Cadent

Your Gas Network

# Cadent Gas Ltd

## CONNECTIONS CHARGING METHODOLOGY

## STATEMENT OF PRINCIPLES AND METHODS TO BE USED TO DETERMINE CHARGES FOR CADENT CONNECTION SERVICES FOR DISTRIBUTION NETWORKS:

## NORTH WEST EAST MIDLANDS
## WEST MIDLANDS EAST ANGLIA
## LONDON

(Pursuant to Standard Condition 4B of the Gas Transporter License)

**Effective date – 09 November 2026**

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# *Section 1* - Introduction

This is a statement of the principles on which, and the methods by which Cadent will determine connection charges, pursuant to Standard Condition 4B of the Gas Transporter Licence. The Statement applies to charges determined from the Statement Effective Date, until superseded by any future Statement. In addition it sets out the basis of our charges for the alteration and disconnection of connection apparatus. It also includes some information about capacity availability and meter housings.

All references to "GDN", "we", "us" and "our" in this document are to Cadent trading as Cadent Gas Ltd, being the GT Licence holder for gas distribution in the Distribution Networks, as defined in Paragraph 1 in Special Condition E1 of our GT Licence.

Further information relating to our connection services may be obtained from the Cadent web site, http://cadentgas.com or using the relevant contact details provided in Appendix E.

Please note that the provision of gas distribution connection services is open to competition. Details of independent connection providers who hold Gas Industry Registration Scheme (GIRS) membership can be obtained from the following web sites:

http://www.sbgi.org.uk/UIP
http://www.lloydsregister.co.uk/girs.html
**NB: Defined Terms** – Please note that key terms used in this document are indicated by the use of initial capital letters. These key terms are defined in the glossary in Appendix A

# Section 2 - Connections Charging - Principles

## 2.1 Charging: General

**2.1.1** **Cost Recovery** - Subject to the requirements of Condition 4B(1) of our Licence, we aim to recover those costs that we reasonably expect to incur in providing our connection services.

**2.1.2** **Basis of Charges** - Charges will be calculated to reflect the costs which we reasonably expect to incur in carrying out the required connections work. These costs include labour, materials, and any other expenses required to complete the work. Each cost element will carry an appropriate level of overhead.

**2.1.3** **Additional Costs** - Where appropriate, charges will also reflect costs arising from charges payable by Cadent to third parties such as Highway Authorities. Such charges include, but are not limited to, fees in connection with the suspension of parking bays, Streetworks Scheme Charges and the costs of temporary traffic regulation[1].

**2.1.4** **Profit Element** – In accordance with paragraph 5(c) of Condition 4B of our gas transporter Licence, our charges may include an appropriate level of profit margin, where enabled by the Gas Act.

**2.1.5** **Standard Charges** - Standard Quotations and standard charges will be applied for some categories of connection services where the cost benefit of their use, relative to the production of Non-Standard Quotations and charges, is believed to be favourable.

**2.1.6** **Quotation Charges[2]** – For all Non-Standard Quotations (see paragraph 2.2.2), we will make a separate charge for provision of the quotation for the work execution element of the job. Quotation charges will be payable by the customer before we provide the quotation.

**2.1.7** **Design Charges** – For works which are deemed to be of Sufficient Complexity, we will make a separate charge for the design of the required connection and reinforcement[3] apparatus. Design charges will be based upon the anticipated cost of design works, and will be payable by the customer before we issue the quotation for works. A proportion of any design charge made in respect of associated reinforcement may be refunded, subject to the, Economic Test, when the project proceeds.

[1] Cadent will only pass on those costs which have been efficiently incurred.
[2] Introduced with effect from 1 April 2009.
[3] Where applicable

**2.1.8** **Additional Work -** On occasions we may carry out work that is additional to the customer's requirements to comply with the Gas Act requirement to develop our pipeline system in an economic and efficient manner. The cost of any such additional works will not be charged to the customer.

**2.1.9** **Contract** - All charges will be made subject to the appropriate conditions ofcontract (which will be made available on request).

## 2.2 Quotations

In respect of the provision of quotations for connection charges, the following definitions will apply:

**2.2.1** **Standard Quotation** - A desktop quotation for an individual one-off new service or alteration request which results in the application of a standard price, (excluding self-quotations).

A full list of standard charges is provided in our "Gas Distribution Connection Services Charges" document. It can be obtained from the Cadent web site using the following link: http://cadentgas.com under "Get Connected – New Connections.

**2.2.2** **Non-Standard Quotation (Bespoke Quotation)** - Any quotation for works other than a Standard Quotation but excluding a self quotation[4], i.e., all quotations that require a bespoke price, a site visit or reinforcement.

**2.2.3** **Assumptions** - Non-Standard Quotations will specify assumptions that were used in the determination of the price. Subject to the conditions of the contract, where we discover that the assumptions used in preparing the quotation were materially incorrect, we may require the person requesting the connection to agree to and pay for a variation in price before commencing or recommencing work on site. Where such agreement is not provided, we may terminate the job.

## 2.3 Standard Connection Pressure

**2.3.1** Gas will normally be made available for offtake to consumers at a pressure that is compatible with a regulated metering pressure of 21mbarg. Information on the design and operating pressures of distribution pipes can be obtained by contacting our Network Strategy Team at the address given in Appendix E.

[4] The definition of a self-quotation is provided in our terms and conditions for Siteworks

## 2.4 Self-lay Pipes or Systems

**2.4.1** **Self-Lay Connections to Relevant Mains** - In accordance with Section 10(6) of the Gas Act, and subject to the principles set out in this statement and the terms and conditions of the contract between us and the customer in respect of the proposed connection, where a party wishes to lay their own service pipe to premises for the purposes of connecting to a Relevant Main, ownership of the pipe will vest in us once the connection to our system has been made.

**2.4.2** **Self-Lay Connections to Non-Relevant Mains -** Where we allow or provide a connection to a main on our system which is not a relevant main, by means of a pipe laid by the customer, the customer-laid pipe will not automatically vest in Cadent. However, subject to the principles set

**2.4.3** **Assets for Adoption** - Any party considering laying a pipe that will either vest in Cadent or is intended to come into our ownership should contact our Network Strategy team prior to the planning phase of any project, using the contact details in Appendix E. (Please see Sections 3.12 and 3.13 for further information on asset adoption.)

## 2.5 Reasonable Demands for Capacity

**2.5.1** **Gas Act Obligation -** Operating under the Gas Act 1986, we have 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 it is economic to do so. However, in many instances, specific system reinforcement may be required to maintain system pressures for the winter period after connecting a new supply or demand.

**2.5.2** **Reinforcement** - Details of how we charge for reinforcement and the basis on which contributions may be required can be found within Section 4 of this document. Please note that dependent on scale, reinforcement projects may have significant planning, resourcing and construction lead-times and that as much notice as possible should be given. In particular, we will typically require two to four years' notice of any project requiring the construction of high pressure pipelines or plant, and in certain circumstances, project lead-times may exceed this period.

## 2.6 Private Gas Distribution Networks

**2.6.1** Where requested to do so, we will assess whether it would be appropriate to provide a quotation to maintain or adopt an existing private gas distribution network. Assessments and quotations will be made on an individual basis and will be fully chargeable to the person requesting the assessment / quotation.

**2.6.2** We may refuse to adopt the existing system if we believe that it does not comply with our engineering and/or safety policies. In such circumstances we will, if requested to do so, provide a quotation for the design and construction of alternative apparatus at full cost to the person making the request.

