

# THE INSTITUTION OF GAS ENGINEERS AND MANAGERS

## Gas Quality Standard Working Group

26<sup>th</sup> September 2017

**PRIVATE AND CONFIDENTIAL**

**MINUTE NOS. 083 to 088**

The 9<sup>th</sup> Meeting of the Gas Quality Standard Working Group of the Institution of Gas Engineers and Managers was held at 10.00 a.m. on Tuesday 26<sup>th</sup> September 2017 at IGEM, IGEM House, Kegworth, Derbyshire, DE74 2DA.

### **083**

#### **ATTENDANCE**

There were present:

Angus McIntosh (GM)	(Chairman)
Ross Anderson (RA)	ICOM
Kevin Bradley (KB)	Isle of Grain, LNG National Grid
Phil Bradwell (PB)	SGN
Ben Graham (BG)	NGN
Ben Hanley (BH)	NGN
Damien Heylen (DH)	Isle of Grain, LNG National Grid
Robyn Jenkins (RJ)	National Grid Transmission
Sarah Kimpton (SK)	DNV GL
Dave Lander (DL)	Dave Lander Consulting
Ian Marshall (IM)	WWU
Ian McCluskey (IM)	IGEM Head of Technical Services, Secretary
Stewart McEwen (SM)	HSE
Nancy Thompson (NT)	SGN
Shane Wilcox (SW)	Kiwa
Tom Bancroft (TB)	IGEM Technical Officer

Apologies for absence were received from:

Julie Cox, Energy UK; Neil McDonald, HHIC; Stuart Gibbons, Cadent.

### **084**

#### **PAPERS CIRCULATED BEFORE THE MEETING**

IGEM-TSP-17-300 – GL10

IGEM-TSP-17-302 – Draft Response to CEN Questionnaire on Gas Quality Requirements

IGEM-TSP-17-303 – Gas quality action list

AM welcomed everyone to the meeting, introductions were made and the facilities information was given by IM.

### **085**

#### **MINUTES OF THE LAST MEETING**

(a) The minutes of the last meeting were signed off as an accurate reflection of the meeting.

**086**

**NOTES FROM THE MEETING**

**a) ACTION LOG**

The action log was presented to the group and the outstanding actions were discussed with updates detailed below:

**Action Number 1/23 – NIA project update** – RJ has received an email recently but John Harris needs to put this into a format that can be circulated. There are some concerns that need to be considered by the group and RJ will circulate this as soon as possible. This should be added to the agenda for discussion at the next meeting.

**ACTION: Robyn Jenkins/Tom Bancroft**

GM said that the feedback received for this can be used to decide if further projects are needed.

**Action number 2/9 – Oxygen content** – SM to check if this was circulated. HSE possibly need to revisit this as the standard is now being drafted. A question was asked if there is a goal setting requirement on oxygen content not effecting appliances? The relevant clause in the standard may need looking at.

**ACTION: Stewart McEwan**

**Action number 3 – Emergency Specification** – this action was discussed and as the figure is 53.25 the emergency specification would disappear. RJ trying to get the GDN's to review this with no luck so far. However, there is a new emergency manager in position so this may be given a new focus. SM's operation colleagues in HSE are in collaboration with NIC and this will be on the agenda. RJ to keep a watch on this and inform the group of any updates.

**ACTION: Robyn Jenkins**

**Action number 14 – website** – IM reported that initially this was planned to be included in the new website but as this has been delayed it has now been decided to be on the current website and carried across when the new website goes live. TB has already done significant work on this and this will be finalised and added to the agenda for discussion at the next meeting. GM made the point that there is still an issue with visibility on how this group sits with the future of gas initiative. Links to Carbon Connect etc. could be useful.

**ACTION: Tom Bancroft**

**Action number 17 – study in the Netherlands** – SM to chase colleagues for an update on this.

**ACTION: Stewart McEwan**

**Action number 30 – CEN working group** – RJ gave an update on this and Phil Hobbins is at the ENTSOG/CEN working group meeting this week and will feed back into the group. There are risks associated with Brexit as there is an overwhelming desire to harmonise everything across Europe. BEIS are responding through Richard Harris but there is an issue with the engagement with BEIS and there is currently no relationship as old contacts have left. There were additional actions for SM to circulate names of new people at BEIS and GM and IM to organise a meeting with Richard Harris.

**ACTION: Stewart McEwan, Gus McIntosh, Ian McCluskey**

**Action number 48 – impact assessment** – there was a short discussion on this as it was an agenda item and is discussed in more detail below.

**Action number 50 – evidence database** – work on this has started and it will be kept up-to-date moving forward and circulated to the group for the next meeting.

**ACTION: Tom Bancroft**

**Action number 51 – John Baldwin’s questions** – DL drafted the original response but this issue is still being discussed. In essence the group isn’t restricting the lower end. The restriction comes from the thermal energy regulations. As biomethane is essentially a G20 gas this is not a GSMR issue. Real-time networks and future billing methodology should also be able to help answer some of these questions. It was decided that DL would discuss these issues with John Baldwin at the meeting on Thursday.

**ACTION: Dave Lander**

**Action number 52 – siloxanes report** – action carried over from the last meeting for the report to be circulated to the group.

**ACTION: Sarah Kimpton**

**Action number 53 – SIU gas quality presentation** – this has been circulated to CEN for comment and a response has been received. Not yet offered to present to Marcogaz. Keep action open.

## **b) GAS QUALITY QUESTIONNAIRE**

### **Ref paper: IGEM-TSP-17-302 – Draft Response to CEN Questionnaire on gas quality requirements**

Phil Hobbins completed this response which came through BSI and then was circulated to the group. There is a meeting at ENTSOG this week Phil Hobbins is attending and will feedback to the group.

