

EMIB – Expert Group Meeting 6

Monday 16 April 2012

at the National Grid Office, 31 Homer Road, Solihull B91 3LT

Attendees

Tim Davis (Chair)	(TD)	Joint Office
Mike Berrisford (Secretary)	(MB)	Joint Office
Colin Stock	(CS)	Wales & West Utilities
Dave Lander	(DL)	Dave Lander Consulting
David Pickering	(DP)	National Grid
Ian Taylor	(IT)	Northern Gas Networks
John Baldwin	(JB)	REA
Richard Lewis	(RL)	Arup
Stuart Gibbons	(SG)	National Grid Distribution
Trevor Roberts	(TR)	Scotia Gas Networks

Copies of all papers are available at: <http://www.gasgovernance.co.uk/emib/160412>

1. Introduction

TD welcomed all to the meeting.

1.1 Approval of Minutes

The minutes of the previous Expert Group meeting (19/03/12) were approved.

1.2 Review of Actions

None to consider.

2. Commercial Arrangements for Biomethane Entry

2.1 Consideration of Data Transmission Issues

Site functionality referenced in the Functional Specification table review

In opening the debate, DL suggested that due consideration should be given to each of the as-is now items with a view to identification of either regulatory or (simpler) letters of approval / direction changes, or a combination of both. He pointed out that where changes to the current regulations are proposed, these would take more time to resolve. DP believes that as part of the EMIB Workgroups recommendations, potential timeline differences between the two routes need to be understood – parties indicated that they were happy with the suggested approach.

A brief summary of the detailed debate on each of the items, is provided below and accompanied by the workgroups proposed recommendation.

1) Acquisition and storage of gross CV from the approved CV determination device.....

Parties discussed how 3rd party provided equipment would or would not be included under consideration of item 2 below and whether or not the transporters would need to provide determinations for equipment that they did not provide – consensus was that parties would be happy that Transporters make determinations based on 3rd party provided equipment, as these instances could be provided for within respective Network Entry Agreements (NEAs). Furthermore, it was felt by some that reasonable consumer protection could be provided for within the Authority Letters of

Direction, whilst others continued to believe that resolution of faulty equipment issues should come under the regulatory undertakings. JB advised that the Biomethane Producers advocate shutting off gas injection into the system (network) whenever out of specification CV is involved, which is why they support the letter of direction option. He also supports a lower timeframe for invoking a shut off, suggesting that for biomethane this could be as short as a 15 minute period where no CV is determined (especially where enrichment is involved), rather than the current 8 hour window. Later on in discussions JB indicated he would be happy to retain the 8 hr clause but to bring it within the auspices of the letters of direction in preference to it being a regulatory change requirement.

DL pointed out that the Authority legal team could have a different view on the public gas transporter matters and whether or not any regulatory changes would be required.

It was a generally supported view, that we may require different letters of direction in future to cater for the different system connection point (tier) pressures although DP observed that the current regulations appeared to be aimed more at failing to determine the CV, rather than 'outside the range' CV recordings. Whilst noting that a loss of telemetry would not necessarily be an issue, as parties could still manually retrieve the CV data, DL also remained of the opinion that we may require an Authority ruling on whether or not 3rd party apparatus would fall under the regulatory umbrella. In response, TD reminded those present that it is absolutely NOT the Authorities place or within their role to approve any regulatory changes – this task falls to the government of the day to undertake.

JB remained concerned over the issue of breaching the CV cap, whilst DL remained convinced that a view on the potential for end of day CV cap breaches from the Authority would prove beneficial. TD believes that we simply need to be able to confirm that any CV values submitted to the system are true, rather than fictitious. DL remained of the view that the Authority would need to appease themselves that an item of equipment is providing accurate CV measurements (an operating envelope) – SG advised that the Authority had already provided some guidance around this matter.

In the meantime, RL felt that we would also need to consider how to treat wholly discrete biomethane networks (i.e. isolated housing estates etc) and identify what provisions for CV and GS(M)R considerations would be needed.

