

THE INSTITUTION OF GAS ENGINEERS AND MANAGERS

Gas Quality Standard Working Group

21st November 2017

PRIVATE AND CONFIDENTIAL

MINUTE NOS. 089 to 095

The 10th 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 21st November 2017 at IGEM, IGEM House, Kegworth, Derbyshire, DE74 2DA.

089

ATTENDANCE

There were present:

Angus McIntosh (GM)	(Chairman)
Ross Anderson (RA)	ICOM
Julie Cox (JC)	Energy UK
Mark Crowther (MC)	KIWA Gastech
Stuart Gibbons (SG)	Cadent
David Goodwill (DG)	Ancala Midsteam
Ben Graham (BG)	NGN
Rick Hemmings (RH)	Energy UK
Damien Heylen (DH)	Isle of Grain, LNG National Grid
Robyn Jenkins (RJ)	National Grid Transmission
Navdeep Kahlon (NK)	Cadent
Sarah Kimpton (SK)	DNV GL
Ian Marshall (IM)	WWU
Stewart McEwen (SM)	HSE
Nancy Thompson (NT)	SGN
Ian Walker (IW)	EON
Tom Bancroft (TB)	IGEM Technical Officer

Apologies for absence were received from:

Kevin Bradley Isle of Grain, LNG National Grid.
Phil Bradwell SGN
Ben Hanley NGN
Neil Macdonald HHIC
Ian Redshaw HSE
Dave Lander Dave Lander Consulting
Ian McCluskey IGEM

090

PAPERS CIRCULATED BEFORE THE MEETING

IGEM-TSP-17-300 – GL10 (Circulated with minutes)
IGEM-TSP-17-303 – Gas Quality Action Log (Circulated with minutes)
IGEM-TSP-17-351 – SAGE Impact Assessment
IGEM-TSP-17-352 – Comments from HHIC
IGEM-TSP-17-353 – Comments from National Grid

AM welcomed everyone to the meeting and introductions were made.

091

MINUTES OF THE LAST MEETING

- (a) The minutes of the last meeting were signed off as an accurate reflection of the meeting.
- (b) AM gave a brief overview of the group as there were new members present. This included a brief description of the Opening up the Gas Market project. This is split into three stages;
 - 1. Oban
 - 2. Independent Undertakings
 - 3. Widening wobble index for entire group

IGEM industry group set up to facilitate the removal of schedule 3 from GSMR and create an IGEM standard.

092

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 – NIA project update – This action was discussed and is still ongoing.

Action number 2/9 – Oxygen content – SM still looking at this, action ongoing.

ACTION: Stewart McEwan

Action number 3 – Emergency Specification – the proposal is to remove emergency limit, this doesn't necessarily mean removing the lower limit. The proposal needs considering but perhaps shouldn't happen now in the standard. The group agreed to close the action.

This prompted a discussion on the lower end and the need to consider this moving forward. JC stated that this needs to be safe at both ends and support the lower carbon agenda. It was agreed that the lower end is not changing at the moment. The upper end is evidence based and currently the lower end is speculation. SM stated that the driver has always been financial with the result ultimately being a reduction in consumers bills.

The questions raised by John Baldwin were also discussed again and the group were informed that wobble will not restrict biomethane and that billing is the main issue. The future billing project is running until 2020. JC raised the issue that the organisations Energy UK represent feel poorly engaged with. IM is hoping to rectify this by attending the Transmission working group meetings.

Action number 17 – study in the Netherlands – SM believes this has been circulated and it was agreed to close the action.

Action number 28 – Complete

Action number 30 – CEN working group – AM stated that there is a need to re-engage with this and the marcogaz group as well

ACTION: Gus McIntosh

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

ACTION: Sarah Kimpton/Martin Brown

Action number 57 – Contacts at BEIS – this was an action carried over from the last meeting to circulate the new contacts at BEIS. These may have already been circulated to IM but AM will circulate these again.

ACTION: Gus McIntosh

Action number 58 – this action is still ongoing.

JC requested for the presentations to be included on the IGEM website. TB to look at this and complete in time for the next meeting.

ACTION: Tom Bancroft

Action number 60/61/62 – complete

Action number 66 – impact assessment – this action was discussed again and AM informed the group that this is something that proved difficult to do during the Oban project. It was decided that AM would consult with The British Institute of Energy Economists and see if anything can be done.

ACTION: Gus McIntosh

Action number 67 – Shippers and suppliers engagement – As discussed previously IM will be attending the meeting in December.

ACTION: Ian McCluskey

b) SAGE IMPACT ASSESSMENT

Presentation by David Goodwill

DG gave a presentation with key points made below:

- Raising wobble and removing ICF particularly would have a big impact on Midstream

Current status:

- NTS Export spec delivered by separation trains and blending
- Intermittent requirement to ballast with Nitrogen on a batch basis to maintain ICF spec:
 - Lean gas producers offline for maintenance
 - Plant operating in JT mode
 - NGL export routes restricted
- £0.5M OPEX cost for Liquid Nitrogen

Future Risks and Opportunities:

- Ambition to bring in additional production
- Potential for additional condensate rich gas streams
 - Revenue for UK
 - Additional gas for NTS
 - Additional condensate for Grangemouth & Mossburn
- Risk of requirement to inject Nitrogen continuously

- Potential £30m CAPEX investment
- Potential £3m OPEX cost
- Risk of loss of business to Norwegian pipelines
- Similar challenges being faced by CATS system

Conclusions:

- The changes being considered are valuable to us both now and in the future.

