



Energy Information
Telephone: 020 7901 7389

Shippers, National Grid Transco and other
interested parties

Our Ref: Net/Cod/Mod/0732
Direct Dial: 020 7901 7389
Email: sonia.brown@ofgem.gov.uk

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Dear Colleague

Network code modification 0732 "Amendment of Network Entry Provisions at BP sub terminal at West Sole Easington"

Ofgem¹ has carefully considered the issues raised in modification proposal 0732 to Transco's network code, "Amendment of Network Entry Provisions at BP sub terminal at West Sole Easington".

Having had regard to the principal objective and statutory duties of the Authority, Ofgem has decided to direct Transco to implement modification proposal 0732 because Ofgem considers that the proposal will better facilitate the relevant objectives of Transco's network code under standard condition 9 of Transco's Gas Transporters (GT) licence.

In this letter, Ofgem explains the background to the modification proposal and gives reasons for making its decision.

Background to the proposal

Gas Safety (Management) Regulations (GS(M)R) 1996

The GS(M)R, which are part of health and safety legislation, set the legal parameters for gas entering into and leaving the GB gas network. These parameters are set to ensure the safe distribution and utilisation of gas. All gas entering the National Transmission System (NTS) at

¹ Ofgem is the Office of the Gas and Electricity Markets Authority. The terms 'Ofgem' and the 'Authority' are used interchangeably in this letter.

either sub-terminals or in some cases specified downstream blending points² must comply with these regulations.

Network entry agreements / legacy contracts

In addition to the GS(M)R, Transco has its own individual gas quality specifications at each entry point, which it agrees with the relevant sub-terminal operator. At some sub-terminals, these specifications are contained in Network Entry Agreements (NEAs). NEAs are subsidiary documents governed by Transco's network code. However, at some of the sub-terminals, these specifications are contained in pre-network code agreements (so called "legacy" contracts). These legacy agreements were signed primarily by British Gas and the relevant producers at the entry points prior to the introduction of Transco's network code in 1996.

The gas quality specifications contained in these agreements are referenced in Transco's network code. Under section I of Transco's network code, any changes to the Network Entry Provisions (NEPs), which include gas entry conditions, measurement provisions and the point or points of delivery, need the written consent of all users who are registered at such a date when the amendment is to take effect. Alternatively, changes to NEPs can be progressed via a modification proposal.

Gas quality parameters

Natural gas contains hydrocarbons (methane, ethane, propane, and butane), small quantities of hydrogen, inert gases such as nitrogen and carbon dioxide, and contaminants such as hydrogen sulphide, oxygen and mercury. In the UK, gas appliances are designed and tested to operate on methane. The appliances are tested with this reference gas and some tests are also performed with limit gases. The limit gases³ are those which fall at the upper and lower ends of the GS(M)R Group H Wobbe range. The Wobbe index is related to calorific value (CV) and density. The GS(M)R range for the Wobbe number is 47.2 MJ/m³ – 51.41 MJ/m³.

Transco's obligations

Transco has a number of obligations within the GS(M)R, the Gas Act 1986 and its GT licence that are relevant when considering changes to gas quality arrangements at entry terminals.

Transco must comply with the GS(M)R when allowing gases to enter its transportation system at either sub-terminals or in some cases specified downstream blending points.

Under section 9 of the Gas Act 1986, Transco must comply, so far as it is economical to do so, with any reasonable request for it to connect to the system and convey gas by means of that system to any premises. In doing so, Transco must avoid any undue preference or undue discrimination in the terms on which it undertakes the conveyance of gas.

² Gas Safety (Management) Regulations 1996 Regulations 2(4) and 8.

³ Limit gases relate to gas falling at the upper and lower end of the group H classification as determined by EN 437 Gas Category H. These limit gases have a Wobbe number of 54.7 MJ/m³ at the higher end and 45.7 MJ/m³ at the lower end. These gases are usually tested to confirm that they will operate safely, if temporary excursions up to these limits occur. It should be noted that it is accepted that "operate safely" can be achieved by controlling shutdown of the appliance in a manner that presents no hazard to the user or surrounding property.

