

Energy Market Issues for Biomethane (EMIB) Workgroup Minutes

Monday 30 January 2012

at the National Grid Office, 1-3 The Strand. London WC2N 5EH

Attendees

Tim Davis (Chair)	(TD)	Joint Office
Mike Berrisford (Secretary)	(MB)	Joint Office
Andrew Grigsby	(AG)	ARUP
Chris Bielby*	(CB)	Scotia Gas Networks
Dave Lander	(DL)	Dave Lander Consulting
David Pickering	(DP)	National Grid
Gareth Mills*	(GM)	Northern Gas Networks
John Baldwin	(JB)	REA
John Cornes	(JC)	Atlas Copco
Jonah Anthony	(JA)	DECC
Lesley Ferrando	(LF)	Ofgem
Matthew Hindle	(MH)	ADBA
Pat Howe*	(PH)	SSE
Peter Hardy	(PH)	IGEM
Richard Street	(RS)	Corona Energy
Richard Pomeroy	(RP)	Wales & West Utilities
Roger Warren*	(RW)	Enzen Global
Steve Sherwood	(SS)	Scotia Gas Networks

* via teleconference

1. Introduction

Copies of all papers are available at: <http://www.gasgovernance.co.uk/emib/300112>

TD welcomed all to the meeting and thanked National Grid for hosting.

2. Minutes of the Previous Meeting

2.1 Approval of Minutes

The minutes of the previous meeting (22/11/11) were approved.

2.2 Review of Actions

Action EMIB 09/02: Dave Lander Consulting (DL) to prepare a list of CV measurement devices along with their performance.

Update: DL indicated that his papers focussed on appropriate performance, but a list of CV measurement devices had been provided within the documents.

Closed

Action EMIB 10/01: National Grid (DP) to seek DECC view on biogas producer exemption from any need to hold a GT Licence.

Update: DP confirmed that discussions had taken place. BR explained that, following initial resourcing issues, DECC had commenced work with ongoing discussions around various regulatory aspects taking place. When asked about delivery timescales, JA suggested that he would welcome an indication of priorities. However, any necessary changes to secondary legislation should be achievable in relatively short timescales – an interim timeline indication along with a set of guidelines would be provided in due course. To retain visibility of the potential need for a GT Licence exemption and secondary legislation changes, it

was agreed that the action should remain open.

Carried

Forward

Action EMIB 11/01: Joint Office (TD) to set up an Odorant Expert Sub-Group meeting.

Update: The meeting was held on 11 January.

Closed

Action EMIB 11/02: Ofgem (SR) to seek a view on whether DN capacity costs could be addressed via a logging up process.

Update: LF confirmed that the concept of logging up costs is part of the RIIO GD1 conclusions. LF agreed that if more certainty is needed in the specific case of reinforcement to meet entry capacity commitments, she would be prepared to consider providing a written summary of Ofgem's policy position. RP suggested that the issue is the need for potential reinforcement for low gas demand days, which RIIO GD1 did not specifically address.

Carried Forward

Action EMIB 11/03: Joint Office (TD) to request a note on NTS charges in respect of DN entry points.

Update: National Grid NTS had confirmed that:

- a. No charges are payable in regard to NTS Entry (Capacity and Commodity);
- b. NTS Exit Capacity is payable by the DNs in regard to their Exit Capacity bookings; and
- c. NTS Exit Commodity is payable at supply point level.

Closed

Action EMIB 11/04: All to review the Generic Measurement Risk Assessment of Biomethane Injection into Gas Distribution Systems & Specification of Water dew temperature of biomethane injected into below 7 bar Gas Distribution Systems reports.

Update: DL confirmed that no formal responses had been received. The papers were reviewed by the Expert Group and recommendations added as a result.

Closed

Action EMIB 11/05: DNs to provide a communications data flow network map and confirmation of minimum data requirements.

Update: Please refer to item 7. below.

Closed

3. **GDN Connection Policy for Biomethane Projects**

TD noted that EMIB had agreed that a minimum connection approach is appropriate, leaving procurement of the entry facility open to competition. RP confirmed that revised arrangements would be implemented primarily through changes to connection policy and that a draft GDN connection policy document had been circulated to ENA members. Work on UNC Modification 0391 "Distributed Gas Charging Arrangements" remained ongoing to develop any supporting changes to the transportation charging methodology.¹

¹ The next meeting of Workgroup 0391 is 27 February at the Energy Networks Association, London.