Phil is also working on entry agreements and a consultation will be sent out soon. This is looking at increasing the limit to deal with emergency situations.

## **c) WORKING GROUP FUNDING**

The contract is now in place. National Grid Transmission not funding but will be a full participant. PO’s still need to be sent to IM including SGN, Cadent and NGN. This was a challenging process but could be used as a template for the future.

**ACTION: Network Leads**

## **d) I AND C RESEARCH**

Contracts are now through and the first meeting is taking place after the working group meeting.

### **Presentation by Sarah Kimpton – gas quality impacts on I and C applications**

- Background to the issue of gas quality impact
- Approach and scope
- Timeline
- Current GSMR approach is based on older appliances. New appliances possibly more able to accept wider range.
- Some industrial applications sensitive to operating conditions
- Fuel type/quality a concern

### **Changes in the chemical composition impacts:**

- Physical properties
- Combustion temperature
- Flue gas composition

### **These impact on:**

- Efficiency CO, soot, NO<sub>x</sub>
- Emissions
- In certain industries product quality

### **Engagement:**

- RA to introduce SK to right people for the engagement event. DEFRA should be looked at. RA to circulate name of contact.

**ACTION: Ross Anderson**

### **Other stakeholders to engage with include:**

- Environment agency
- Storage operators – RA to send details of the Chair of Gas Operators Group. SK to circulate list of stakeholders they have already engaged with and other members of the group (RJ, JC) can add to the list others they think should be involved.

**ACTION: Sarah Kimpton, Robyn Jenkins, Julie Cox**

### **Other issues:**

- Power stations reporting operational issues due to gas quality but this can never be confirmed. Examples could be sent to SK as long as commercially sensitive information is removed.

### **Project split into 2 phases:**

#### **Phase 1 starts this afternoon and will look at:**

- Literature review of GB equipment installed
- Focus on wobbe number, methane number, gas composition
- ID key manufacturers

#### **Phase 2 – Customer Engagement**

- Workshop hosted by IGEM aimed at trade associations, equipment manufacturers, key end users and selected consultants.
- ID typical existing control components and assess dynamics – motorised valves dampers.
- Liase with suppliers and manufacturers
- Assess effectiveness of systems for rate of change control
- Determine if there are effective solutions
- Study in Germany on different industries on changing wobbe from low to high. Background info showing issues and I close look is needed at what they did/why they did it and what they and what the issues were

## **Team, timeline and next steps**

- Team – Sarah Kimpton; Martin Brown – I and C burners; Howard Levinsky – gas engines; Terry Williams – controls; David Byrne – measurement
- Stakeholder workshop could be done in 1 day or with 2 workshops with afternoon breakouts. Planning will start on this now with a likely date early Jan
- A report on progress will be made to this group every three months
- Next steps – engage with OEM's and trade associations. Good contacts include chemical industry and burner manufacturers.
- A question was asked about costs and it was explained that a cost benefit analysis is not currently included in the project.

## **e) FUTURE OF GAS INNOVATION PRESENTATION**

GM presented some slides on the future of gas innovation that covered:

### **Key projects and how they contribute to future energy scenarios:**

- Real-time networks
- Future billing methodology
- Hydeploy
- H21

This presentation led to a discussion on gas and electricity and how these sectors should not continue to operate separately. OFGEM have been contacted regarding planning and sharing data and how interactions between the two can be improved. This issue is extremely commercially sensitive but something is trying to be done about it.

There was also a discussion on the possibility of commissioning a study to look at Hydrogen in the range of 20% to 100% and the issues associated with this, including security of supply issues.

The slides are to be circulated with the minutes of the meeting.

**ACTION: Tom Bancroft**

## **f) DRAFT GAS QUALITY STANDARD**

The standard was presented to the group and IGEM's governance process was discussed. It was decided that TB would circulate the comment form and the members of the group would review the draft standard and send any comments to TB in time for the next meeting.

**ACTION: Tom Bancroft, All**

## **087**

### **ANY OTHER BUSINESS**

1) Impact assessment – this area still needs some work and is an extremely important aspect of what the group is trying to achieve. The figure of £325 million which was referenced in a presentation from National Grid LNG to IGEM is a figure that causes a lot of debate as to whether this will be redistributed to customers or if the benefit will be a security of supply one rather than cost. There was a discussion on the possibility of a financial specialist looking at this but it was explained that this is something that SGN explored during the Oban project and is very difficult to do. It was decided that SK would take this back to DNV GL and investigate to see if anyone can help with this.

**ACTION: Sarah Kimpton**

2) Gas producers engagement – Shell, ICF – Saint Fergus to come up with costs. IM to feed this back into the group.

**ACTION: Ian McCluskey**

3) Shippers and suppliers engagement – Julie Cox meeting on 5<sup>th</sup> October. Will update on the activities of the group and then feedback responses to the working group.

**ACTION: Julie Cox**

4) Peer review on interchangeability factor with DL to be starting soon where Dutton's theories will be revisited. There was a concern raised on if peer reviews will become common practice moving forward. It was explained that the HSE need to be presented with evidence and their experts ask any questions they may have. This is more a study of the evidence rather than a peer review.

Topic of debate on the 53.25 figure was ODS. Oban operational for 30 months without issues. Scope to do relatively small project on this. SGN to agree this directly with Kiwa.

**ACTION: Gus McIntosh**

Brexit risks – Irish regulators at biggest risk. Brexit and Decarbonisation top of the list of priorities at the moment.

5) items for the agenda of next meeting:

- Hydeploy
- HHIC meeting
- Real-time networks
- CEN

**088**

**DATES OF MEETINGS FOR 2017**

21<sup>st</sup> November

END