

UNC Combined Workgroups 0498/0502 Minutes
Amendment to Gas Quality NTS Entry Specification at BP
Teesside System Entry Point
Wednesday 21 January 2015
Energy Networks Association, 52 Horseferry Road, London SW1P 2AF

Attendees

Les Jenkins (Chair)	(LJ)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Alice Mitchell	(AM)	Ofgem
Andrew Pearce	(AP)	BP Gas
Antony Miller	(AMi)	Centrica Storage
Charles Ruffell*	(CR)	RWEst
David O'Donnell	(DO)	TGPP
David Reilly	(DRe)	Ofgem
Dennis Rachwal	(DRa)	National Grid NTS
Graham Jack	(GJ)	Centrica
Julie Cox	(JCx)	Energy UK
Marshall Hall	(MH)	Oil & Gas UK
Natasha Ranatunga	(NR)	EDF Energy
Richard Fairholme	(RF)	E.ON

*via teleconference

Copies of papers are available at: www.gasgovernance.co.uk/0498/210115

Modification 0498 - Amendment to Gas Quality NTS Entry Specification at BP Teesside System Entry Point

Modification 0502 - Amendment to Gas Quality NTS Entry Specification at the px Teesside System Entry Point

The Workgroup Report (combined 0498 and 0502) is due to be presented at the UNC Modification Panel by 21 May 2015.

1.0 Introduction

LJ welcomed all to the meeting.

2.0 Review of Minutes and Actions**2.1 Minutes (08 December 2014)**

AMi requested a minor amendment to the previous minutes (page 3, paragraph 3) suggesting that the last two sentences be transposed, as follows:

“Example scenarios were discussed. JCx reiterated the need for parties to be able to anticipate any change coming so that they could deal with it appropriately. There may be a number of reasons for trips. ~~AMi commented that high CO₂ gas was harder to inject and storage operators would have to bear that cost.~~ If it could be predicted it could be better managed; the risk is when an asset operator has very little time to respond to variations. AMi commented that high CO₂ gas was harder to inject and storage operators would have to bear that cost.”

The change was accepted and the minutes from the previous meeting were then approved. A revised version will be published.

2.2 Actions

0807: *'Rate of change' issues for operating equipment* - Consider providing examples or information where this sort of problem had been experienced/encountered before.

Update: JCx had provided a table and a graph with high level information relating to "CCGT trip events that may be related to gas switching between low and high Wobbe". The data provided in the table did not add much to the debate, and JCx reported that she was trying to obtain more detailed information from engineers to establish root cause(s) and better inform the picture.

The graph "Gas Quality variation at CCGT" was reviewed and discussed. The plant seemed to receive two different qualities at the high and low ends of the range and the data supported this. The variation may be causing the trip events and JCx was trying to obtain more data to clarify the position. She observed that plant was tuned either to higher *or* to lower levels, and if it received the opposite of what it is was tuned for then it was out of its range; to tune it to the middle was not optimum for anything. The data showed that this plant received gas quality of quite a wide range.

Asked if this plant was likely to receive Teesside gas, JCx was only able to confirm it was situated in the East of England. What it received was within the permitted range, but the question was, how much more variation could be expected if the CO₂ range was increased. MH suggested there was a need to understand if this was hourly data or not, otherwise no relevance could be established; intraday data was required to substantiate what was actually happening. JCx agreed, and reiterated she was trying to obtain more detailed data.

LJ summarised that high rates of change appear to cause trips at power stations; there was some evidence to support this but it was not conclusive at this stage.

JCx suggested there was also a need to identify and quantify the consequences of what happens when a trip event occurs; there were potential effects for the electricity market (e.g. could cause a spike in prices), and there may be effects on more than one asset or party. The time of the year in respect of a trip event was also of importance; at certain periods of the year there was a much greater reliance on gas, and the effects will be different depending on whether the trip occurred in winter or summer. JCx had asked National Grid NTS to bring forward its work on gas quality but had received no information as yet.

LJ suggested some simple scenarios would be useful to demonstrate the effects on the electricity market of a trip event in summer and in winter. **Carried forward**

0808: *CATS and TGPP infrastructure* – Provide revised schematic to confirm how facilities will be configured, what will be upgraded and likely combined costs.