# Section 3 - Connections Charging Methodology

## 3.1 Connection Design Philosophy

**3.1.1** **Economic Principle** - We will construct apparatus on least project cost Fit for Purpose basis taking into account the customer's requirements and our statutory obligations. This means that where there are different fit for purpose design solutions, which meet a customer's requirements, we will select the one that is anticipated to have the lowest overall whole life cost of construction and maintenance. However the customer will only be charged for the lowest cost Fit for Purpose scheme; this means that any upgrading of the lowest cost Fit for Purpose scheme to comply with any additional requirements we have, such as taking into account the future development of our Distribution Network, will not be charged to the customer requesting the connection.

## 3.2 Connections Charging - General

**3.2.1** **Basis of Charges** - Charges for connection works are calculated using:

**a)** The labour costs which we reasonably expect to incur for such work within the relevant Distribution Network[5], plus overheads which reflect the cost of the management and delivery of connections services and the general business costs attributable to this activity;

**b)** Any special expenses required to carry out the connection, such as the cost of bought-in services and associated overheads;

**c)** Materials costs, plus overheads related to the handling of materials;

**d)** Subject to Condition 4B(1) of our Licence, we will recover Streetworks Scheme Charges incurred in relation to permit schemes operated by Highway Authorities under Part 3 of the Traffic Management Act 2004 (TMA) and / or Lane Rental charges in relation to Lane Rental schemes made under section 74A of the New Roads and Streetworks Act 1991. Such charges will be separately identified from the principal connection charge in quotations, etc. The principles we will apply in determining whether these charges are directly recoverable from customers are set out in Section[8] of this document.

[5] Please note that large projects are individually tendered

**e)** Where appropriate, charges will also reflect other costs arising from charges payable by Cadent to third parties such as Highway Authorities. Such charges include but are not limited to fees in connection with the suspension of parking bays and the costs of temporary traffic regulation.

**f)** Where enabled by the Gas Act, our charges may include an appropriate level of profit margin.

**3.2.2** **Public Use Land** - Charges for connection include excavation, backfill and reinstatement in land dedicated to public use.

**3.2.3** **Private Land** - Charges include excavation, backfill and routine reinstatement, or service insertion, where possible, on private land except where the customer indicates that a pre-cut trench will be provided. We will not guarantee full reinstatement of specialist surfaces, e.g., coloured flagstones, mosaic tiles, etc. Customers requiring specialist finishing are advised to arrange for their own contractor to carry out such work. Nor can we guarantee to avoid damage to growing plants.

**3.2.4** **Pressure Reduction Apparatus** – Where required to enable the connection, this is charged for as follows:

**a)** The labour costs which we reasonably expect to incur for such work within the relevant Distribution Network5, plus overheads which reflect the cost of the management and delivery of connections services and the general business costs attributable to this activity;

**b)** Any special expenses required to carry out the connection, such as the cost of bought-in services and associated overheads;

**c)** Materials costs, plus overheads related to the handling of materials;

**d)** Subject to Condition 4B(1) of our Licence, we will recover Streetworks Scheme Charges incurred in relation to permit schemes operated by Highway Authorities under Part 3 of the Traffic Management Act 2004 (TMA) and / or Lane Rental charges in relation to Lane Rental schemes made under section 74A of the New Roads and Streetworks Act 1991. Such charges will be separately identified from the principal connection charge in quotations, etc. The principles we will apply in determining whether these charges are directly recoverable from customers are set out in Section 8 of this document.

**e)** If it is part of an alternative to reinforcement connection, then the cost is treated in the same way as the proposed alternative to reinforcement connection pipe (see section 4.1 - Reinforcements for System Exit Connections).

**3.2.5** **Load Increases** - When a premises already has one or more gas service pipes, and the owner or occupier wishes to increase their consumption of gas, it may be necessary for us to replace, or duplicate an existing service pipe. No charge will be made if the additional flow of gas is required from an existing Supply Meter Point and the total consumption remains below 73,200 kWh per annum. In other circumstances we will charge for works as if the consumer required a new connection.

**3.2.6** **Pressure Increases** - All the costs associated with increasing the gas supply pressure from an existing gas supply pipe will be charged to the person concerned. [Note: Consumers using less than 732,000 kWh per annum are not permitted to receive their gas at a pressure higher than 21 mbarg. nominal because of the provisions of the Gas (Calculation of Thermal Energy) Regulations].

**3.2.7** **Configuration of Domestic Service Pipes** – Depending upon the size and layout of a domestic premises, the installation of a new gas supply may require more than one service pipe to be laid from our Relevant Main. Where this is the case and the premises are located within 23 metres of our Relevant Main, paragraph 3.7.4 of this document will apply and the connection charge will require a non-standard quotation. Note that for new domestic connections, it is no longer permitted to supply more than one premises from one point of connection to our Relevant Main; i.e. each domestic premises must be connected by means of a discrete service pipe or pipes.

## 3.3 Standard Charges

**3.3.1** Standard charges will be used for certain types of connection service request where:

**a)** The cost benefit of their use, relative to the production of high volumes of individual designs and quotations, is believed by us to be favourable;

**b)** The standardisation is based on an analysis of the types of works that are typically carried out in that charge category;

**c)** The costs of such typical works are calculated in accordance with the principles and methods of this statement;

**d)** The resulting standard charges do not result in undue preference or undue discrimination;

**e)** Representatives of customers, who might be quoted using a standard charge, have been consulted.

**3.3.2** Standard charges will be calculated for each Distribution Network (DN) to reflect the typical costs which we reasonably expect to incur in carrying out the required type and size of job, in the period in which the standard charges will apply, using the following elements:

**a)** Analysis of labour and materials costs incurred, carried out on a statistically significant sample of completed jobs within a recent 12 month period;

**b)** A weighted average component for each type of work in that charge category is derived from the analysis and other detailed information on job costs;

**c)** Application of inflation factors, as appropriate, to labour and materials costs, these being calculated to ensure that the resulting standard charges reflect, as far as reasonably practicable, the actual level of costs we will incur in carrying out the requested work during the time period in which those standard charges will apply;

**d)** The applicable overheads for labour and materials respectively;

**e)** A profit element, where applicable.

**3.3.3** Standard charges for administrative services, which are provided centrally (e.g. adoption of assets), are calculated accordingly.
A full list of standard charges is provided in our "Gas Distribution Connection Services Charges" document. It can be obtained from the Cadent web site using the following link: http://cadentgas.com under "Get Connected – New Connections".

**3.3.4** We will use standard designs in respect of certain connections, where:

**a)** The cost / benefit of using standard designs is believed by us, to be advantageous to customers,

**b)** Representatives of customers, who might be quoted on the basis of a standard design, have been consulted,

**c)** The designs have been produced in accordance with the principles and methods of this statement; and,

**d)** The resulting standard designs do not result in charges which entail undue preference or undue discrimination.

## 3.4 Charging for the Final Connection of Mains Apparatus Laid by a Third Party (<7 barg. connections)

**3.4.1** In general we will follow the same principles that we apply to other connection works in respect of charging for Final Connections.

**3.4.2** Where requested to carry out a Final Connection, the requesting party must carry out excavation and backfill and obtain any permissions necessary.

## 3.5 Charging for Minimum Connections (>7 barg. connections)

**3.5.1** The charge made for each >7 barg. connection job will reflect the total actual project cost incurred in providing that connection, including appropriate overheads.

