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Appendix 10

Connection to Transco's System

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Appendix 10: Connection to Transco's System

A10.1 Introduction

This chapter sets out Transco's policy on connections to or from its system. The UK Gas Industry is in transition between a situation where Transco provided all new connections, to one where customers and developers may choose other parties to build their facilities, and where other Public Gas Transporters (PGTs) can connect their pipeline systems to Transco's system. Any requirement to increase the quantity of gas delivered or offtaken is also treated as a new connection.

Entry Connections are connections from pipelines associated with offshore or onshore gas producing fields, for the purpose of introducing gas into the Transco system.

Exit Connections allow gas to be offtaken from the Transco system and can take the form of individual supply points or connected systems. There are four types of connected offtake system:

- a pipeline system operated by another PGT;
- a storage facility;
- an international interconnector; and
- any other non-Transco pipeline transporting gas to more than one premises (consuming more than 75,000 therms per annum).

Storage connections and interconnectors both deliver gas to the system and offtake gas from the system and therefore arrangements pertaining to both entry and exit connections will apply.

Whilst the requirements for new entry connections in terms of gas quality and measurement are not expected to change significantly, the competitive market for exit connections is developing rapidly. Consequently the arrangements, in terms of engineering requirements and charging policy, are subject to review to accommodate these developments. Further details can be found in the Connection Guidelines 1997 and Transco's Connection Charging Statement.

A10.2 System Entry Connections

Transco's policy is that the full capital costs of any connection, including project management costs and any costs associated with the existing or new Transco entry facility, should be borne by the party wishing to connect to Transco's system. These will be assessed on a case by case basis.

The location of the connection point will be agreed between the terminal operator and Transco. The costs will include the equipment and construction costs of the physical connection, metering and quality monitoring. Transco will not receive a return on these assets and in some circumstances may pay additional operating costs.

The equipment will depend on the particular circumstances, but the basic technical requirement is the minimum level of control and monitoring equipment at the point of connection necessary to safeguard the Transco system and to ensure that gas entering the system meets the agreed gas specification. Additionally, the equipment has to provide the necessary information to allow Transco to run an economic and efficient system. Transco needs to ensure that equipment associated with connections to the system is capable of operating under all anticipated conditions and complies with all relevant industry standards.

Transco will consider individually the possible provision of other equipment which may, depending on the circumstances, be installed either by Transco or the terminal operator.

Any additional pipeline costs will be subject to negotiation between Transco and the terminal operator or the party wishing to connect to the system. If the upstream terminal operator funds, constructs and owns the new connecting pipeline, the Transco system entry point will be located at or as close as possible to the point of connection to the existing NTS. If Transco is asked to complete the connection, Transco will put the contract to competitive tender in the same way that it would for work on other Transco installations or for system modification work.

Whenever a new entry connection or increased entry flow is required, it is important to contact Transco as early as possible to discuss requirements.

For all new terminals, Transco will enter into a Network Entry Agreement with the terminal operator. This will state the gas quality specification, the physical location of the delivery point and the standards to be used for the measurement of quality and flow of the gas.

The following section provides an indication of the Transco gas quality specification.

A10.2.1 Network Entry Quality Specification

In negotiating the Network Entry Agreement and setting the entry quality specification for a new terminal and/or System Entry Point, Transco will agree that gas meeting the following specification will be accepted:

1. Hydrogen Sulphide
 - Not more than 3.3 ppm
2. Total Sulphur
 - Not more than 15 ppm
3. Hydrogen
 - Not more than 0.1 mol %
4. Oxygen
 - Not more than 10 ppm
5. Hydrocarbon Dewpoint
 - Not more than -2°C at any pressure up to 75 barg
6. Water Dewpoint
 - Not more than -10°C at any pressure up to 75 barg
7. Wobbe Number (real gross dry)
 - Within 48.14 to 51.41 MJ/m³ range, and
 - In compliance with ICF & SI limits listed below
8. Incomplete Combustion Factor (ICF)
 - Not more than 0.48
9. Soot Index (SI)
 - Not more than 0.60
10. Gross Calorific Value (real gross dry)
 - A value will be set within the band 36.9 to 42.3 MJ/m³, in compliance with the Wobbe Number, ICF and SI limits described above, subject to a +/- 1MJ/m³ variation
11. Inerts
 - Not more than 7.0 mol % subject to
 - Carbon Dioxide: not more than 2.0 mol %
 - Nitrogen: not more than 5.0 mol %
12. Contaminants
 - The gas shall not contain solid or liquid material which may interfere with the integrity or operation of pipes or any gas appliance {within the meaning of regulation 2(1) of the Gas Safety (Installation and Use) Regulations 1994} which a consumer could reasonably be expected to operate
13. Delivery Temperature
 - Between 1°C and 38°C

14. Odour

- Gas delivered shall have no odour which might contravene the statutory obligation not to transmit or distribute any gas at a pressure below 7 bar g which does not possess a distinctive and characteristic odour

14. Pressure

- The delivery pressure shall be the pressure required to deliver natural gas at the Delivery Point into the Transco Entry Facility at any time taking into account the Transco System back pressure at the Delivery Point as the same shall vary from time to time
- The entry pressure shall not exceed 75 bar g.

