage where there are two connections on the same Network.

When it was clarified that a CSEP NExA amendment goes to IGTAD for approval, any amendment to that CSEP NExA will require a Modification and that this Modification could be used as the scene setter in the UNC, possible the IGTAD, and have the detail in the NERA.

It was agreed that the Legal Text provider and the Proposer would have a supplementary discussions to think about the way forward and reconvene next month.

In conclusion, JB confirmed that he has one project that is keen to go ahead by September in a Cadent owned area one, and that Cadent are overall supportive of this approach.

3.0 Next Steps

AR confirmed the next step will be to:

- Think about the structure of the UNC and Ancillary Agreement
- Consider heads of terms of the Ancillary Agreement
- SGN and Proposer to discuss the way forward
- Request a further reporting extension at August UNC Panel, (report to Panel in October)

4.0 Any Other Business

None raised.

5.0 Diary Planning

Further details of planned meetings are available at: www.gasgovernance.co.uk/events-calendar/month

Workgroup meetings will take place as follows:

Time / Date	Paper Publication Deadline	Venue	Workgroup Programme
Thursday 10:00 25 August 2022	5pm 16 August 2022	Microsoft Teams	Review of Legal Text Conclusion of Workgroup Report

Action Table (as at 28 July 2022)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0105	26/05/22	3.0	DNOs to provide justification for an Authority Direction Governance route based on v1.0 of the Modification.	DNOs	Carried Forward
0106	23/06/22	3.0	DNOs to supply list of <u>mandatory</u> items for ancillary agreements and items which that <u>may</u> be in an ancillary agreement.	DNOs	Carried Forward