## 3.6 Standard Source Pressures

**3.6.1** We will use, and provide to other connection service providers, standard source pressures for the purpose of the design of certain connections. Types of connection covered by standard source pressures will have previously been subject to public consultation.

**3.6.2** We will publish standard source pressures, which may be subject to change from time to time.

## 3.7 Load Evaluation Service

**3.7.1** We will provide basic load evaluation services only, as set out below:

**a)** To determine whether a potential customer will require an Advance Reservation of Capacity Agreement (ARCA), (see paragraph 4.1.9 and 4.1.10) or

**b)** The standardisation is based on an analysis of the types of works that are typically carried out in that charge category;

**c)** Where it is necessary to determine which connection charge category a potential consumer is in, or

**d)** Where we are obliged to make a connection under Section 10(2)(a) of the Gas Act and the person requesting the connection has submitted a request outside of the Quotation Compensation Scheme.

## 3.8 Quotation Charges

**3.8.1** For all Non-Standard Quotations (see paragraph 2.2.2), we will make a separate charge for provision of the quotation for the work execution element of the job.

**3.8.2** Quotation charges will be payable by the customer before we provide the quotation.

## 3.9 Sufficiently Complex Connections

**3.9.1** A connection or load increase is designated to be of Sufficient Complexity when it requires significant design effort prior to our being able to produce a quotation to construct apparatus.

**3.9.2** When a project is determined to be of Sufficient Complexity we will quote for, charge and carry out the design of apparatus prior to estimating the cost of constructing any equipment. (we may decide that it is appropriate to split the design works into stages e.g. feasibility study, conceptual design study etc.

**3.9.3** We will charge for Sufficient Complexity Connections on the basis of anticipated cost plus applicable overheads.

**3.9.4** For consistency we use published criteria (detailed below) to determine whether a request is of Sufficient Complexity.

**3.9.5** Both the connection and reinforcement-related apparatus may be regarded as Sufficiently Complex. Where a project includes both reinforcement and connection works, then each part will be considered separately when determining whether the project is of Sufficient Complexity.

**3.9.6** **Sufficiently Complex Connections** - occur when the connection is to be made to an above 2 barg. system, or where there are known obstacles on the proposed route of the new apparatus and the anticipated total cost of the construction works including applicable overheads is expected to exceed £50,000, or where the total construction costs including applicable overheads, based on past experience of projects of a similar nature, is expected to exceed £250,000.

**3.9.7** **Sufficiently Complex Reinforcements** - occur when the reinforcement includes any apparatus that is designed to operate at above 2 barg. or where there are known obstacles on the proposed route of the reinforcement apparatus and the anticipated total cost of the construction works including applicable overheads is expected to exceed £50,000, or where the total construction costs including applicable overheads, based on past experience of projects of a similar nature, is expected to exceed £500,000.

A list of obstacles is given in Appendix B.

**NB: All Entry and Storage connections are treated as being of Sufficient Complexity.**

**3.9.8** **Design Charges & Design Report** - A chargeable design study will be carried out prior to a quotation being issued for physical connection works. The estimated[6] cost of completing the study will be charged to the customer before it is completed. This charge will include an appropriate level of overhead and a profit element, where applicable. Once completed, we will supply the customer with a Sufficiently Complex connection design report. The customer may use the information in this report, under licence, in respect of the hire of an Independent Connection Provider to construct the connection apparatus with the exception of any Minimum Connection element. We will not provide a design report in respect of other types of Sufficiently Complex works.

## 3.10 System Entry and Storage Connections

**3.10.1** **General** - For Entry and Storage connections we will follow the same principles we apply to Exit connections, except for the treatment of associated reinforcement costs. In all cases, we will charge for a remotely operable valve and telemetry at the interface of the connecting pipeline and the system operated by the other party and for any other equipment installed by us to facilitate the Entry or Storage connection or its operation.

[6] Charges made for connection design works will be calculated on the basis of the cost that we expect to incur in carrying out such a design and is dependent upon the information provided by the customer, other publicly available information and information relating to our pipeline system

**3.10.2** **Requirements for Entry and Storage Connections** - In addition to the equipment we provide, there are a variety of requirements (e.g. gas quality measurement) that a customer must fulfil if it is to connect and operate an Entry or Storage facility that is connected to our system. These are not within the scope of Standard Condition 4B and they are not included within this Statement. Prospective Entry and Storage facility operators should contact our Network Strategy team for details using the address in Appendix E.

**3.10.3** **Charging for Connections to Entry or Storage Facilities** - We offer a service to connect pipelines or mains laid and intended to be operated by others, which will link Entry or Storage facilities to Distribution Network Systems, and will follow the same principles that we apply to other connection works in respect of charging for connections to such facilities, except for the treatment of associated reinforcement costs[7].

**3.10.4** **Ownership of DN-Embedded Entry or Storage Connection Assets** -Subject to 3.12 or 3.13, as appropriate, and at the customer's option, we will take ownership of apparatus laid by others that is intended to connect Entry or Storage facilities to our Distribution Network System.

## 3.11 Gas Infill Projects (Infills)

**3.11.1** In an Infill[8], the proportion of any shared costs to be paid at each premises will be calculated as follows:

**a)** The shared costs include the cost of the new mains, connecting the new mains with existing mains, installing pressure controlling apparatus (not part of any Supply Meter Installation), any Streetworks Scheme Charges arising[9] and, if applicable, the charge for the provision of capacity on our existing system.

**b)** For us to proceed with an Infill, we will conduct a survey in the area to be supplied to assess the number of premises which are likely to connect within twenty years of the new mains being laid. It is this number which is used to apportion costs, not the total number of premises in the area.

**c)** Subject to the Gas Connection Charges Regulations 2001 as amended, the appropriate proportion of the shared costs is charged to all customers connecting in the Infill area for a period of not more than twenty years until the total cost of the mains has been recovered or the scheme closes whichever is the earlier.

7 Please also refer to section 4.2
[8] See definition in Appendix A.
[9] Please refer to Section 8.

**d)** The twenty-year period starts on the day the Relevant Main is commissioned.

**3.11.2** In an Infill, the cost of service pipes may be calculated collectively on a project basis, but any costs for atypical services within the scheme or for service pipes provided after the original project works are completed, will be calculated on a bespoke basis. This method will generate the appropriate individual charges to connectees for service pipes. Infill scheme is considered as "live" until either the shared costs have been fully recovered, or the twenty-year period from commencement of that scheme has expired.

**3.11.3** Where a consumer, likely to consume more than 2,196MWh per annum, is situated within the Infill, and will connect to gas at the time when mains are laid, that connection will be deemed to be the first connection made in that scheme, and the customer will pay a mains contribution in direct proportion with their share of the total anticipated annual offtake quantity (AQ) within the Infill.

**3.11.4** Where a consumer, likely to consume more than 2,196 MWh per annum, is situated within the Infill, and declines to connect at the time when mains are laid then that consumer will not be permitted to connect to the Infill mains unless;

**a)** either the Infill scheme is no longer "live", or

**b)** they fund sufficient reinforcement to enable the remaining not above 2,196 MWh per annum premises within the Infill, which might connect to gas, to be connected without there being any requirement for any additional reinforcement within the twenty year period.

## 3.12 Adoption of below 7 barg. Apparatus

**3.12.1** Subject to the exception detailed in paragraph 3.12.2 we will adopt any Fit for Purpose below 7 barg. connections apparatus that is connected to our system and that is not intended to be operated by another system operator (e.g. another Gas Transporter).

