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Dear Colleague

Network code modification 0722 “Amendment of Network Entry Provisions at Hornsea entry point”

Ofgem¹ has carefully considered the issues raised in modification proposal 0722 to Transco’s network code, “Amendment of Network Entry Provisions at Hornsea entry point”.

Having had regard to the principal objective and statutory duties of the Authority, Ofgem has decided to direct Transco to implement modification proposal 0722 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)

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. In particular we will 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 will assess the gas quality implications for the UK as it becomes more import-dependent in the coming years. The study will consider 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 in mid-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 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.

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 currently in place at 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. This modification proposal was approved by Ofgem on 29 October 2004.

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

Network code modification proposal 0720 sought to extend the Wobbe range in place at Rough Entry Point from 48.2-51.2 MJ/m³ to 47.2-51.41 MJ/m³. This modification proposal was approved by Ofgem on 29 October 2004

The modification proposal

Modification proposal 0722 was raised by Scottish and Southern Energy (SSE) plc on behalf of SSE Hornsea Limited. It seeks to reduce the lower Wobbe limit from 48.14 MJ/m³ to 47.2 MJ/m³. This proposal did not apply for urgent status. However, it did secure a reduced consultation period of five days.

Respondents' views

There were five responses to the consultation all lending support to the modification proposal.

All of the respondents considered this modification proposal sought to introduce consistency with entry specifications in the light of other recent changes at various entry points. These respondents agreed that allowing this amendment would remove any potential for undue

discrimination, several of the respondents considered that this modification proposal would help to ensure effective competition between the relevant shippers and suppliers by guaranteeing consistent gas entry conditions across the system. The respondents also considered that failure to amend the entry specifications at Hornsea would have negative implications for security of supply.

Several respondents commented on the increased risk of a GS(M)R breach. One considered that this increased possibility placed an additional onus upon the Delivery Facility Operators (DFOs) and Storage Facility Operators (SFO) to closely monitor and control any potential excursions. The other respondent considered that all the relevant parties are aware of the GS(M)R requirements and would not wish to breach these requirements at present and in the future. This respondent was also of the view that it was not aware of any expected changes in flow patterns as a result of this modification proposal and therefore there should not be any impact on capital or operating costs.

Another respondent also considered that it would be sensible to ensure all the entry specification amendments from this and previous modification proposals should have common implementation dates, which would facilitate any re-cycling of gas over this coming winter without introducing a concern about inconsistency of gas specifications.

Transco's views

Transco supports implementation of this modification proposal. Transco considers that there could be security of supply implications if the entry specifications were not changed. It was also of the view that implementation of this modification proposal would lead to increased confidence of gas being able to be delivered into the NTS from Hornsea, therefore having a positive impact on security of supply. Transco, in its response, made the point of stating that this modification proposal could increase the probability of gas quality excursions breaching the GS(M)R and called upon full co-operation from the DFOs to ensure this would not occur.

Transco also considered that there should be no changes to the capital and operating costs due to the fact that it has received no data to suggest any changes in flow patterns on the system. However, Transco did state that if this proposal did lead to higher costs, these should be recovered by application of the Income Adjusting Event provisions contained in paragraph 14(11) of Part 2 of special condition 28 of its GT licence.

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 allows gas to be injected and withdrawn from Hornsea without compromising its contractual arrangements. Given that several of the sub-terminals have revised or are seeking to revise their gas quality specifications, Ofgem considers that it is important to have consistent

arrangements at the relevant storage sites. Ofgem considers that the additional supply of gas allowed out of Hornsea as a result of this proposal 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.

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

Ofgem agrees with Transco and respondents that this modification would allow Hornsea storage users to withdraw gas this coming winter without the concern that Transco may declare it out of specification, avoiding undue discrimination between Hornsea and other entry points. Therefore, Ofgem considers that this modification proposal better facilitates achievement of relevant objective (c) of Transco's GT licence.

Way forward

On 21 September 2004 Ofgem published a letter proposing the initiation of a gas quality review group, chaired by Transco to review the current gas quality arrangements at both entry and exit. After a preliminary meeting with Transco, Ofgem and the industry to discuss this proposal, it was apparent that there was not a high level of support for a network code gas quality review group at present. Therefore, Ofgem is considering internally how this issue should be progressed. Ofgem will inform the industry of its plans in relation to the progression of this issue in due course.

Ofgem notes that it is for market participants to raise any further gas quality modification proposals and also notes that any further modification proposals raised will be considered on a case by case basis.

Ofgem's decision

For the reasons outlined above, Ofgem has decided to direct Transco to implement network code modification proposal 0722 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, consisting of several overlapping, wavy horizontal strokes.

Steve Smith
Managing Director, Markets