Update: DO reported that px and BP continued to work on the schematic and it was hoped to be provided at the next meeting. **Carried forward**

1103: AH to clarify the cost implications of removing H₂S and CO₂ in regards to the August British Gas presentation.

Update: DO confirmed that H₂S is not an issue for this forum; measures were already in place for its removal, and this was not part of the CO₂ arrangements. **Closed**

1201: All parties to review the draft Workgroup Report (published at www.gasgovernance.co.uk/0498/081214) and what information they have been tasked to provide (*see text/assignments in red, page 8 onwards*), and submit their contributions to the Joint Office in advance of the next meeting (i.e. by 12 January 2015) for inclusion in the redrafted Workgroup Report.

Update: LJ reported that a number of contributions had been received and been added to the draft Workgroup Report. It was noted that many had been received very late and this had made a timely redrafting and publishing for review quite challenging.

Following consideration of the draft report (see discussions at 3.0, below) further contributions were necessary and should be submitted to the Joint Office in advance of the next meeting (i.e. by 02 March 2015) for inclusion in the redrafted Workgroup Report.

(This action has been updated to reflect the new submission date and publication location - see Action Table below.) **Carried forward**

3.0 Development of the Workgroup Report

The draft Workgroup Report was reviewed onscreen. LJ explained how it had been restructured and the additions made following receipt of various contributions.

Workgroup Assessment (Page 8 onwards)

The new inclusions were discussed and what further information might be required; a number of observations and suggestions were made as the review progressed. Individual parties were tasked with confirming/providing additional information as appropriate, according to the Workgroup's view of what was necessary to include as supporting evidence in the Workgroup's report.

The use of the word 'significantly' was discussed at some length, and whether some other phrasing could be used, as the meaning and degree of what was 'significant' varied depending on a party's position and viewpoint. GJ pointed out that the use of this word contrasted quite strongly with the message of 'low probability'. Was this modification absolutely critical to the project going ahead?

DO explained it was to do with having 100% certainty that the gas can be brought to market in a constant flow, and a reliance on a blending service that is 100% of ensuring that was possible at all times.

JCx drew attention to the references to curtailment in the 'Why Change' section of the modifications and suggested further examination of the factors. Which party was instructing the curtailment, Teesside or NTS? It was suggested that DO and AP could check this?

Action 0101: *Curtailment* - Confirm which party instructs curtailment, Teesside or National Grid NTS.

LJ reminded that the Workgroup was tasked with assessing these modifications and should focus on whether the contract(s) could be changed as suggested by the Solutions; (other options could be explored and detailed for completeness). If the contract(s) were not changed, what would that mean? DO reiterated that field development will not happen if an assured route to the NTS is not guaranteed.

Communications regarding variations of quality were discussed. DO observed that a notification process exists to give advance warning of variations, if between the range 2.9 mol% and 4.0 mol%; these notices go to National Grid NTS. National Grid NTS has to make Reasonable Endeavours (RE) to accept and flow this gas. The ability to flex above 2.9 mol% is an RE service that has to be agreed with the NTS; DO was not certain how

often this had been used in practice; it was suggested that it would be useful to know more details of any such occasions to understand the circumstances and what actions had been taken. MH suggested that perhaps a wider notification/transparency of process might be required when the NTS received warnings of anticipated or predicted variations in gas quality.

Action 0102: Advance warning of gas quality variation - Confirm how the notification process currently operates, and report on details of any past occurrences (cause, duration, process followed, etc).

JCx noted that the decision on development of the Jackdaw field had been put back, so a decision on these modifications may not be required immediately, and suggested that further time could be devoted to developing the Workgroup's report. MH pointed out that Jackdaw was not the only field under development; there were other known prospects that may have CO₂ issues but that have not yet been publicised to this Workgroup.

AMi reiterated concerns that precedents would potentially be set on the outcome of these modifications; there were a number of concerns regarding impacts for downstream parties, and how other parties may react following assumed implementation cannot be predicted at this point. MH believed that investment decisions relating to Jackdaw could be made over the next two years, and planned development is sensitive as to what happens in terms of gas quality at entry at Teesside. DO commented that there was an existing field with high CO₂ gas and this is an issue for the operator at the moment (when the field was drilled high CO₂ gas was a surprise; blended at the moment, but the operator is not happy with the situation). The problems were discussed; how to meet requirements; how it should be paid for and by whom. Commercial decisions were under review; developers were not keen to make investments where gas cannot be flowed for a high proportion of the time. Referring back to AMi's point about setting precedent, DO stated that px and BP would be building for one specific field, not to accommodate others.