**3.12.2** We will not adopt apparatus (except Final Connection apparatus) where this forms part of a system of pipes that includes any apparatus, which will become a connected system that will not also be adopted by us.

**3.12.3** We will adopt free of charge below 7 barg. connections apparatus installed by Independent Connection Providers that are registered with the Gas Industry Registration Scheme.

**3.12.4** We will levy a charge in respect of the adoption of below 7 barg. connections apparatus that is installed by persons who are not registered with the Gas Industry Registration Scheme. Details of these charges are given in the Gas Distribution Connection Services Charges document.

**3.12.5** Where a person is not registered with the Gas Industry Registration Scheme they should contact us to explain their intentions and to discuss the adoption procedure before carrying out any works in respect of the design or construction of below 7 barg. apparatus that they wish us to adopt.

**3.12.6** With the exception of apparatus installed under Section 6.5 of this document, no payment will be made by us to any party in respect of the adoption of below 7 barg. apparatus.

### 3.13 Adoption of above 7 barg. Apparatus

**3.13.1** With the exception detailed in paragraph 3.13.2, we will adopt Fit for Purpose above 7 barg. connections apparatus that is connected to our system and that is not intended to be operated by another system operator (e.g. a Connected System Operator that has received a derogation under the Gas Act).

**3.13.2** We will not adopt apparatus (except Final Connection apparatus) where this forms part of a system of pipes that includes any apparatus which will become a connected system that will not also be adopted by us.

**3.13.3** We will charge to determine whether above 7 barg. connection apparatus, to be installed by a third party and adopted by us, is Fit for Purpose.

**3.13.4** Charges will be based upon the cost of employing our staff together with any costs incurred by service providers employed by us. Charges will include an appropriate level of overheads.

**3.13.5** It should be noted that the asset adoption process requires the applicant to pass a number of audit measures, and that this process normally takes in excess of 12 months to complete.

**3.13.6** Customers are strongly advised to contact us to explain their intentions and to discuss the 'Taking Ownership' procedure before carrying out any works in respect of the design or construction of above 7 barg. apparatus that they wish us to take into ownership.

**3.13.7** No payment will be made by us to any party in respect of the adoption of above 7 barg. apparatus.

### 3.14 Costs Imposed by Highway Authorities

**3.14.1** We will pass on to customers the appropriate cost[10] incurred pursuant to any Streetworks or traffic management legislation in force at the relevant date, subject to prevailing legislation and the requirements of Standard Condition 4B(1) of our gas transporter Licence.

### 3.15 Network Approach Mains

**3.15.1** We do not offer a service to extend our system to a Connected System Exit Point. Neither do we offer a service to complete part of a system of pipes that is being constructed, or that is proposed to be constructed, by an Independent Connection Provider.

### 3.16 Entry and Exit Agreements

**3.16.1** We have the right to require a customer to enter into a Supply Point Network Exit Agreement (NExA), Network Entry Agreement (NEA) and/or Storage Connection Agreement (SCA) as appropriate. An example of when we will make use of these rights is when a Very Large Daily Metered Customer is connected. (The definition of a Very Large Daily Metered Customer is in Section A of the Uniform Network Code.)

### 3.17 Connection – load size thresholds

**3.17.1** Loads (or sources of gas) of 2,196 MWh per annum or less shall not be connected, or be permitted to connect, to any apparatus operating at a pressure of greater than 7 barg., or which has been declared not to be a Relevant Main.

### 3.18 Connections to Independent Undertakings

**3.18.1** The above are not applicable to Cadent Distribution Networks.

### 3.19 Administration Charges for Third Party and Non-standard (bespoke) Connections

**3.19.1** We will apply standard administration charges in respect of connection jobs which are carried out by independent gas transporters, utility infrastructure providers and also in respect of Non-Standard Quotation requests (excluding Final Connections carried out by Cadent. These standard charges are published within the relevant Gas Distribution Connection Services Charges document, and reflect the gas transporter costs which we incur in respect of these jobs.

[10] Cadent will only pass on those costs which have been efficiently incurred

**3.19.2** Cadent will apply charges for assurance services provided against complex projects associated with below 7 bar IGEM/GL/5 process requirements. The Gas Distribution Finance Handbook has been used to calculate rates applied for associated assurance tasks applicable to the charge. The standard charge rates are published within the charge. Full supporting guidance for this can be found at https://cadentgas.com/services/household-customer/new-connections

# *Section 4* - Charging Methodology To Be Applied Where Reinforcement Is Required

## 4.1 Reinforcements for System Exit connections

**4.1.1** Reinforcement required to enable the connection of identified new consumers, or to permit an increase in flow rate in respect of an existing consumer is known as **Specific Reinforcement**.

**4.1.2** We apportion the cost of Specific Reinforcement according to its location in relation to the Connection Charging Point. Specific Reinforcement downstream of the Connection Charging Point is charged to the customer. Subject to the Economic Test, in respect of Distribution Network System reinforcements, we will fund Specific Reinforcement upstream of the Connection Charging Point. (The Economic Test is described in Section 5.

**4.1.3** The **Connection Charging Point** is the closest economically feasible[11] point (taking into account any customer request for gas to be made available at a particular pressure) on our system, which is deemed to have enough capacity to supply the new load disregarding existing loads. The Connection Charging Point creates the financial distinction between Connection Costs, that are fully chargeable to the person concerned and upstream reinforcement costs, which may be funded by us subject to any contractual requirements.

NB: The Connection Charging Point only applies in relation to the application of the Economic Test.

**4.1.4** In respect of where we connect premises and select an alternative route that provides lower overall reinforcement and Connection Costs, the customer contribution will be based on the lower of:

**a)** The overall costs of the alternative route including any associated contribution towards any specific reinforcement that is associated with the alternative connection, or

**b)** The Connection Costs plus any contribution towards specific reinforcement associated with the original Connection Charging Point route.

[11] A consumer's premises may be closer to a main that is on the 'wrong' side of a significant obstacle (e.g. a river) than it is to another main. In this circumstance the Connection Charging Point would be deemed to be on the alternative main as the cost of laying a connection pipe across the obstacle would be prohibitive.

**4.1.5** In respect of such "alternative to reinforcement connections" by Independent Connection Providers and other Gas Transporters, the customer will be informed of where the connection should be made. The customer will then be offered a payment to offset the additional cost that we estimate will be associated with their being asked to connect at the alternative point.

**4.1.6** If the customer insists on making a connection at another point, which represents a sub-optimal system development solution, then we will charge the full cost of any associated reinforcement.

**4.1.7** Where we have already planned and financially approved general reinforcement of a Distribution Network System, which is to be installed prior to the Winter following connection of the new load request and which removes the requirement for specific reinforcement, we will fund the full cost of the general reinforcement. Where a general reinforcement project that has already been planned and financially approved has to be upsized prior to construction then only the additional costs necessary to meet the customer's load shall be deemed Specific Reinforcement.

**4.1.8** If any Distribution Network System Specific Reinforcement that is subject to the Economic Test does not pass the Test, a financial contribution toward the costs will be payable. In such cases, details of the chargeable and non-chargeable elements are set out in a "Reinforcement Template".

**4.1.9** An ARCA (Advanced Reservation of Capacity Agreement)[12] will always be required for any load that is expected to consume more than 586 GWh per annum.