Before moving on, parties briefly debated what information would be needed to flow into the Transporters' systems, for different types of equipment such as Danalyzer or PT2 etc. DL felt the issue boils down to whether or not a 'flag' is needed to indicate an instrument alarm has been triggered, or whether a separate measurement provision is provided for elsewhere. TD reminded parties that we only need 1x measurement from each device.

- 2)together with a flag indicating its quality / suitability for use

See item 1 discussions above for details.

- 3) For non-continual CV determination devices, the System – CV determination device interface shall be such that only one value of each CV determination is acquired

See item 1 discussions above for details.

- 4) Acquisition and storage of instantaneous volumetric flowrate at the time of acquisition of gross CV

DL opened by advising that this only applies when gas is flowing and the measuring equipment is NOT in an alarm condition.

When asked if they believe that they would be able to satisfy the minimum requirements, both JB and RL believed they could.

DL went on to suggest that there maybe potential end of day average CV calculation impacts involved and where parties do not wish to adhere to the current end of day average CV calculation requirements we would need to ensure that the appropriate Letter(s) of Direction are changed to reflect this.

Parties debated whether to recommend a more simplified (flow computed) approach based on:

$$24\text{hr (daily) energy} / 24 \text{ (daily) flowrate} = \text{Average CV}$$

DL pointed out that there can be various means of calculating the average CV depending upon the accuracy of the measuring equipment deployed and the approach followed and we would need to consider whether we need to utilise instantaneous recordings of the daily average flowrate or opt to utilise calculated values. When asked, JB and RL indicated that they would be happy to provide volumetric flowrates and gross CV values. Responding, JB indicated that he does not believe that there is a large cost implication in providing the flow information, as this is being done anyway. The issue is whether or not the information is provided to the GDNs. In the end he is happy to leave as-is or to also calculate daily flowrate and CV and calculate on a site-by-site basis.

Summing up, it was agreed that no regulatory change is required and that the Letter(s) of Direction should adopt a simplified (average CV calculation as suggested above) approach and be capable of accommodating the existing &/or any new approaches. DL believed that a view from the Authority on whether or not they would be happy to accommodate the proposed simplified calculation within their Letter(s) of Direction would be needed.

5) Initiation of daily calibration of CV determination device

See item 4 discussions above for details.

6) Automated tests of apparatus and equipment at periods not exceeding 35 days in accordance with Regulation 6(e) of the Gas (COTE) Regulations. The facility to manually initiate tests of apparatus and equipment either by, or at the request of, the Gas Examiner. Provision of a report of results of automated or manual tests in accordance with Regulation 6(e) of the Gas (COTE) Regulations

Opening discussions, DL provided a brief resume of what Regulation 6(c) entails.

TD wondered whether or not the workgroup should recommend a regulatory change to replace the term 'public gas transporter' with 'responsible party'.

In considering the automatic testing of apparatus and equipment at periods not exceeding 35 days (Regulation 6(e) of the Gas (COTE) Regulations), JB wondered if this would sit better within either the Letter(s) of Approval or Direction. He went on to suggest that maybe this potentially raises issues associated with equipment provided by another party which the Authority may need to provide a view for – they may agree to provide separate 'exclusion' letters for different instances. In any case, JB believes that the first possible occasion where a biomethane producer is likely to own the equipment would not be before 2013 giving the Authority time to consider future provisions.

DL suggested that one option would be for the Transporters to seek a short-term exemption from GS(M)R 6(c) especially when a regulatory change could take anything up to 2 years to achieve. When asked, TD confirmed that this is in fact a DECC related issue and an exemption from them for GDN ownership status changes would be required if regulatory changes could not be accommodated. It remains his view that the goal should be to obtain a longer-term regulatory change to remove any/all 'public gas transporter' references and replace these with 'reasonable party' and in the meantime seek a shorter-term GS(M)R 6(c) DECC exemption.

In considering if it is a necessity for public gas transporter personnel to undertake any testing, DL suggested that it boils down to how you would interpret 'provide' in the current regulation.