Standard condition 4D of the GT licence also states that:

“the licensee shall conduct its transportation business in the manner best calculated to secure that neither –

- ♦ the licensee or any affiliate or related undertaking of the licensee, nor
- ♦ any gas shipper or gas supplier,

obtains any unfair commercial advantage including, in particular, any such advantage from a preferential or discriminatory arrangement.”

Ofgem’s statutory duty with regards to gas quality

The principal objective of the Authority is to protect the interests of consumers⁴. Further, under the Gas Act 1986, “the Authority may with the consent of the Secretary of State, prescribe standards of pressure and purity to be complied with by gas transporters in conveying gas to premises or to pipe-line systems operated by other gas transporters”⁵.

DTI/Ofgem/HSE/DEFRA study

The Government committed in the Energy White Paper with respect to gas quality to “keep developments here closely under review” and, in particular, to “monitor the likely effects on gas quality”⁶. Subsequently, the Department of Trade and Industry (DTI) announced the launch of a three phase gas quality exercise. This is a joint study between the DTI, Ofgem, the Health and Safety Executive (HSE) and the Department of Environment Food and Rural Affairs (DEFRA).

This study assesses the gas quality implications for the UK as it becomes more import-dependent in the coming years. The study considers both the need to facilitate trade in the wholesale gas market and the need to ensure that customers’ gas appliances function adequately. In phase one, a study was commissioned by the DTI from Ilex Energy Consulting Ltd⁷. It concluded that the UK’s ability to meet gas demand could be impaired by the mismatch between the national gas specification requirements with respect to the quality of gas that could be imported and the quality of potential imported gas sources. This finding launched phase two of the study, which is currently exploring the different policy options available to the UK. Phase three, which is likely to occur towards the end of 2005, would begin to implement the preferred policy option.

Ofgem and the DTI are also aware of the gas quality developments that are occurring in Continental Europe. These developments are mainly focusing on the work being achieved by EASEE-gas⁸, which comprises of representatives of gas transporters, producers and other interested parties from Europe, working to agree on common gas quality standards to aid the harmonisation of the gas markets in Europe. However, the results of this forum are voluntary and therefore EASEE-gas cannot currently compel member states to adopt the standards. Recommendations for harmonised gas quality specification and an associated implementation timetable were endorsed by the EASEE-gas Executive Committee on 3 February 2005.

⁴ Section 4AA (1) of the Gas Act 1986

⁵ Section 16 (1) (a) of the Gas Act 1986.

⁶ Energy White Paper: Our energy future creating a low carbon economy, DTI, February 2003

⁷ A copy of this report can be found on the DTI’s website in the energy section.

⁸ European Association for the Streamlining of Energy Exchange, for more information see www.easee-gas.org

Modification proposal 0681 "Amendment of Network Entry Provisions at ConocoPhillips sub terminal at Theddlethorpe"

Network code modification proposal 0681 sought to change some of the gas quality parameters at the ConocoPhillips sub-terminal at Theddlethorpe. These parameters included extending the current Wobbe range from 48.3 – 51.3 MJ/m³ to 47.36 – 51.41 MJ/m³, increasing the lower limit of CV for the gas from 36.9 MJ/m³ to 37.3 MJ/m³ and aligning hydrogen, soot index and incomplete combustion with the GS(M)R limit. Ofgem accepted modification proposal 0681 on 16 July 2004 after assessing that there was no identified increase in direct costs as a result of the changes to the gas quality parameters at entry.