**4.1.10** For loads of 586 GWh and below, we may require an ARCA where the cost of Specific Reinforcement upstream of the Connection Charging Point (net of any customer contribution identified by application of the Economic Test) is expected to equal or exceed £500,000.

**4.1.11** **Existing Supply Points or Connected System Exit Points (CSEPs)** - All the costs associated with reinforcement works that are required to increase the gas pressure at an existing Supply Point or CSEP will be charged to the person requiring the increase.

[12] See Appendix A – Key Definitions for further information on ARCAs

**4.1.12** **New Supply Points / CSEPs** - Where requested by the customer, and where practicable and consistent with the other provisions of this Statement and the Uniform Network Code, as appropriate, we will provide pressure elevation at a new Supply Point or CSEP, free of charge if the required pressure is predicted to be continuously available during the subsequent planning period. (The planning period is 5 years for below 7 barg. networks and 10 years for above 7 barg. networks). If the requested pressure is determined to be unavailable at any time within the planning period reinforcement will be required. Subject to the exception detailed in the paragraph below, the cost of these works will be charged to the person requiring the elevated pressure.

**4.1.13** As a result of the Gas Act obligation upon gas transporters to develop an efficient pipeline system we have developed a methodology, which is applicable for new Connected System connections and which derives the connection point pressure that could reasonably be expected to be available for the purpose of designing low pressure gas transportation infrastructure. Dependent upon the Economic Test, we will fund reinforcement upstream of the Connection Charging Point designed to provide this pressure where it is not available. Anyone wishing a higher pressure than that derived by the methodology must pay any additional costs.

**4.1.14** It is sometimes necessary for us to upsize a connection or reinforcement pipe beyond that which is required to enable the connection of a load. We do this to ensure efficient system development, and will do this when the anticipated cost of subsequent reinforcement is greater than the predicted cost of upsizing apparatus, taking into account the time value of money and probability that subsequent reinforcement will be required. Where necessary we will fund the marginal cost of upsizing apparatus that we adopt. In this circumstance we will ask the Independent Connection Provider to quote for the upsizing works and will use this quotation when deciding whether to proceed with upsizing.

**4.1.15** Where any specific reinforcement involves works that are of Sufficient Complexity, the person requesting the connection (or increase in load) which will give rise to the reinforcement, must pay for design works prior to their receiving a quotation. (Charges for design will include an appropriate level of overhead.) If the reinforcement subsequently proceeds, with the load as it was originally proposed, and there has been no substantive change to the environment through which the new apparatus must pass, the person will not have to pay for a subsequent study and, dependent upon the outcome of the Economic Test, they may receive a refund for some or all of any payment made for design works.

## 4.2 Reinforcements for DN-embedded System Entry and Storage Connections

**4.2.1** Where we will notify entry connection applicants when reinforcement is required to the Distribution Network System to provide their requested peak hourly flow rates. Cadent will apply the rules within this Connections Charging Methodology and the Statement of Connection Charges when making entry reinforcement and connection offers to eligible applicants.

**4.2.2** Cadent we will charge to fully recover the reasonable costs it incurs (plus a reasonable element of profit), net of any applicable funding identified in 4.2.6 – 4.2.11, and including the costs incurred through making any necessary reinforcements to the Distribution Network System, from the connecting party seeking to inject.

**4.2.3** The charges payable by the customer as outlined in their entry connection and/or reinforcement offer are based on the capital expenditure incurred by Cadent through connecting the Delivery Facility to the pipeline system, plus the construction of any necessary reinforcement(s) to the Distribution Network System. Further detail on the principles Cadent applies to its recovery of operating and maintenance expenditure can be found below.

**4.2.4** Entry connection applicants that require reinforcement to the Distribution Network System to achieve their required peak hourly flow rates to enter biomethane, shall be subject to the rules within the RIIO-3 Biomethane Use It Or Lose It (UIOLI) Governance Document and the methodology within paragraphs 4.2.6 – 4.2.12 shall apply.

### 4.2.5 Recovery of Entry Reinforcement Operating and Maintenance Expenditure

Cadent will incur costs when operating and maintaining reinforcements for DN-embedded entry connections. Cadent will require entry connection customers to enter into a Maintenance and Operation Agreement alongside their connection contract. The Maintenance and Operation Agreement will govern Cadent's delivery of services and the recovery of its reasonable costs. Cadent will provide entry connection customers with a copy of its Maintenance and Operation Agreement prior to requiring acceptance of connection and reinforcement offers.

### 4.2.6 Reinforcements to Enable Requested Biomethane Entry Flows

Cadent will operate an Application Window to receive requests from customers seeking to enter biomethane into the Distribution Network System. Through the Application Window, Cadent will identify requests that trigger reinforcement to the Distribution Network System to provide customers' with their peak hourly flow rates. Customers that can achieve their required peak hourly flow rates without reinforcement will be directed out of the Application Window and receive a connection offer as per the process outlined in Cadent's Distributed Gas Connections Guide.

**4.2.7** Where reinforcement is required, the terms of the UIOLI guidance document will apply, and Cadent will calculate the apportionment of available UIOLI to the charges payable by customers within the Application Window using the methodology within the Statement of Connection Charges. Cadent will confirm the connection point for each connection facility. The customer will be required to pay any incremental connection charges should they select to connect at a different location.

### 4.2.8 Financial Security Requirement for Entry Reinforcements to Enable Biomethane Entry Flows

Where reinforcement is required to provide a biomethane applicant with their requested peak hourly flow rates, the customer will be required to provide financial security. This is to protect network users from the risk of stranded investment if a project fails to proceed or underutilises the requested capacity created by the reinforcement.

- Cash deposits or escrow arrangements
- Letters of credit from an approved financial institution
- Parent company guarantees
- Other industry recognised instruments agreed by Cadent on a case-by-case basis

Further details are provided in Cadent's Statement of Connection Charges.

**4.2.9** A condition of the reinforcement agreement will be putting in place and maintaining financial security.

**4.2.10** This will be set out in the reinforcement agreement and will be calculated based on 50% of the UIOLI apportionment to the customer's reinforcement charges. This must be provided upon acceptance of the connection and reinforcement offers and must be maintained for a period of two years following the reinforcement's commissioning. Cadent will assess the customer's utilisation of the capacity created by the reinforcement using periodic flow data from across the two year period.

**4.2.11** If a biomethane entry connection request (that triggers reinforcement works that utilise UIOLI allowances) is cancelled or does not demonstrate full sustained output within two years after the reinforcement works have been completed, Cadent may draw upon the provided security to recover incurred costs. Any unused funds will be returned in accordance with agreed terms.

# Section 5 - The Economic Test

**5.1** The Economic Test is a financial assessment tool that is designed to ensure Cadent meets its Gas Act obligations to develop and maintain an efficient and economical pipeline system for the conveyance of gas (Gas Act, section 9(1)(a)) and to comply with any reasonable request to connect to its system any premises or any pipeline system operated by an authorised transporter (Gas Act, section 9(1)(b)).

**5.2** The Economic Test is used to identify new requests for capacity on the gas distribution network where the level of investment would be considered 'uneconomic', and so avoids existing customers on the distribution network subsidising the new load.