Continuing the debate, JB suggested that consumer issues around GDN and shut-off requirements could also be 'covered' under Letter(s) of Approval or Direction, which brings in to question the vale of testing. Responding, DL questioned whether or not the view that biomethane is unique in these respects is a correct one, especially as he believes this relates more to being reassured that the apparatus had not gone 'belly up' (failed). TD suggested that the existing regulation is correct and wondered if the real issue related to the testing timeframe.

When asked about the (Danalyzer) 35 day provision, DL advised that this was an historic value (similar to the German model) and that supporting analysis relating to how often apparatus was tested and found to be out of specification was available – in essence we are talking about reassurances that the apparatus has not failed and has not flagged up an alarm.

TD wondered if the fact that the 35 day test is an automatic test, posed any cost issues when a gas examiner test would be a manual test. Responding, DL suggested that there would always be a requirement to allow 'test gas' injection and analysis to take place, but he believed that the cost of the actual testing (whether automated or manual) would be less of an issue – it boils down to whether or not we wish to retain a test gas provision in future.

JB voiced his concern around the proposed 0.5MJ provision and wondered if this highlighted potential test frequency concerns. DL suggested that the issue is not related to accuracy, more about reliability (i.e. how long parties would be happy to allow suspect data to be ongoing).

JB wondered whether or not the regulation should simply state that there is an accuracy range and that the actual range is included within some form of bi-lateral agreement between the interested parties – in short should we conclude that in the absence of any meaningful analysis we stick with the 35 day timeframe. TD suggested that it could be argued that on a scale basis we stay with what we have now, whilst acknowledging that the real issue relates more to proximity related aspects.

- 7) Calculation of the daily average CV at the end of each Gas Day in the manner specified by the Letter of Direction. This will require confirmation of the quality of individual records (records are Good if the CV determination device is operating within agreed limits) and averaging only those records that are Good and for which gas is flowing past the sample point. In addition a flag shall be stored indicating whether the resulting daily average CV is Valid (i.e. the maximum time between Good records is less than 8 hours). Gross CV values during calibration or tests of apparatus and equipment shall not be included for averaging

It was agreed that this had been sufficiently covered elsewhere in discussions.

8) Acquisition and storage of integrated daily volume at the end of the Gas Day

When asked, no party raised an objection to this item, whilst also acknowledging that where not provided for by the public gas transporter it would still be important to undertake the requirement.

9) In addition to local storage of individual data acquired, appropriate means of secure transfer of data to the High Pressure Metering Information System (HPMIS) owned and operated by the GT. HPMIS currently accepts data as CSV files with appropriate check sum to ensure corrupted data is identifiable and not accepted. A list of files and structure is provided in Appendix A

Parties agreed that this item does not relate to either a regulatory change or Letter(s) of Direction requirement.

In the absence of R Wood (National Grid), it was agreed to defer any further consideration of this matter.

10) Individual determinations of CV to be available to gas transporter

Opening, TD suggested that regulatory changes would be required in this area and went on to question whether having the biomethane producers providing the information direct to the Authority would not be a more preferable solution as any consumer requests for CV information could be accommodated within specific Network Entry Agreements (NEAs).

DL then provided a brief overview of HPMIS and specifically its relationship to Regulation 6(d). He advised that whilst HPMIS is not a (direct legal or regulatory) requirement, it remains the GDNs preferred mechanism, as it remains a cost reflective provision. He went on to suggest that getting the data into HPMIS is not the real issue, it is more to do with what data we require in future. Furthermore, he is of the view that with regards to paragraph (d), determinations relate to the daily average CV.

In considering Regulation 5(c) aspects, TD enquired as to how many owner occupiers had requested such information to which DL advised that as far as he is aware, no one has so far. TD suggested that if this is proved to be the case, these requirements could be 'covered' under NEAs considerations. JB felt that this would work as long as any information was stored in a suitable format and location.

In the end it was agreed that the recommendation should be to retain the current regulation whilst at the same time highlight to the Authority the apparent lack of utilisation so that they (the Authority) can assess whether there is any real value in retaining this regulation going forward.

11) Results of 35 day tests to be available to the gas transporter, including the suitability of the calibration gas. This data is currently imported into HPMIS from the "35-day test" file H1234.abymdd.Xmn

When asked if he had ever been requested to provide information relating to the results of any 35 day tests, DL indicated that he had not.