The connections policy document is expected to incorporate entry plant technical specification requirements. The GDNs confirmed that DL has been commissioned to take forward the proposed specification provided by the REA. DL advised that this would add further detail, and would also reflect the specification used by National Grid in developing the so-called packaged plant skip units.² However, this excludes both gas treatment and propane injection equipment. He had begun consideration of the broader functional and technical specification requirements going forward, including identification of interfaces between key components and equipment scopes. It was suggested that the first stage should be to develop guiding principles and functional specifications that are not so detailed as to constrain vendor participation.

Whilst acknowledging that some GDNs remain concerned about aspects of motorisation, JB indicated that he was happy with progress and the way forward. RP noted that, whilst adoption of a standard technical specification was agreed and could be a Network Entry Agreements (NEA) schedule, NEAs themselves would not be standard but would remain specific to each GDN. Some parties felt that a standard NEA would be beneficial. SS said that the GDNs believe that any development of standard NEA terms should sit towards the end of the process such that any EMIB recommendations can be accommodated. While accepting that there is benefit in commonality, RP felt that each DN could have different requirements preventing delivery of a single NEA. SS supported this - whilst a common technical specification is possible, the front-end commercial aspects are likely to be specific to the circumstances at each entry point. JB emphasised the importance of agreeing a common approach to the twin elements of technical requirements and capacity provision.

Summarising, TD suggested that, to complete the EMIB report and recommendations, it would be desirable to establish by the end of February: a proposed connection policy; a standard technical specification; and as many generic elements as possible of an NEA. SS indicated that he did not believe that agreement over provision of a generic NEA, especially the front-end commercial aspects, had been reached and doubted whether it could be available in the suggested timeframe. JB countered that provision of a common set of capacity rules is needed and these would sit within the NEA.

JB enquired if the GDNs would be prepared to draft a simple overview of the NEA (i.e. what common elements are included and where any possible differences may occur). RP agreed to produce this. He also advised that he expects issue a draft connection policy document (based on minimum connection and upstream requirements) by the end of March, prior to formal consultation.

Action EMIB 01/01: DNs (RP) to prepare an NEA overview (i.e. what elements can be common and where differences may occur)

Odorant Provisions

JB suggested that a legal view from the DNs on the provision of odorant would be beneficial. SS advised that it remains Scotia Gas Networks view that they have a duty to comply with the various regulations, and that this includes odorant. Whilst acknowledging that, as with other aspects, they could assign responsibility for adding odorant to a third party, SGN remain gravely concerned that in the event that something should go wrong (i.e. over / under motorisation or a breakdown in the measuring aspects), it is SGN who would be held legally

² Standardised grid injection plant – comprising four independent designs to date, available to all the GDNs, bio-producers etc. via the four independent manufacturers.

responsible. This sits alongside potential issues about recouping any costs associated with a third party's action, bearing in mind the impact of odourisation on the number of Public Reported Escapes (PREs). With this in mind, SGN remain supportive of allowing third party delivery of all the various service components except odourant provision. While not necessarily owning nor installing the odourising equipment, they would wish to be responsible for its operation. RP confirmed that this view is shared by WWU. DP advised that National Grid remain open to third party operation, backed up by appropriate contractual arrangements.

JB was concerned that the SGN stance could potentially add complexity and cost to any solution. The issue of who would pay for any additional costs would need resolving, as would liabilities. In response, SS suggested that in instances where costs become an issue, SGN could always choose to install the plant. When asked, DP advised that, as far as National Grid is concerned their standard uplift when procuring services from 3rd parties is 10%. The Group asked whether Ofgem had a view on the approach to odourisation. LF responded that any proposals would need to be considered by Steve Rowe, but Ofgem is looking to EMIB to make recommendations.

DL then raised some points for clarification:

- what is actually meant by ownership of plant and equipment;
- what constitutes operation and maintenance of the plant and equipment;
- what site access requirements would be needed for odourant and downstream test points;
- how will odourant be delivered; and
- what if any liabilities would apply.

RS suggested it would be helpful to have a legal view from the DNs relating to the matter of the ownership of plant and equipment passing over from one party to another. SS agreed to obtain a legal view on title passing between parties, which DL could reflect in the odourant section of the technical specification.

Action EMIB 01/02: DNs (SS) to obtain a legal view on plant and equipment ownership rights passing between parties.

4. Capacity for Biomethane

RP provided an overview of the 'Capacity for distributed gas entry' paper.