MH observed that a relaxation of the specifications permits the development of fields at lower capital cost, and benefits the 'public purse' in the longer term. These modifications facilitate the development of ultra-High Pressure High Temperature (uHPHT) fields, pipelines and infrastructures and processing facilities, and postpones the decommissioning of facilities to a point further in the future. Perhaps a longer term view of the lifetime of assets and of the future of the industry need to be taken to perceive the greater benefits to the UK, over and above any short term adverse effects.

GJ reiterated his concerns that reaching 4.0 mol% was being construed and argued as a low probability event; was allowing this really going to make that much of a contribution to security of supply. There was more likelihood of a 'creep' effect, especially when it had been promulgated earlier in this discussion that there might now be more high CO₂ fields than first thought. It is more a question of the movement of costs and consequences and where these should be borne. MH indicated that the possible increase in the average level of CO₂ in the NTS might be the more important issue. The variability issue is more difficult to quantify because the data is not available to the Workgroup. He reiterated that the high CO₂ prospects lie in the Central North Sea (CNS) and it is that gas that would be going into Teesside.

AP observed that 4.0 mol% gas was currently flowing into St Fergus and no party was objecting. It was noted that the Workgroup was waiting for data relating to this to see if it actually flows at that level or lower. AMi added that investments made at the time of those contracts (many years before the Uniform Network Code provisions) took account of what was being seen at the time.

DO reiterated that the confirmed ability to get gas to market 100% of the time is the primary question/breakpoint for any investment decisions/development.

It was questioned what would happen if the developer chose to go ahead without that confirmed ability and the risk of curtailment.

Impact on Consumers

Further discussion took place with suggestions for the provision of additional information noted in red in the draft report. JCx will endeavour to provide further information to address these points.

Impact on Storage Operators

AMi outlined the impacts on Storage Operators. It was noted it was harder to inject higher CO₂ gas into storage facilities. Further discussion took place with suggestions for the provision of additional information noted in red in the draft report. AMi will endeavour to provide further information to address these points.

Carbon Cost Assessment

DO reiterated the options for addressing elevated levels of CO₂ at Teesside. JCx asked for more information on the assumptions made, and greater clarity on the source of the figures and how they were arrived at.

Use of the term 'abatement' was considered, with a note of caution expressed by DRe.

MH observed that if UK gas sources were not developed then marginal gas would be sourced from Russia and LNG with higher CO₂ specifications. Less domestic gas production would be foregoing wider benefits to the UK economy. National Grid NTS continuing to act on an RE basis does not provide the high degree of certainty required for these significant investment decisions. GJ asked at what point would National Grid NTS call a halt when acting under RE. Invocation of RE could actually happen now; there was no obligation to notify any party except National Grid NTS; perhaps the industry need to think about a firm number and improved transfer of information.

It was questioned under what circumstances would National Grid NTS say no, and is that applicable to every NEA or is it unique to Teesside?

DRe then drew attention to information he had provided in an email to DO (copy published at www.gasgovernance.co.uk/0498/210115). The guidance provided was discussed in an attempt to clarify what elements should be treated as costs, and whether or not there was positive benefit to be identified and where. Amine units attracted certain costs, which DO explained in more detail. The DECC model was considered; DO believed this was not appropriate and LJ suggested that DO provide relevant information in support of his view.

MH then gave his view as to why in terms of global and UK emissions approval of these modifications should be argued for. It was better to develop the UK's own field rather than take marginal supplies from elsewhere because of how those marginals had been treated. MH agreed to provide an explanation for inclusion in the report.

Explaining that the DECC representative was absent due to illness, LJ then displayed the DECC presentation "CO₂ Content in UKCS Developments" for review and consideration.

MH believed there was no discernible trend for higher CO₂ fields and gave an overview of the current fields around the British Isles and where the biggest growth areas were believed to be located.