Questions:

- Cost – loss of business. No figure yet but DG could get that
- Processing/tax
- Sooting index/ICF – this was brought in for particular appliances and these appliances no longer exist. The calculation is invalid now but is still in GSMR. A move to relative density is the proposal.
- Specification comes from GSMR and this has to be worked to at each terminal. Conversations need to happen with right contacts and the wider review of GSMR will look at definition of network. However this will not happen without gas quality. RJ to discuss potential exemption away from the meeting from a transmission perspective.

ACTION: Dave Goodwill to share potential loss of business

c) HYDEPLOY

NK gave a presentation on the Hydeploy project with important points/actions noted below:

Project Rationale:

- UK must reduce carbon emissions by 80% by 2050

Why blending Hydrogen?

- 20% Hydrogen equivalent to removing 2.5 million cars from the road

Project objective:

- Funded by OFGEM under NIC
- A reference piece of work to be used by the industry now and in the future
- Mirrors methodology utilised in Opening up the Gas Markets
- Build on existing work on the impact of Hydrogen
- Closed private network ideal for first UK trial

Why Keele?

- At the forefront of research
- Gas grid at Keele particularly suitable as it is self-contained and typical of a small town
- Licensed transporter and supplier of gas to those customers

Phase 1

- Exemption
- Development of evidence base

Phase 2

- Installation
- Construction and installation of equipment

Phase 3

- Trial operation of the network

Key issues:

- Short/long term appliance behaviour
- Effect of Hydrogen on materials
- Risk of poor mixing
- Fire and explosion risk
- Hydrogen detection
- Customer perception

Phase 1 activities:

- Engagement
- Appliance lab test
- Onsite testing
- Specify and design equipment
- Quantitative risk assessment
- Submission of safety case

Outcome:

- Customer focused solution
- Expert consortium engaged with key stakeholders supportive of the project

Questions:

The question that created most discussion in the group was the issue of Hydrogen embrittlement, particularly for storage.

d) DRAFT GAS QUALITY STANDARD

Ref papers - IGEM-TSP-17-352 - Comments from HHIC IGEM-TSP-17-353 – Comments from National Grid

There was an action on the group to submit comments on the working draft of the IGEM gas quality standard. Two sets of comments were received and circulated to the group as the papers referenced above. These comments were discussed by the group with any important discussion points/actions detailed below:

National Grid comments:

- Work ongoing on quantifying the risk and impact on National Grid's assets which is not yet finished. This may include commercially sensitive information
- Needs to look at the documents and standards that could be affected
- Impact on pipeline fracture

- Compressors
- Once report is published a detailed discussion is needed
- RJ to invite John Harris to a future meeting to provide quantitative evidence and discuss concerns

ACTION: Robyn Jenkins

HHIC comments:

- Supportive of proposal
- Pressure figure needs to be correct (albeit this was discussed and not to be specified in the Gas Quality standard, rather reference the separate standards in development)
- Work ongoing in the IGEM low pressure working group on what the pressure will be
- Industry understanding on what pressure should be at different points and what pressure appliances should operate at etc
- A flow chart to be an outcome from the working group

A question was asked of when customers/other stakeholders will get chance to comment on the draft and it was decided that RJ will circulate this to any relevant parties for comment.

e) Collaborative Innovation Strategy

AM gave an update on this and the innovation consultation on the future of gas. More details are available on the ENA website with a deadline of 22nd December. AM to circulate to IGEM which will then be circulated to the group.

ACTION: Gus McIntosh/Tom Bancroft

f) I and C project

- Started on 26th September
- Looking at impact on industrial and commercial users
- Mapping and engaging with stakeholders
- Interest and influence
- Details of the project and link to the questionnaire are now available on the IGEM website.
- IGEM managing this process and forwarding any interested parties and completed questionnaires to SK at DNV GL

The date and venue for the workshop has been finalised but other details are still to be confirmed, including invited parties etc.

ACTION: Sarah Kimpton

093

IGEM website

The recently published gas quality page on the IGEM website was presented to the group with suggestions on content detailed below:

- Presentations from the meetings (permission will be needed for any presentations that haven't already been circulated, TB to look into this further)
- Consultation to innovation strategy (action discussed above)
- Links to the papers from Marcogaz etc

094

ANY OTHER BUSINESS

Metering Combustion Plant Directive effects water heaters – AM to discuss this with RA after the meeting.

ACTION: Gus McIntosh/Ross Anderson

095

DATES OF MEETINGS FOR 2018

25th January (still to be confirmed)

END