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The Joint Office, Relevant Gas Transporters and other interested parties

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Dear Colleague

Code modification 019 "Amendment of Network Entry Provisions at ConocoPhillips sub-terminal at Theddlethorpe to align with Transco's 10 Year Statement"

Ofgem[1] has carefully considered the issues raised in modification proposal 019 to the uniform network code (UNC), "Amendment of Network Entry Provisions at ConocoPhillips sub-terminal at Theddlethorpe to align with Transco's 10 Year Statement".

Having had regard to the principal objective and statutory duties of the Authority[2], Ofgem has decided to direct the relevant gas transporters to implement code modification proposal 019 because Ofgem considers that the proposal will better facilitate the achievement of the relevant objectives of the UNC under Standard Special Condition A11 of the relevant gas transporters'[3] (GT) licences.

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

[1] Ofgem is the Office of the Gas and Electricity Markets Authority. The terms 'Ofgem' and the 'Authority' are used interchangeably in this letter.
[2] Set out in Section 4AA of the Gas Act 1986, as amended.
[3] On 1 May 2005, Transco hived down 4 of its Distribution Networks into four wholly Transco owned subsidiary companies in preparation for the sale of these DNs (scheduled for 1 June 2005). On 1 June 2005 the share sale was completed, and the relevant gas transporters are Transco's RDN and NTS businesses and the buyers of the DNs.

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 either sub-terminals or in some cases specified downstream blending points[4] must comply with these regulations.

Network entry agreements / legacy contracts

In addition to the GS(M)R, Transco NTS 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 the UNC. 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 the UNC. Under section I of the UNC, 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 gases[5] 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/m^3 – 51.41 MJ/m^3.

Transco NTS's obligations

Transco NTS 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 NTS 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.

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

[5] 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/m^3 at the higher end and 45.7 MJ/m^3 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.

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Under section 9 of the Gas Act 1986, Transco NTS 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 NTS must avoid any undue preference or undue discrimination in the terms on which it undertakes the conveyance of gas.

Standard Special Condition A6 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 consumers[6]. 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" [7].

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"[8]. 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 import-dependent. 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 Ltd[9]. 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 being progressed by EASEE-gas[10], which comprises of representatives of gas transporters, producers and other interested parties from Europe, who have agreed on common gas quality standards to aid the harmonisation of the gas markets in Europe. Recommendations for harmonised gas quality specification and an associated implementation timetable were endorsed by the EASEE-gas

[6] Section 4AA (1) of the Gas Act 1986
[7] Section 16 (1) (a) of the Gas Act 1986.
[8] Energy White Paper: Our energy future creating a low carbon economy, DTI, February 2003
[9] A copy of this report can be found on the DTI's website in the energy section.
[10] European Association for the Streamlining of Energy Exchange, for more information see www.easee-gas.org

Executive Committee on 3 February 2005. The timetable proposes to implement the non-combustion parameters by 1 October 2006 and the combustion parameters by 1 October 2010. The EASEE-gas proposals will be presented at the Madrid Forum in September. However, currently the results of this forum are voluntary and therefore EASEE-gas cannot currently compel member states to adopt the standards.

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/m^3 to 47.36 – 51.41 MJ/m^3, increasing the lower limit of CV for the gas from 36.9 MJ/m^3 to 37.3 MJ/m^3 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/m^3 to 51.41 MJ/m^3. 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/m^3 to 47.2-51.41 MJ/m^3. 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/m^3 to 47.2 MJ/m^3 at the Rough entry point. Ofgem also accepted modification proposal 0720 on 29 October 2004.

Modification proposal 0732 "Amendment of Network Entry Provisions at BP sub terminal West Sole"

Network code modification proposal 0732 was raised by BP Gas Marketing Limited on 26 November 2004. This modification proposal sought to amend the NEPs at BP Gas Marketing Ltd's sub-terminal at West Sole Easington. Specifically it sought to extend the Wobbe range from 48.2-51.2 MJ/m^3 to 47.2-51.41 MJ/m^3. The modification also sought 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. Ofgem accepted modification proposal 0732 on 29 March 2005.

The modification proposal

UNC modification proposal 019 "Amendment of Network Entry Provisions at ConocoPhillips sub-terminal at Theddlethorpe to align with Transco's 10 Year Statement" was raised by ConocoPhillips on12 May 2005. It seeks to align the lower Wobbe limit to the GS(M)R moving it from 47.36 MJ/m^3 to 47.2 MJ/m^3. It also seeks to align the CV value with Transco's 10 Year statement, therefore moving the CV from 37.3 MJ/m^3 to 36.9 MJ/m^3.

Respondents' views

There were seven responses to modification proposal 019. Six respondents expressed their support for the proposed modification, with one respondent offering qualified support.

The respondents in favour of the implementation of the proposal were of the view that the proposed changes would enhance security of supply, secure greater flexibility in the operation of the sub-terminal at Theddlethorpe, facilitate the economic and efficient development of new gas supplies and facilitate greater competition between suppliers and relevant shippers.