TD asked whether or not the workgroup wished to recommend a regulatory change to reflect the potential increase in sites and associated testing, associated with the ever increasing rollout of biomethane projects and to consider whether the GDNs would actually need the information should we recommend changing the requirement away from the public gas transporter / GDN. DL felt any issues would stem from its potential relationship to Regulation 5(c) as previously discussed.

12) Results of tests by gas examiner to be available to the gas transporter

TD believes that this item relates more to ensuring that we are holding the data. IT advised that Northern Gas Networks provide this information to the Authority on a monthly basis.

TD went on to suggest that a move towards including the possible 1000 or so biomethane sites could necessitate a change in views and perhaps the issue is more related to how we 'flag' any failed apparatus / sites – DL pointed out that the Xmn element already identifies what has potentially failed.

TD went on to suggest that an Authority view on whether or not to continue with the 35 day provision would prove beneficial.

In debating whether or not we should retrospectively correct any below specification test information (i.e. apparatus thinks 39.5MJ, when in fact it is found to be only 38MJ), DL believed that answer should be NO, as in most circumstances a retest would / does address these types of issue. In rare cases it does also identify an increased failing rate on an instrument. Furthermore, it should be noted that whilst the Authority may request that historic performance figures are re-evaluated, there is no laid down procedures that identify any material impacts on consumers.

13) Daily calorific values and daily volumes to be available to the gas transporter

Discussions now alternated between continuing to review this paper and consideration of the REA 'Biomethane to Grid and CV measurement; notes on FWACV determination' paper below.

Opening debate, JB suggested that the real issue relates to where the obligation should reside believing that ideally the workgroup should recommend changing the obligation from the 'public gas transporter' to now reside with the 'biomethane producer' whilst still retaining the 6 year data retention element – the end result being non dependence on HPMIS.

DL reiterated the GDNs view that they need to retain HPMIS and that it would not be going away any time soon – the real requirement being provision of daily CV and volumes, regardless of which route into HPMIS is adopted. When asked, SG provided a brief review of how data flows – the CV is retrieved from a site via a remote firmware file transfer into HPMIS whilst volume data (every minute) is gathered via a telemetry link and is then calculated as an end of the day value which ultimately resides within the HPMIS.

When asked if the National Grid I.S. IP Security concerns had been resolved, SG advised that work is still ongoing. JB then enquired whether or not there are any technical barriers associated with both pieces of information being routed via telemetry means in future. In responding, SG indicated that as the volume information is currently using a telemetry link he sees no reason why CV information could / should not follow a similar route. He advised that National Grid I.S. is currently looking into the matter – in short the current approach was a reflection of historical technical constraints. DL believes should such a change be proposed and adopted, the PGTs and National Grid would thereafter need to find a suitable 'fix' to enable the information to flow into the Transporters IGTS, supported by a validation flag to that the daily CV was accurate. SG suggested that this is heavily dependant upon where the obligation sits in future. JB believes that as long as all data is retained on a site-by-site basis so that retrospective error tracing can take place, this proposal could / would work. Apart from the GDNs obligation to ensure that out of specification gas does not enter the

system, JB sees no reason why the biomethane producers should not take on this obligation in future.

Biomethane to Grid and CV measurement; notes on FWACV determination

Looking at the 'Options for implementation of EMIB findings in respect to FWACV', JB suggested that if the workgroup opts for option 2, then option 3 is potentially redundant.

Asked where the £50k (ESTA sourced) figure came from, JB believed that in compiling this figure ESTA identified a differential cost of comparing a solution that provided a complete system to one that did not (i.e. £250 to £300k, resulting in the £50k figure as presented). DL suggested that these assumptions were inaccurate, whilst TD suggested that actual figures are not that important with specific regard to selecting option 2.

DL suggested that the Authority could well have different validation requirements and that the real issue is what functionality is deemed as essential and what information we DO NOT wish to change allied to what regulatory changes the workgroup would seek to recommend. TD advised that whatever recommendations are put forward, the workgroup would need to quantify any associated benefits.