**5.3** The Economic Test compares the cost of distribution network reinforcement and additional operating costs of accommodating the new load with the additional distribution transportation revenue from the load. The annual transportation revenue and operating costs are capitalised over the agreed appraisal period at the rate of return allowed in the Price Control. Where the aggregate additional reinforcement and capitalised operating cost is greater than the capitalised transportation revenue, the transportation revenue will not provide the allowed rate of return on the investment. To avoid this deficit being recovered by increased charges to other customers, the customer is requested to pay a contribution towards the cost of the reinforcement. This contribution will be equal to the excess of the costs associated with the new load over the capitalised transportation revenue.

**5.4** Contributions are made by means of an up-front payment, enabling the standard transportation charges to be applied when the new load is connected.

**5.5** The Economic Test methodology is only applied when there is a requirement to immediately reinforce the existing pipeline system in respect of a new load for the next Winter. The costs associated with a new load are split into two types: specific reinforcement costs and the assessed cost of growth in respect of the load.

**5.6** Specific reinforcement costs are the engineering costs of providing capacity for the new load. The treatment of specific reinforcement costs depends on whether they are upstream or downstream of the Connection Charging Point (CCP). The CCP is the closest economically feasible[13] point (taking into account any customer request for gas to be made available at a particular pressure) on our system, which is deemed to have enough capacity to supply the new load disregarding existing loads. Specific reinforcement costs downstream of the CCP are fully chargeable to the connectee and so are not included in the Economic Test, whereas those upstream of the CCP are included within the Economic Test. Specific reinforcement costs are assessed based on the particular work that will be required and are location, load and time specific.

**5.7** The costs of growth are the estimated costs that will be incurred throughout the system as a result of the new load. There are three components to these costs, which are based on network specific average values:

**i)** Additional operating costs.

**ii)** Costs of developing additional capacity within the distribution network. Separate unit costs are used for the costs of developing capacity within the Local Transmission System (LTS) and the Below 7 barg. network.

**iii)** The transportation income relating to the new load is determined using the transportation charges a shipper would pay to transport gas within a given network to a Supply Point or Connected System Exit Point (CSEP), as appropriate.

**5.8** Capacity development and additional operating costs are determined using the factors shown in the table below. These factors are chosen as being the key cost drivers. For each factor the specific value for the new load is multiplied by a set unit cost for that factor to determine the typical one-off and ongoing operating costs and capital costs. The unit cost drivers for each factor are determined from a study of the cost of growth for various types of load.

**5.9** The cost factors used are compatible with the 'Minimum Information Requirements' that apply in respect of site works requests, whilst at the same time ensuring the Economic Test is able to take proper account of the various factors which affect the cost of connection and reinforcement.

[13] A consumer's premises may be closer to a main that is on the 'wrong' side of a significant obstacle (e.g. a river) than it is to another main. In this circumstance the Connection Charging Point would be deemed to be on the alternative main as the cost of laying a connection pipe across the obstacle would be prohibitive.

**5.10** The transportation income relating to the new load is determined using the transportation charges a shipper would pay to transport gas within a given network to a Supply Point or Connected System Exit Point (CSEP), as appropriate.

**Table 1. Factors used to assess the General Additional Costs for a New Load**

| Description | Value for Load | Unit |
|---|---|---|
| *Throughput* | | |
| Cost of transporting additional gas volumes e.g. gas odourisation | AQ (Annual Quantity) | GWh/yr |
| **Capacity (General Reinforcement)** | | |
| Cost of developing additional below 7 barg. general reinforcement assets | SHQ (System Hourly Quantity) | MWh/hr |
| Cost of developing additional LTS general reinforcement assets | SQQ (System Offtake Quantity) | MWh/day |
| **Maintenance of Assets** | | |
| Cost of operating additional below 7 barg. Assets | SHQ | MWh/hr |
| Cost of operating additional LTS assets | SQQ | MWh/day |
| **Other – related to the number of supply points** | | |
| Administrative cost of progressing a connection request | per connection enquiry | Number |
| Cost of providing services to additional supply points irrespective of supply point type e.g. provision of emergency service | No. of supply points | Number |
| Xoserve cost of administrating an additional CSEP | No. of CSEPs | Number |
| Xoserve administration cost per supply point | No. of supply points | Number |

**NB:** Note that both the cost associated with additional NTS exit capacity bookings and the revenue attributable to the ECN transportation charge, introduced with effect from 1 October 2012, are excluded from the Gas Distribution Economic Test. Since Gas Distribution Networks are allowed to fully recover these costs through the ECN charge, both revenue and costs are assumed to be equal with a nil cost impact for the individual load.

**5.11** Since the costs involved include both one-off capital costs and ongoing costs the comparison is done using discounted cash flow (DCF) analysis as demonstrated in the diagram below. The cost types, one-off OPEX, ongoing OPEX and CAPEX, and income are kept separate throughout the analysis in order to ensure the proper treatment of each with respect to the time value of money.

**5.12** The result of the analysis is the determination of a level of investment (the allowed investment) that would make the NPV zero. This is the maximum level of investment on which the net transportation revenue provides the allowed rate of return. The actual level of investment required is then subtracted from the allowed investment. The difference can be either positive or negative. If the difference is positive then the new connection is economic without a customer contribution to the reinforcement costs. If the difference is negative then it equals the level of contribution towards the reinforcement costs that is required from the connectee in order to make the new connection economic.

**5.13** Key points underlying the calculation are:

- Both income and costs of growth are assumed to be constant in real prices over the appraisal period;
- There is a 25 year appraisal period for loads greater than 58.6GWh per annum (large loads) and an appraisal period of 45 years for loads with an annual consumption of 58.6GWh or less; as proposed by Ofgem.
- It is assumed that the depreciated allowed investment costs ('Net Book Value' in diagram above) will be recovered from all customers at the end of the appraisal period;

- A depreciation period of 45 years is applied. This means that for a 25-year appraisal period, it is assumed that approximately 80 per cent of the initial allowed investment is recovered during the appraisal period, using a sum-of-the digits method, consistent with the RIIO GD1 price control;
- The Economic Test calculates the allowed investment so that the relevant cash flows, discounted at a discount rate of 4.94%, being equal to the pre-tax weighted average cost of capital (WACC) assumed in the derivation of the RIIO GD1 distribution price control (2013-21), generates an NPV of zero; and
- Costs and transportation income include only distribution elements (not NTS).

**5.14** In order to compare the ongoing costs and transportation income with the one-off costs, a capitalisation factor is applied to the ongoing costs and transportation income to convert them to an equivalent one-off cost or revenue. The capitalisation factor is therefore a shorthand calculation tool. It is determined such that the NPV of net revenues (transportation revenue minus ongoing costs) over a 45 year period (or 25 years for large loads), is equal to the depreciation incurred over the same period for a one-off capital cost, using a total depreciation lifespan of 45 years. The capitalisation factor is a function of only the discount rate and the length of the appraisal and depreciation periods.

# *Section 6* - Other Works

## 6.1 General

Other works which we provide comprise service alterations, which occur when a person requests the relocation of a gas service pipe, without there being any significant variation in the load at the premises, and disconnections, which occur when a person requests that an existing gas service pipe is cut off.

In general we will follow the same principles that we apply to connection works in respect of pricing disconnection and alteration services.

## 6.2 Service Alterations

**6.2.1** We will alter the position of any service pipe we own when this is requested by the Registered User or the person who owns or occupies the premises, supplied by that pipe, or a person acting as their agent.

**6.2.2** In addition we will relocate the position of any Supply Meter Installation where this is required as a result of the relocation of a gas service pipe. (This document, which relates to connection services, does not contain any detail of meter relocation services or charges.)