RP suggested that the only viable option is where unanticipated entry related reinforcement is treated in the same way as other general reinforcement (i.e. not charged to the entrant), although clarity around the RIIO GD1 cost logging up arrangements would be helpful. JB supported this and hoped that Ofgem would give the matter due consideration and provide suitable guidance. LF confirmed that Ofgem would expect to respond to any recommendations that are put to them, which should be backed up by appropriate analysis and evidence.

DP felt that the issue may only materialise in a small number of instances, if any - it is difficult to envisage where unanticipated reductions in demand could take place. RS indicated that his main concern relates to investors becoming potentially 'risk adverse' if no firm and continuing capacity rights are available. RP clarified that any risk is not associated with capacity availability at the point of connection, but is related to capacity availability in the future.

It was agreed that the proposed approach of providing capacity up to the level that could be accommodated by a low demand scenario was appropriate. In

instances where this would not provide the level of capacity sought, the option of within network compression may provide an appropriate solution - if this proves to be feasible.

5. Technical Standards Associated with Calorific Value Measurement for Biomethane Flows

Accuracy of CV Determination Systems for Calculation of FWACV

DL provided a brief overview of Flow Weighted Average Calorific Value (FWACV) work to date – the conclusion being that the standard of accuracy is not a crucial element and has a nugatory bearing on customer bills. Based on his analysis, DL concluded that any impact depends upon the scale of the entry point – it is only if the volume of biomethane entry were approaching 30% of the LDZ volume that an impact might begin to be seen.

When asked, DL indicated that he had focused on the domestic market and tracker sites in particular, using a range of standard fixed factors. The major influences on customer bills are variations in these fixed factors, such as temperature and pressure.

DL advised that 0.5MJ accuracy is typical of a low cost measurement device and, in his view, would be a sufficiently accurate level for volume rates such as 240,000 m³/day, based on a single flow model assumption. JB supported Ofgem approving a suitable accuracy requirement, along with a minimum recording speed for the device itself (i.e. not necessarily the more accurate and expensive chromatographs that may be required under the present terms). SS suggested maximum flow rates and volumes should be specified for the accuracy percentage. TD cautioned that any borderline could be deemed as discriminatory. However, DL did not perceive any real issue relating to which volume figure to apply, as the significance of using either 240,000, 2.4 million or 24 million m³/day is very low. SS observed that he would prefer that 2.4 million m³/day was adopted.

To make a change to the regime, DL pointed out that there is a two-part process:

1. A Letter of Direction identifies and establishes aspects such as GDN site monitoring requirements etc., and
2. A Letter of Approval specifies the standard of accuracy required etc. – this forms the basis on how Ofgem approves a particular instrument.

SS felt that one of the main EMIB goals is production of a technical specification for CV measurement devices, which DL agreed to provide in a form that would support inclusion within any future Letter of Approval.

DP added that specific consideration may be needed to be given to the appropriate level of accuracy when commingling is used rather than propane enrichment. This reflected the different risks of low CV gas triggering the FWACV cap under the different approaches. DL agreed to address this in his recommendations.

JB suggested a somewhat simpler approach may be measuring the propane and methane flows separately and combining the results – he would not want this option to be ruled out. DL warned that this could be contrary to the current regulations and that there are practical issues which may not make the approach as simple as JB assumed. TD observed that if the barrier is a regulatory one, EMIB could recommend that the Regulations should be changed.

Action EMIB 01/03: Dave Lander Consulting (DL) to propose a suitable technical specification for CV measurement devices for potential inclusion in Letter of Approval

New Action EMIB 01/04: Dave Lander Consulting (DL) to consider whether different standards should apply when commingling is adopted rather than propanation

6. Gas Quality Analysis at Biomethane Entry

Specification of Water dew temperature of biomethane injected into below 7 bar Gas Distribution Systems report

The recommendations defined within DL's report were accepted.

7. Transmission of Data to the GDNs Agent

DP introduced the National Grid paper on data transmission. RS enquired whether it was compulsory to use the DANINT software to collect and store CV and volume data, or could a party use their own software. DL advised that DANINT comprises several elements, some of which (end of day CV averages etc.) are approved by Ofgem. Anyone seeking a different approach would need Ofgem approval - this falls under the Letters of Direction and Gas Calculation of Thermal Energy Regulation. DP suggested that Ofgem might consider agreeing to a process to cater for instances where the GDNs are not doing the measuring, but this is something parties would need to discuss with Ofgem in due course.