In considering how best to take matters forward TD suggested, and parties agreed, that the 'big' recommendation is to change the ownership aspects from 'public gas transporters' to 'responsible party'. At the same time it was acknowledged that the Authority could request that the workgroup identify and justify each individual change, rather than a 'global' approach – i.e. a more unbundled approach.

It was also suggested that one option could be to remove the public gas transporter obligation for testing, or alternatively, leave as-is and amend Regulation 6(a) to state 'the public gas transporter shall procure' rather than 'make determinations of CV' and thereafter 'cover' the obligation under NEA considerations and requirements. JB believed that we may also need flexibility to allow for inclusion of the terms 'provided by' or 'procured by' in future.

DL went on to point out that Regulations 4(3) and 4A(7) could possibly invoke a large shrinkage issue, although this was not a unanimously supported view, with TD believing that the issue would not change regardless of who was obliged to undertake it. DL remained of the view that the actual CV is not the issue, but rather whether the instrument concerned is in an alarm condition and whether as a result the CV cap is triggered. RL favoured adoption of a 'common' alarm standard should be utilised and once a specified time limit had been breached the site would be shut-off, believing that it would be better if this obligation sat within the NEA arena.

In closing, and further to any specific recommendations highlighted during the above discussions, the workgroup concluded that:

1. references within the Regulations are changed from 'public gas transporter' to read as 'responsible party' (where appropriate to do so) and / or change the respective regulations to read the public gas transporter shall 'procure';
2. that the Authority establish a smaller (post EMIB) workgroup to consider changes to the Letter(s) of Approval and Direction;
3. consider changing the Regulation 6 - 35 day test rule or make 6(c) suitably vague, and
4. consider how any testing automated information provisions are fed back to the Authority (including the gas examiner aspects);

5. seek assurances from the Authority that any proposed regulatory changes are in place in time for any 2013 biomethane projects to reap the benefits – if not, advocate ‘dropping back’ to the existing GDN ownership model, and
6. recognise that the GDNs would continue to utilise the HPMIS and the issue of how information would be expected to transfer in future (especially the end of day aspects) still needs addressing.

Thereafter, a new action was placed upon National Grid (DP) to prepare a draft Expert Group summary paper identifying any potential regulatory changes (including DECC impacts and considerations and identification of National Grid I.S. outstanding IP Address Security concerns) for consideration by those parties present at the meeting prior to subsequent submission to the Authority.

(Post meeting note: a copy of the ‘Draft Recommendations from EMIB Expert Group relating to Gas (Calculation of Thermal Energy) Regulations and data transfer requirements for small entry flows, Authority Letter’ was issued by email to workgroup members in attendance at this meeting on 19/04/12.)

New Action EMIB 04/01: National Grid (DP) to prepare a draft Expert Group summary paper identifying any potential regulatory changes (including DECC impacts and considerations and identification of National Grid I.S. outstanding IP Address Security concerns) for consideration by those parties present at the meeting prior to subsequent submission to the Authority.

2.2 Next steps

Parties indicated that they now believe that sufficient progress had been made to ensure that the EMIB Workgroup Report could be concluded at the 11 May 2012 meeting. DL agreed to provide some CV recommendations along with accuracy for blending information for inclusion within the report in due course.

It was agreed to include a caveat within the report stating that the Functional Specification remains a ‘work in progress’ as some table 1 issues remain unresolved at this time. DL agreed to ‘flag’ the document as a work in progress and consider removal of table 1 elements at the same time.

3. Any Other Business

None.

4. Next Steps and Diary Planning

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

The following meetings are scheduled to take place:

Title	Date	Location
EMIB	11/05/2012	The Energy Networks Association, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF.

Action Ref	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
EMIB 04/01	16/04/12	2.1	To prepare a draft Expert Group summary paper identifying any potential regulatory changes (including DECC impacts and considerations and identification of National Grid I.S. outstanding IP Address Security concerns) for consideration by those parties present at the meeting prior to subsequent submission to the Authority.	National Grid (DP)	Completed 19/04/12.