Modification proposal 0707 "Amendment of Network Entry Provisions at Total E&P UK sub-terminal at St Fergus"

Network code modification proposal 0707 sought to change the Wobbe number upper limit at Total E&P UK's sub-terminal at St Fergus from 51.0 MJ/m³ to 51.41 MJ/m³. Ofgem accepted modification proposal 0707 on 13 August 2004 after assessing that there was no identified increase in direct costs as a result of the changes to the gas quality parameters at entry.

Modification proposal 0711 "Amendment of Network Entry Provisions at BP sub terminal at Dimlington"

Network code modification proposal 0711 sought to extend the Wobbe range in place at BP Gas Marketing Ltd's sub-terminal at Dimlington from 48.2-51.2 MJ/m³ to 47.2-51.41 MJ/m³. The modification also sought to align hydrogen, soot index and incomplete combustion factor with the GS(M)R limits and to revise the water dewpoint specification from -10°C@69 barg to -10°C@70.33 barg. Ofgem accepted modification proposal 0711 on 29 October 2004.

Modification proposal 0720 "Amendment of Network Entry Provisions at Rough Entry Point"

Network code modification proposal 0720 sought to reduce the lower Wobbe limit from 48.14 MJ/m³ to 47.2 MJ/m³ at the Rough entry point. Ofgem also accepted modification proposal 0720 on 29 October 2004.

The modification proposal

Modification proposal 0732 was raised by BP Gas Marketing Limited on 26 November 2004. This modification proposal seeks to amend the NEPs at BP Gas Marketing Ltd's sub-terminal at West Sole Easington. Specifically it seeks to extend the Wobbe range from 48.2-51.2 MJ/m³ to 47.2-51.41 MJ/m³. The modification also seeks to align the hydrogen, soot index and incomplete combustion factor with the GS(M)R limits and to revise the water dewpoint specification from a variable winter/summer spread to -10°C@48.26 barg and the hydrocarbon dewpoint specification from a variable winter summer spread to -2°C@48.26 barg.

Respondents' views

There were five representations. Four were supportive of the modification proposal and one respondent offered partial support.

Of those respondents who supported this modification proposal, a couple considered that this modification proposal would bring West Sole Easington in line with the full range of the

GS(M)R. It was also considered that this modification proposal would increase the volume of gas landed at the entry point and this could facilitate the development of additional gas supplies from the UK Continental Shelf that could be brought ashore without the need for capital investment on Transco's system. One respondent stated that it would be detrimental to security of supply and the efficient and economic operation of the system if gas delivered to West Sole Easington could not be accepted by Transco. However, this respondent considered that this modification proposal must be consistent with the NEPs at Hornsea to avoid a situation whereby the gas injected into the storage facility could not be withdrawn by shippers.

One respondent considered that the alignment of specifications with those of GS(M)R would effectively remove an in built tolerance of excursions from the expected Wobbe index figures, requiring more rigorous monitoring by the Delivery Facility Operator (DFO) in order to ensure the limits would not be exceeded.

The respondent offering partial support stated that it is supportive of steps that lead to additional gas supplies to be delivered to the UK providing they do not cause any safety issues or other problems at exit. However, this respondent did consider that the following aspects were inappropriate:-

- ◆ The changes to the dewpoint specifications. This respondent considers that the proposed changes to the dewpoints at West Sole Easington are more restrictive than the existing levels and therefore this respondent cannot fully support this modification proposal. This respondent was of the view that the changes in Transco's Ten Year Statement to the Hydrocarbon and Water Dewpoints had not been justified or subject to any form of consultation.
- ◆ Changes to the Gas Entry Conditions that may only be accepted if accompanied by the need to sign a NEA. This respondent was unaware that any generic NEA has been the subject to the same degree of consultation as the generic Storage Connection Agreement (SCA). This respondent considered that a wide ranging consultation on generic NEAs should be initiated before anyone is expected to sign one. This respondent also considered that any changes to Gas Entry Conditions should not be slowed down by any consultation on NEAs.

