

THE INSTITUTION OF GAS ENGINEERS AND MANAGERS

Gas Quality Standard Working Group

27th September 2016

PRIVATE AND CONFIDENTIAL

MINUTE NOS. 021 to 030

The 3rd 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 27th September 2016 at IGEM, IGEM House, High Street, Kegworth, Derbyshire, DE74 2DA.

021

ATTENDANCE

There were present:

Angus McIntosh (AM)	SGN (Chairman)
Ross Anderson (RA)	ICOM
Mark Crowther (MC)	Kiwa Gastec
Jim Stancliffe (JS)	HSE
Robyn Jenkins (RJ)	National Grid Transmission
Sarah Kimpton (SK)	DNVGL
Kevin Bradley (KB)	Isle of Grain, LNG National Grid
Damien Heylen (DH)	Isle of Grain, LNG National Grid
Ian McCluskey (IM)	IGEM Head of Technical Services, Secretary.
Dave Lander (DL)	Dave Lander Consulting
Tom Bancroft (TB)	IGEM Technical Officer
Jamie McAinsh (JM)	SGN
Neil McDonald (NM)	HHIC
Phil Bradwell (PB)	SGN

Apologies for absence were received from:

Graham McKay, BSI; Ian Redshaw, HSE; Stew McEwen, HSE; Steve Sutton, HHIC; Ritchard Hewitt, National Grid Transmission

The Chairman welcomed everyone to the Gas Quality Standard meeting and introductions were made as new members were present.

022

Minutes of the last meeting

- (a) The minutes of the last meeting were discussed and a request was made to change 'changes to interchangeability diagram' to 'proposed changes to interchangeability diagram' and also that 'CO mitigation steps' needs changing.
- (b) Dave Lander circulated the Marcogaz report.
- (c) RJ,IM and AM had a meeting to discuss funding.
- (d) The action on RA to provide list of industrial commercial members is still ongoing.
- (e) Proposal from HSL – the group will determine any gaps in evidence from Oban and co-ordinate formal commercial process.
- (f) HSE – 3 major pieces of evidence – study by DNVGL, internal pipe corrosion – Wales and West, siloxanes and odourisation /odorant masking. JS to check with DNVGL if they are happy to circulate. It was found that there was an impact of

siloxanes on a certain Wobbe index. There is a GDN funded second study taking pace in the Netherlands but the project is not due to start for a while. Action to circulate findings through the group.

ACTION: Jim Stancliffe

- (g) GSMR meeting last Wednesday and the driver to the change in GSMR is gas quality. It is sensible to start the wider review of GSMR at the same time and ENA have set up a group to redraft legal process. Details to be circulated on the HSE process around GSMR and gas quality.

ACTION: Jim Stancliffe, Angus McIntosh

- (g) Oban Launch – AM said that everyone should have received an invite for the Oban launch on 25th October at the St. Ermin’s hotel.
- (h) The action on TB and IM to produce a draft of the standard is still ongoing

The minutes were signed off as an accurate reflection of the meeting.

023

ENTSOG Report

RJ reported that there has been a mixed response to the report and there is no overwhelming support for CEN. There is a massive cost with adopting CEN and there is an economical argument against it. It has been decided to conduct a second consultation with the closing date for responses 21st October. RJ hoping to circulate the draft response from National Grid around a week before submission. AM indicated SGN will be submitting a response. RJ to organise telecom with IM to collaborate group response.

ACTION: Robyn Jenkins, Ian McCluskey

024

Oban Report

AM reported that there are still a couple of outstanding aspects including the quantified risk assessment but the document is largely complete with the key conclusions being:

- (a) 2% of the GB appliance population would be classified as immediately dangerous
- (b) Allows sufficient headrooms for deleterious unknowns
- (c) appliances correctly installed can safely burn gas with WI 54.76 MJ/m³
- (d) interchangeability diagram can be simplified and updated
- (e) already an extremely small number of unsafe appliances pre 1996. Although CO increased as a result of WI increase it was not considered to materially increase the risk of the occupant
- (f) currently only 10% of the available LNG can be accepted into the GB gas network without processing. Increasing the WI to 53.25 MJ/m³ would allow 90% of globally available LNG to be injected into the network without processing
- (g) no evidence of deterioration of appliance performance in a year
- (h) appliance maintenance, servicing and replacement reduces absolute risk by 84%
- (i) CO campaigns that focus on CO alarms not the most effective way of mitigating risk

- (j) increasing to 53.25 MJ/m³ has negligible impact on efficiency of domestic or small commercial appliances
- (k) as a representation it is estimated that 4% of GB appliance population would be classified as at risk
- (l) Oban network safely stored, injected, distributed and utilised gas with WI ranging from 49 MJ/m³ to 53.2 MJ/m³ during one year trial period
- (j) cost of maintaining current GSMR limits is grossly disproportionate to the risk involved in widening WI limits.

Full report to be ready by 25th October

Action: Angus McIntosh

025

Mark Crowther Presentation – EFFECT OF WI ON A RANGE OF GAS APPLIANCE TYPES

- Methane/ethane & Methane/Propane results. ie Dutton holds
- Energy input vs WI for partial premix AND vs WI for fully premix ie modern fully premix do not respond in the traditional fashion.
- CO/CO₂ for gas fires (excluding defective appliances)... as wide a band as possible .Indication that ICF is no longer valid.
- CO/CO₂ for fully premix boilers when set up on G20 and when set up with G21 and G23. Indication ICF no longer valid.
- Concept of headroom & allowance for temperature effects.
- Qualitative risk to householders of CO from room sealed, open flued and flueless
- General plots of Oban data of Frequency of appliances vs banded CO/CO₂ ratios WITH CO/CO₂ limit line.

IM to circulate the presentation to the group.

Action. Ian McCluskey

026

FUNDING FOR THE GAS QUALITY STANDARDS WORKING GROUP

IM/AM/RJ working on the at the network innovation allowance submission which will be a cross NGGT and GDN funded project.

Action: Ian McCluskey, Angus McIntosh, Robyn Jenkins

027

NIA Project – NGT asset study on effects of different gas compositions on assets, standards and operating procedures.

RJ still unable to circulate the report at this time but will provide updates.

ACTION: Robyn Jenkins

028

Industrial Commercial Requirements

IM and RJ to work on the proposal for a separate funded project to examine impact of the change in Wobbe on industrial commercial users. This will also look at the possibility of a template for what engagement looks like and try and link in with the National Grid NIA project.

ACTION: Ian McCluskey, Robyn Jenkins

029

Health and Safety Laboratories

IM gave a high level overview of the proposal from HSL for their support to the group and their proposal for an independent review of the evidence base for safety. The proposal would cover the evidence base for widening the gas quality range relating to; upper end of Wobbe; Biomethane and oxygen content; Hydrogen blend and up to 20% in the mix.

The group indicated their preference for a specific research proposal looking at initially the extension of the upper end of the Wobbe index. This will be subject to a specific tender.

ACTION: Ian McCluskey,

030

ANY OTHER BUSINESS

RJ to meet Gas Networks Ireland and report back on discussion at the next meeting.

ACTION: Robyn Jenkins

DNVGL to circulate research on wobbe bands

ACTION: Sarah Kimpton

DATES OF MEETINGS FOR 2016

Tuesday 1st November date for next meeting

END