**6.2.3** We will charge the cost that we reasonably expect to incur when altering the position of a service pipe. In some instances we will make use of standard charges. In these respects charges will be levied in the same way as for connection asset installation.

**6.2.4** We will not charge for the alteration of a meter position and / or service pipe where requested by a Qualifying Person. In these cases the work carried out by Cadent will be the least cost Fit for Purpose solution to meet the physical needs[14] of the customer. Any additional works beyond this will be chargeable to the customer.

**6.2.5** Where customers require the service pipe to be disconnected in a separate visit, prior to the service alteration, a standard disconnection charge will apply.

**6.2.6** We will not charge the additional cost where we carry out works, which are in addition to those required to fulfil the requirements of an alteration customer, and which are designed to enhance our system.

[14] In this instance, 'physical needs' means that as a result of a person's physical condition, the alteration is required to allow that person or a dependant person living at that premises to operate the emergency control valve, and / or read the meter.

**6.2.7** It is possible for service pipe alteration works to be designated as Sufficiently Complex works.

**6.2.8** Consistent with the principles set out in Section 8 of this document, where we incur Streetworks Scheme Charges in respect of rechargeable service alteration works, these costs will be passed on to the party requesting the works, where appropriate.

## 6.3 Disconnections

**6.3.1** We will disconnect service pipes that we own when requested by the Registered User. If a person who owns or occupies the premises, or a person acting as their agent, contacts us to request a disconnection, we will request their permission to contact the Registered User and will then gain permission to disconnect from the Registered User.

**6.3.2** This document relates to connection services and therefore excludes details of meter disconnection services or charges.

**6.3.3** We will charge the cost that we reasonably expect to incur when disconnecting a service pipe. In some instances we will make use of standard charges. In these respects charges will be levied in the same way as for connection asset installation. Charges will include appropriate overheads.

**6.3.4** We will not charge the additional cost where we carry out works which are additional to those required to fulfil the requirements of a disconnection customer and which are designed to enhance our system.

**6.3.5** If works are unable to proceed as a result of the presence of a Supply Meter Installation, or because outlet pipework has not been purged, we will charge an abortive visit charge.

**6.3.6** It is possible for service pipe disconnection works to be designated as Sufficiently Complex works.

**6.3.7** Consistent with the principles set out in Section 8 of this document, where we incur Streetworks Scheme Charges in respect of rechargeable disconnection works, these costs will be passed on to the party requesting the works, where appropriate.

## 6.4 Competition in Disconnection and Alteration Services

**6.4.1** Competition was introduced into the disconnection and alteration of below 7 barg. gas service pipes on the 15th September 2003. Where a <2" steel service pipe is altered by a third party, we may require the remaining existing metallic components of the pipe to be replaced by them. In this circumstance we will pay a fixed standard contribution to the person carrying out the alteration. Details relating to this contribution are provided in Section 4 of the Gas Distribution Connection Services Charges Document. Further details may be obtained by contacting our Connections Pricing Manager, using the details provided in Appendix E.

# *Section 7* - Recharging of Streetwork Scheme Charges

## 7.1 General Principle

**7.1.1** Where a customer requests works from Cadent that involve excavations in a street that is subject to a permit scheme made under Part 3 of the Traffic Management Act 2004 (TMA) and / or Lane Rental scheme made under Section 74A of the New Roads and Streetworks Act 1991 (NRSWA), the relevant Streetworks Scheme Charges will be chargeable to the customer[15]. Such Streetworks Scheme Charges will be separately identified in the customer's quotation. The customer will be required to pay the initial estimate of Streetworks Scheme Charges in advance, together with payment of the quoted charge for the requested work. Any variation from the initial estimate of Streetworks Scheme Charges will be reconciled and refunded or invoiced to the customer following completion of the works.

**7.1.2** Please also note that additional Streetworks Scheme Charges may also be payable where a customer triggers any change that invalidates the terms of the original agreed TMA permit. Such changes include:

**i)** Requests to reschedule the agreed date for carrying out the required works, or

**ii)** Where the actual required work is found to differ from that quoted, due to incorrect or incomplete information having been supplied by the customer.

**7.1.3** We will make any Streetworks Scheme Charges from the Highway Authority separately identifiable.

**7.1.4** Please note that validly applied Streetworks Scheme Charges are non¬refundable.

## 7.2 Specified Exemptions

**7.2.1** **Cadent Policy** - Streetworks Scheme Charges will not be charged to customers where the work is initiated pursuant to our policy, for example, the replacement of existing metallic services with polyethylene pipe.

[15] With the exceptions specified.

**7.2.2** **Cadent Failure or Default** – We will only recharge Streetworks Scheme Charges where these have been incurred efficiently. The customer will not be charged where Streetworks Scheme Charges have been incurred as a result of any failure or default on our part

## 7.3 Avoidability of Lane Rental Charges

**7.3.1** Where a Lane Rental scheme is in place and depending upon the rules of that particular scheme, Lane Rental charges may be avoidable[16] in certain circumstances, e.g. where the works can be undertaken with no impact on the road carriageway or cycleway, or where the works can be completed during non-traffic sensitive times. Where it is reasonably practicable for us to avoid Lane Rental charges, within operational and economic limits, we will make reasonable endeavors to do so. In all other circumstances, we will recharge to the customer the Lane Rental charges we incur in carrying out the requested works, subject to the exemptions set out in Section 7.2.

**7.3.2** Where we incur additional costs in order to achieve a net saving by avoiding Lane Rental charges, we will reflect those additional costs within the charges for works and/or quotation charges accordingly.

[16] Note that where Lane Rental charges are avoided, TMA Permit charges may be applicable.

# *Appendix A* - Key Definitions

An **Alteration** is any change made to an existing service pipe, and associated equipment, to premises.

An **Approach Main** is a pipe that will become a Relevant Main (not necessarily a Relevant Main that is part of our system) that is designed to connect a new system of pipes with an existing transportation system.

**ARCA** stands for Advanced Reservation of Capacity Agreement. An ARCA is always required when a load, or load increase, requires specific reinforcement upstream of the charging point and the load is expected to exceed 586 GWh per annum in aggregate. For loads of 586 GWh and below, we may require an ARCA where the cost of Specific Reinforcement upstream of the Connection Charging Point (net of any customer contribution identified by application of the Economic Test) is expected to equal or exceed £500,000. An ARCA will oblige the person making the connection (or load increase or transfer) to either ensure that their Registered User books capacity (in respect of their supply point, to at least the level of the ARCA) or to pay us an appropriate amount to compensate for the loss of transportation revenue. Each ARCA will remain in force for the time specified within it.

The **Connection Charging Point** is the closest economically feasible[17] point (taking into account any customer request for gas to be made available at a particular pressure) on our system, which is deemed to have enough capacity to supply the new load, disregarding existing loads. The Charging Point creates the financial distinction between Connection Costs, that are fully chargeable to the person concerned and upstream reinforcement costs, which may be funded by us subject to any contractual requirements. The Connection Charging Point only applies in relation to the application of the Economic Test.

**Connection Costs** are defined in one of two ways, as follows:

**a)** For System Exit connections, these are the costs of all Physical Connection Works downstream of the Connection Charging Point, which may include Specific Reinforcement costs downstream of the Connection Charging Point;

NB: Connection Costs will include an appropriate level of overhead uplift.