The discussions concluded, with suggestions for the provision of additional information noted in red in the draft report. DO, AP and MH will endeavour to provide further information to address the points.

Risk of Precedent

Discussion returned to this point, and the concerns that, should these modifications be approved, a party or parties may subsequently feel it to be a matter of prudence to raise other similar modifications 'just in case'. Assuming Modifications 0498 and 0502 to have been approved, it was suggested that it would be very difficult for Ofgem to reject any others.

Non-Discrimination

It was suggested that there might be a competitive disadvantage (i.e. more costs?) for NTS Connects situated closest to the entry point. This was briefly discussed, and it was suggested that National Grid NTS should provide its view.

Appendix Information

Looking at the information provided in the spreadsheets relating to Scenarios 1 and 3, JCx queried some of the figures. DO explained how these had been reached, and agreed to provide a written explanation to add clarity. Referring to the differences for Scenario 2, DO explained in greater detail how the model works and the reasons for amine units being on 'standby'. Process heat is required to retain/store amine (in its drained down form) in optimum condition. In Scenario 3 the amine unit is used all the time (gas coming off and being reduced into spec).

3.1 Review of Relevant Objectives

LJ drew attention to the initial statements included. These may be refined as development of the report progresses.

3.2 Consideration of Legal Text for NEAs

To be reviewed.

3.3 Recommendations (including additional questions for UNC Modification Panel consideration)

To be discussed.

4.0 Next Steps

The draft Workgroup Report (as amended to reflect today's discussions) will be published at the conclusion of this meeting, and all parties will continue to maintain involvement and contribute to the drafting process through Action 1201 (updated to reflect the date agreed for submission of further contributions).

Further contributions should be provided to the Joint Office in advance of the next meeting (i.e. by 02 March 2015) for inclusion in the redrafted Workgroup Report, which LJ will endeavour to publish by Tuesday 03 March 2015 to give sufficient time for review.

At the next Workgroup meeting (09 March 2015) it will be the intention to continue to formally structure and shape the Workgroup's report, with the primary focus being on the further outputs from Action 1201, and how these will inform the Workgroup's views and be translated into meaningful content.

5.0 Diary Planning

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

Following a brief discussion it was agreed to change the dates of the next two meetings, i.e. 25 February will now move to Monday 09 March 2015, and 25 March will now move to Monday 31 March 2015).

Workgroup meetings will take place as follows:

Date/Time	Location	Programme
10:00, Monday 09 March 2015	ENA, 6 th Floor, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF (Room 4)	Development of Workgroup Report
10:00, Tuesday 31 March 2015	ENA, 6 th Floor, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF (Room 4)	Completion of Workgroup Report
April 2015 (date to be confirmed)	To be confirmed	Completion of Workgroup Report

Action Table – Combined Workgroup 0498/0502 (21 January 2015)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0807	07/08/14	2.0	'Rate of change' issues for operating equipment - Consider providing examples or information where this sort of problem had been experienced/encountered before.	Energy UK (JCx)	Carried forward
0808	07/08/14	2.0	CATS and TGPP infrastructure – Provide revised schematic to confirm how facilities will be configured, what will be upgraded and likely combined costs.	TGPP (AH)	Carried forward
1103	10/11/14	4.3	AH to clarify the cost implications of removing H ₂ S and CO ₂ in regard to the August British Gas presentation. DO to clarify costs for H ₂ S removal have not been included in the CO ₂ arrangements.	TGPP (AH/DO)	Closed

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
1201	08/12/14	3.0	All parties to review the draft Workgroup Report (published at www.gasgovernance.co.uk/0498/210115) and what information they have been tasked to provide (<i>see text/assignments in red, page 8 onwards</i>), and submit their contributions to the Joint Office in advance of the next meeting (i.e. by 02 March 2015) for inclusion in the redrafted Workgroup Report.	ALL Parties	By 02 March 2015 Carried forward
0101	21/01/15	3.0	<i>Curtailment</i> - Confirm which party instructs curtailment, Teesside or National Grid NTS.	Proposers (AP and DO)	Pending
0102	21/01/15	3.0	<i>Advance warning of gas quality variation</i> - Confirm how the notification process currently operates, and report on details of any past occurrences (cause, duration, process followed, etc).	National Grid NTS (DRa)	Pending