JB indicated that he would be more than happy to use the DANINT approach if it were at no cost, although he remains unclear why all the information is needed other than assurance that the FWACV is being met. Asked if he was suggesting that sites should not be directed, JB was open minded. He remains cautious, however, because of the scale and variation in costs that have been quoted for the system, including £200k which is clearly disproportionate.

Assuming agreement that biomethane should be included within the FWACV calculation, DL suggested the issue boils down to getting appropriate information into HPMIS. In acknowledging that any suitable data transfer mechanism could be used, he also believed there could be RbD (Reconciliation by Difference) impacts to be taken into account.

RS believed that there is merit in looking to streamline information flows into HPMIS. The issue is how parties get their data into the data server – what format, what platform and at what cost. He felt information provision could be built in to the measuring devices themselves, similar to the new SMART technology, and that the actual transfer approach should not be specified as this could rule out innovation.

Summarising, TD suggested that if we could deliver what everyone wants now, within the current regulatory framework and at reasonable cost, the industry could then look to developing enhanced provision in the future. JB concurred that three issues need resolving: how much will it cost; can DANINT be run on users' computers rather than additional equipment being required; and what changes are needed to cater for the FWACV calculation going forward. SS suggested the DNs Distributed Gas Group meeting could consider the future data communication flow requirements. This would include communication options and whether DANINT would be provided free of charge.

New Action EMIB 01/05: DNs to consider data communication flow requirements

8. AOB

Wales & West Utilities GSMR Update

RP confirmed that work had commenced and two phases are involved – Phase 1 includes a theoretical study to be completed by mid March followed by Phase 2, which includes extracted pipe analysis based on the first 25 samples, sometime in April. Should any corrosion be found within the initial sample set, a second tranche of (25) samples would be undertaken.

Odorant Masking Provisions & Siloxanes Removal (Dutch Study)

JB advised that the HSE has enquired as to what would happen in the event that these are not removed. Further consideration is required.

9. Diary Planning for Workgroup

Details of planned meetings are available at: www.gasgovernance.co.uk/Diary.

It was agreed to arrange another Expert Group meeting in February and a full EMIB meeting in early March.

Suggested agenda items for future meetings would be welcome.

EMIB (Biomethane) Action Log

Action Ref	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
EMIB 09/02	27/09/11	6.	Prepare a list of suitable CV measurement devices along with their performance.	Dave Lander Consulting (DL)	Update provided. Closed
EMIB 10/01	31/10/11	3.	Seek DECC view on biogas producer exemption from any need to hold a GT Licence.	National Grid (DP)	Update due for 06 March. Carried Forward
EMIB 11/01	22/11/11	3.	Set up an Odorant Expert Sub-Group meeting.	Joint Office (TD)	Update provided. Closed
EMIB 11/02	22/11/11	3.	Seek a view on whether DN capacity costs could be addressed via a logging up process.	Ofgem (SR/LF)	Update due for 06 March. Carried Forward
EMIB 11/03	22/11/11	4.	Request a note on NTS charges in respect of DN entry points.	Joint Office (TD)	Update provided. Closed
EMIB 11/04	22/11/11	6.	Review the Generic Measurement Risk Assessment of Biomethane Injection into Gas Distribution Systems & Specification of Water dew temperature of biomethane injected into below 7 bar Gas Distribution Systems reports.	All	Update provided. Closed
EMIB 11/05	22/11/11	7.	Provide a communications data flow network map and confirmation of minimum data requirements.	DNs	Update provided. Closed
EMIB 01/01	30/01/12	3.	Prepare an NEA overview (i.e. what elements can be common and where differences may occur).	DNs (RP)	Update due for 06 March.
EMIB 01/02	30/01/12	3.	Obtain a legal view on plant and equipment ownership rights passing between parties	DNs (SS)	Update due for 06 March.

Action Ref	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
EMIB 01/03	30/01/12	5.	Propose a suitable technical specification for CV measurement devices for potential inclusion in Letter of Approval	Dave Lander Consulting (DL)	Update due for 06 March.
EMIB 01/04	30/01/12	5.	Consider whether different standards should apply when commingling is adopted rather than propanation	Dave Lander Consulting (DL)	Update due for 06 March.
EMIB 01/05	30/01/12	7.	Consider data communication flow requirements	DNs	Update due for 06 March.