The proposer considered that the proposal would increase medium-term security of supply and could also potentially increase short-term security of supply. The proposer noted that in the short-term, the proposal would ease the issue of the depletion of offshore blend gas which is becoming a constraint that, without this modification proposal, could result in the loss of that production. In the medium-term, the proposer was of the view that the proposal would facilitate the economic and efficient development of new gas supplies which, given that Transco NTS would not require any new capital investment to allow the new gas source onto the NTS, would be a relatively quick process. The proposer further considered that the proposal would not only extend the life of the terminal and allow yet undiscovered gas to be produced, but the incremental gas produced would also utilise the significant spare entry capacity at Theddlethorpe. This view was supported by several respondents who agreed that increasing the number of potential supplies at Theddlethorpe sub-terminal would thereby facilitate effective competition between shippers and relevant suppliers.

One respondent was of the view that the proposal should be progressed immediately for security of supply and daily supply reliability reasons for this coming winter, and also for the facilitation of access to future low Wobbe sources of gas in the vicinity of the Theddlethorpe infrastructure for the 2006/07 gas year and beyond.

Another respondent in support of the proposal considered that given that the 10 Year Statement has since been aligned with the GS(M)R, it would be appropriate to amend the specification at the ConocoPhillips sub-terminal at Theddlethorpe in line with these changes. This view was supported by several other respondents. One of these respondents noted that aligning the lower Wobbe limit and CV value to the GS(M)R and Transco's 10 Year Statement removes the risk of discrimination. The other of these respondents stated that the proposal had benefits for continuity.

One respondent in support of the modification proposal and the respondent offering qualified support both expressed concerns regarding the implications that this modification proposal would have on the CV level in the system. The respondent offering qualified support considered that all of the recent gas quality modification proposals could, in their totality, have an effect of lowering the overall CV within the system. This respondent also considered that this may be

something that could be covered by EASEE-gas. The other respondent expressing concerns regarding CV shrinkage noted that if the effects of the proposal are discovered to be more significant than first expected following implementation, then it would be appropriate to address this issue as part of the next review of the SO incentive and sharing arrangements. However, these respondents came to the conclusion that those implications were, at this time, relatively insignificant compared to the additional benefits arising from this modification proposal.

Another respondent considered that the impact on CV shrinkage as a result of this modification proposal would be insignificant. This respondent was also of the view that any such costs would be best managed through the existing NTS SO incentive arrangements. This respondent considered that the physical configuration of the NTS would largely mitigate any potential implications on CV shrinkage costs. This respondent considered that there would not be any capital or operating costs incurred as a result of this modification proposal.

Panel's recommendation

At the Modification Panel meeting held on 13 July 2005, all ten Voting Members were in favour of the implementation of this modification proposal.

Ofgem's view

Ofgem has carefully considered the views of all the respondents and Transco NTS 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 A11 (a) (the efficient and economic operation of the pipe-line system to which this licence relates) and A11 (d) (securing of effective competition between the relevant shippers and suppliers).

Standard Special Condition A11 (a) – ***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 Theddlethorpe. This additional supply of gas will, other things being equal, increase competition in the provision of gas balancing and other system services that Transco NTS must procure to operate the system. Greater competition will lead to more efficient and economic operation of Transco NTS's system. Therefore, Ofgem considers that this modification proposal better facilitates achievement of relevant code objective (a).

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 NTS to operate the pipeline system in an economic and efficient manner.

Standard Special Condition A11 (b) – ***so far as is consistent with (a), the co-ordinated, efficient and economical operation of (i) the combined pipeline system and/or (ii) the pipe line system of one or more other relevant gas transporters***

This modification proposal would allow additional sources of supply to flow onto the GB gas network, which would assist the other relevant transporters' to better manage their respective systems, leading to a more efficient and economical operation of the combined pipeline system.

Standard Special Condition A 11 (d) – ***securing of effective competition between the relevant shippers and suppliers***

The modification proposal would allow new gas to flow to GB via the Theddlethorpe sub-terminal, not just from ConocoPhillips 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 code objective (d).

Other considerations

Ofgem has noted the concerns raised by two of the respondents with respect to CV shrinkage but considers that this modification proposal, if it were to give rise to additional costs, would not represent a direct cost to Users but a transfer cost, caused by the flow weighted average methodology. Ofgem also agrees with the subject matter expert (SME), DTI and NGT that the average CV in the system would not be likely to fall over the coming years, instead the average CV would be likely to increase due to the higher Wobbe import sources of gas coming on stream. Ofgem is also of the view that lowering the CV to 36.9 MJ/m^3 is in line with the Transco NTS's 10 Year Statement. However, if this modification and others of its kind did give rise to additional CV shrinkage costs, Ofgem would expect this to be addressed by Transco NTS.

Ofgem's decision

For the reasons outlined above, Ofgem has decided to direct the relevant gas transporters to implement code modification proposal 019 because it considers that it better facilitates achievement of the relevant objectives as outlined under Standard Special Condition A11 of the relevant transporters' 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 Special Standard condition A11(a) of the relevant transporters' GT licence – increase the efficient and economic operation by the licensee of its pipeline and the relevant objective set out in standard condition A11(d) of the relevant transporters' 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 Fiona Lewis on 020 7901 7436.

Yours sincerely

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