Transco's views

Transco supported implementation of this proposal which would bring the contractual gas quality specifications at West Sole Easington in line with the GS(M)R for the Wobbe range. Transco also considered that this modification proposal would secure effective competition between relevant shippers and suppliers.

Transco did note that increasing the Wobbe range to the full width of the GS(M)R band could increase the risk of excursions breaching the GS(M)R. Therefore, Transco considered that the full co-operation of the DFO at the entry point would be needed.

In response to the respondent giving this modification proposal partial support, Transco notes the respondent's concern with respect to the associated dewpoint changes and states that the modification proposal did not offer a reason for the proposed change to the dewpoint limits. However, Transco did not raise any objection to the proposed change to the dewpoint limits.

Transco also stated in response to the respondent opposing the compulsory need to sign a NEA that the modification proposal states that the Proposer is seeking to implement the modification proposal by means of a NEA and as such is a matter for the Proposer and Transco. Transco also considers that should a party wish to implement a change to their Gas Entry Conditions by another means then they would need to discuss this with Transco. However, Transco is of the view that an NEA has to be entered into in order to alter the Gas Entry Conditions at any site that operates under legacy arrangements.

Ofgem's view

Ofgem has carefully considered the views of all the respondents and Transco on this modification proposal. Having had regard to its principal objective, Ofgem considers that this modification proposal does better facilitate achievement of the relevant objectives (a) and (c) of Transco's GT licence.

Relevant objective 9(a) of the GT licence – the efficient and economic operation by the licensee of its pipe-line system

This modification proposal allows for additional gas supplies to be made available at West Sole Easington. This additional supply of gas will, other things being equal, increase competition in the provision of gas balancing and other system services that Transco must procure to operate the system. Greater competition will lead to more efficient and economic operation of Transco's system. Therefore, Ofgem considers that this modification proposal better facilitates achievement of relevant objective (a) of Transco's GT licence.

Ofgem also notes that approval of this modification proposal could enable further exploitation of the Southern basin fields. This would potentially allow for further additional gas to be brought on stream, easing any supply constraints and enabling Transco to operate the pipeline system in an economic and efficient manner.

Relevant objective 9(c) of the GT licence – securing effective competition between relevant shippers

The modification proposal would allow new gas to flow to GB via the West Sole Easington sub-terminal, not just from BP but any other producer that wishes to develop and exploit these lower Wobbe fields in the South North Sea. Ofgem considers that by enabling these sources of gas to come on stream this would therefore increase competition in the wholesale gas market which could lead to downward pressure on gas prices. Therefore, Ofgem considers that this modification proposal better facilitates achievement of relevant objective (c) of Transco's network code.

Other issues

Ofgem notes the concerns in relation to the NEA issue but considers that it is outside the scope of this modification proposal. Ofgem also notes the concerns with respect to the hydrocarbon and water dewpoint issue and acknowledges that there are different dewpoint specifications in place at present. Ofgem is of the view that this gas quality parameter will be incorporated into the scope of Ofgem's review of the gas quality arrangements in the UK.

Ofgem's decision

For the reasons outlined above, Ofgem has decided to direct Transco to implement network code modification proposal 0732 because it considers that it better facilitates achievement of the relevant objectives as outlined under standard condition 9 of Transco's GT licence and is consistent with the principal objective and statutory duties of the Authority. In particular, Ofgem considers that facilitating additional gas supplies at this entry point should better facilitate achievement of the relevant objective set out under standard condition 9 (a) of the GT licence – increase the efficient and economic operation by the licensee of its pipeline and the relevant objective set out in standard condition 9 (c) of the GT licence – securing the effective competition between the relevant shippers and the relevant suppliers.

If you have any further queries in relation to the issues raised in this letter, please feel free to contact Simon Bradbury on 020 7901 7249 or Fiona Lewis on 020 7901 7436.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Sonia Brown', with a small flourish at the end.

Sonia Brown
Director, Markets