Note that the Incomplete Combustion Factor (ICF) and Soot Index (SI) have the meanings assigned to them in the Gas Safety (Management) Regulations 1996 Schedule 3 (GS(M)R).

A10.3 System Exit Connections

A10.3.1 New connections or increased supplies

There are different technical and operational requirements for exit connections depending on the pressure tier connected into and on the type of connection required. Full details of these requirements and all other information on how to obtain a connection can be found in the Transco publication "Connection Guidelines 1997", which can be obtained from Transco Public Relations (see Appendix 13).

Whenever a new connection or increased supply is required, it is important to contact Transco as early as possible to ensure that the requirements can be met on time. As stated in A7.4, where a new connection or increased supply might lead to the need for a major capacity expansion project on Transco's system, it is essential that Transco is given between two and three years notice. Where appropriate, it may be necessary to enter into an agreement with Transco in advance, to ensure that sufficient capacity will be available when required.

Anyone can contact Transco for a connection, whether a shipper, operator, developer or end-user, but gas can only be offtaken when the supply point so created has been confirmed by a Network Code Registered User. To obtain a quotation for a new connection or increased load, the customer should contact the local Transco LDZ Office. A list of contacts is available from the Connection Policy Team (see Appendix 14).

Where a party wishes to lay their own service pipe, Transco will connect the new pipe providing it is fit for purpose and the appropriate Transco procedure for self-lay pipes has been followed. Where that pipe supplies individual premises consuming less than 75,000 therms per annum, ownership of the pipe will vest in Transco, following connection, in accordance with S.10(6) of the Gas Act (this issue is currently under discussion with Ofgas).

Transco is currently developing proposals for taking ownership of pipes expected to consume more than 2196 MWh (75,000 therms) per annum. These proposals will be published as soon as possible.

Before offtaking gas, all connected system exit points will also need to have a Network Exit Agreement (NExA) which will set out the particular operating conditions for the exit point. In addition, NExAs will normally be required for new Very Large Daily Metered Customers, and could also be required in respect of other new supply points. Transco will advise at the enquiry stage if a NExA will be required.

A10.3.2 Connection and Transportation Charges

Information on Transco's charges and charging methodology for new connections can be found in Transco's Connection Charges Statement. This statement is based on the following paragraphs of Condition 5 of BG's Public Gas Transporters Licence:

Paragraph 3 Connection of Premises

- (a) the connection of premises required in pursuance of section 10 (2) of the Act (i.e. situated within 23 metres of a relevant main or which could be connected via a pipe laid, or to be laid, by the owner or occupier of the premises, and to be supplied at a rate not exceeding 75,000 therms per annum);

- (b) connection of premises likely to be supplied at a rate not exceeding 75,000 therms per annum, including charges for supplying and laying a pipe in cases not falling within Section 10 (1) (a) or (b) of the Act, (i.e. not situated within 23 metres of a relevant main or could not be connected to any such main by a pipe laid or to be laid by the owner or occupier of the premises);
- (c) supplying or laying a pipe or main, and for anything done in respect of connection or disconnection in different cases for premises likely to be supplied at above 75,000 therms per annum;
- (d) works necessary in the circumstances mentioned in Section 10 (10) of the Act (i.e. where the making or continuation of a connection to premises to be supplied at a rate exceeding 73.2 MWh per annum would involve a new or increased supply of gas to the premises in question and Transco reasonably expects that this would necessitate the laying of a new main, or the enlarging of an existing main, or the construction or enlarging of any other works required for the conveyance of gas), having regard to whether the PGT may reasonably expect to recover that expense elsewhere.

Paragraph 11 Connection of Pipelines

Charges for:

- (a) making a connection to a pipe comprised in Transco's pipeline system to enable gas to be introduced into, or taken out of that system;
- (b) works associated with the making of such a connection including, in particular, works to increase the capacity of a high pressure pipeline and by way of the supply and installation of a pipeline.

During 1996, Ofgas initiated a process of consultation on Transco's connections policy and charges. A consultation document was issued and the issues raised are now being progressed through two Ofgas groups: the Ofgas Connections Steering Group and the Pricing Steering Group. Transco is committed to facilitating the development of competition in the construction of connections and is working with Ofgas and other interested parties to develop a new regime for connections to Transco's system and to contribute to the development of a sound industry framework for the competitive connections market. Transco issued a consultation document in January 1998 which discusses how some of the issues raised by Ofgas and the Connections Steering Group could be implemented. Subsequently, Transco have issued revisions to its charging statement which became effective on 1st June and 6th July 1998. The Connections Charging Statement is available from Transco's Public Relations Department.

A 10.4 Reasonable Demands for Capacity

Transco has an obligation to develop and maintain an efficient and economical pipeline system and, subject to that, to comply with any reasonable request to connect premises, provided that is economic.

Specific system reinforcement may be required to maintain system pressures for the winter period after connecting a new supply. Transco will normally fund this work subject to the load meeting certain economic criteria. Where the load does not meet these criteria the customer has the option of making a contribution to the costs in order for the new load to be connected.

Details of how Transco charges for reinforcement and the basis on which contributions may be required can also be found also be found in its Connection Charging Statement.

When making a request for capacity, the shipper should allow sufficient time for the reinforcement to be constructed. In the case of high pressure pipelines this can take between two and three years, in the event of planning difficulties. Requests for firm supplies in a shorter timescale may not be reasonable.