[17] A consumer's premises may be closer to a main that is on the 'wrong' side of a significant obstacle (e.g. a river) than it is to another main. In this circumstance the Connection Charging Point would be deemed to be on the alternative main as the cost of laying a connection pipe across the obstacle would be prohibitive.

A **Design Study** is the design work, which must occur before construction works can commence. Very small projects e.g. the connection of a small domestic premises require little in the way of design and no charge is made in respect of design for these projects. We apply standard design charges in respect of larger, but routine, connection projects. Larger and more complex projects are designated as Sufficiently Complex projects. They may require several stages of Design Works, e.g. a project may require a feasibility study before it is possible to proceed to a detailed design study.

**Design works** can be defined as the preparatory work required before the Physical Connection activity can commence.

A **Disconnection** occurs when a service pipe is disconnected from the main.

The terms "**Distribution Network**", "**Distribution Network System**" or "**DN**" mean the relevant gas pipe-line system owned by Cadent within the Distribution Network, as defined in Paragraph 1 in Special Condition E1 of our GT Licence. (This definition excludes service pipes, which are provided for the purpose of supplying individual premises.)

A **Diversion** is a change made to the route of an existing main or the relocation of other gas transportation (not service pipe associated) assets.

Any reference in this document to the term "**domestic**" is made in relation to domestic premises as defined under the terms of the Utilities Act 2000.

The **Economic Test** calculates the maximum economic investment for Specific Reinforcement, which we can make for any specific load. A load is deemed to be economic where the incremental transportation income from the additional load exceeds the incremental costs of the load. The test shall be applied over the anticipated life of the load. The principles of the Economic Test are explained in Section 5.

The **Final Connection** comprises the labour and materials to physically connect the pipe at the point where it interfaces with our Relevant Main but does not include costs of excavation, backfill or reinstatement.

The term "**Fit for Purpose**" describes apparatus or a design for same, which meets the required engineering standards and which will safely transport the requisite quantity of gas at an appropriate pressure throughout the life of the apparatus, taking into account the Gas Act requirement for economic pipe-line system development.

The acronym "**GDN**" in this document refers to Cadent, being the GT Licence holder for gas distribution in the Distribution Networks, as defined in Paragraph 1 in Special Condition E1 of our GT Licence.

**General Reinforcement** of our pipeline system is reinforcement for load growth associated with individual premises expected to consume 73,200kWh per annum or less, and for general load growth where this cannot be associated with specific requests for a new or an increased load.

An **Infill** is the extension of new relevant mains to an area having a number of existing premises; there may also be new premises being constructed in the area, where not all of the owners or occupiers of those premises have expressed a desire to be connected to a gas supply at the time the mains are laid. In an Infill, an individual contract is formed when sufficient premises have returned completed acceptances for a gas connection and an individual charge is made to carry out that connection. We will only accept acceptances that would establish an Infill when the expected uptake of gas connections in the first twenty years is sufficient to make the project economic. The Infill is only confirmed when sufficient acceptances have been received to confirm that the expected uptake of connections to gas is likely to be achieved. The charging arrangements for Infills are covered by the Gas Connection Charges Regulations.

A **Minimum Connection** comprises the apparatus, determined by us, required to connect apparatus laid by a third party to an above 7 barg. system operated by **Cadent** . We will not permit a third party to install Minimum Connection apparatus. Minimum Connection apparatus will remain in our ownership irrespective of the ownership of the downstream system.

A **Multiple** is a request for works to more than one premises.

A **Non-Standard Quotation (or Bespoke Quotation)** is any quotation for works other than a Standard Quotation but excluding a self quotation[18], i.e., all quotations that require a bespoke price, a site visit or reinforcement.

**Physical Connection Works** are works to supply and lay gas services and mains, including any associated equipment and works to reinforce our system.

[18] The definition of a self-quotation is provided in our terms and conditions for Siteworks.

A **Qualifying Person** is a person who requires the relocation of their gas meter and / or emergency control valves because of his or her physical condition, who is either:

- **i)** of pensionable age and / or
- **ii)** is a registered disabled person and / or
- **iii)** is a chronically sick person

We must ensure that our pipeline system has sufficient capacity to supply new and existing demands at the applicable pressures. System pressures affected by the connection of a new load (or an increase in load at an existing connection) may make it necessary for us to **reinforce** our pipeline system, prior to the load being off-taken. This reinforcement may take the form of new pipelines being laid or the installation or modification of other equipment to increase the pressure within the pipeline system.

A **Relevant Main** is a distribution main operated by a Gas Transporter which is being used for the purpose of giving a supply of gas to any premises in its authorised area at a rate not exceeding 2,196 MWh per annum, except any pipe which is not relevant in accordance with Section 10(13) of the Gas Act 1986 as amended by the Gas Act 1995. A **Non-Relevant Main** is a main used for purposes other than above.

**Specific Reinforcement** occurs when we have to undertake system reinforcement, or additional system reinforcement, as a result of one or more of the following:

- **i)** an increase in the rate of gas consumption at a supply point or
- **ii)** an increase in the rate of gas consumption of a Connected System or
- **iii)** the connection of a new supply point where the consumer in question is anticipated to be likely to consume more than 73,200kWh per annum or
- **iv)** the connection of a Connected System

A **Standard Quotation** is a desktop quotation for an individual one-off new service or alteration request which results in the application of a standard price, (excluding self-quotations).

**Streetworks Scheme Charges** – For the purposes of this document and Cadent Connections Services Charges Statement, the term "Streetworks Scheme Charges" means charges made by Highway Authorities in relation to permit schemes made under Part 3 of the Traffic Management Act 2004 (TMA), and / or Lane Rental schemes made under Section 74A of the New Roads and Streetworks Act 1991 (NRSWA). The term "Streetworks Scheme Charges" covers Lane Rental charges; initial TMA permit fees, together with any subsequent fees for variation and further permit fees and the costs associated with fixed penalty notices. The principles we will apply in determining where such charges are directly recoverable from customers are set out in Section[7] of this document.

"**Sufficiently Complex Jobs**" will mean either a Sufficiently Complex Connection or Sufficently Complex Reinforcement".

"Sufficiently Complex" or "Sufficient Complexity" **connections** occur when the connection, disconnection or service alteration is to be made to an above 2 barg. system, or where there are known obstacles on the proposed route of the new apparatus and the anticipated total cost of the construction works including applicable overheads is expected to exceed £50,000, or where the total construction costs including applicable overheads, based on past experience of projects of a similar nature, is expected to exceed £250,000.

Sufficiently Complex" or "Sufficient Complexity" **reinforcements** occur when the reinforcement includes any apparatus that is designed to operate at above 2 barg. or where there are known obstacles on the proposed route of the reinforcement apparatus and the anticipated total cost of the construction works including applicable overheads is expected to exceed £50,000, or where the total construction costs including applicable overheads, based on past experience of projects of a similar nature, is expected to exceed £500,000. A list of obstacles having the potential to categorise a connection or reinforcement job as being of Sufficient Complexity is provided in Appendix B.

A **Supply Meter Installation** is the gas meter and associated apparatus used to measure the volume of gas off-taken at a Supply Point.

An **Independent Connection Provider (ICP)** is an organisation which designs and constructs gas infrastructure for adoption by Gas Transporters (They may also offer to construct other utility related equipment e.g. a water service pipe and / or install gas appliances and / or offer other services.)

**Winter** is defined as the period from 1st November in any year until and including 30th April in the following year.

# *Appendic B* - Engineering Obstacles Which Define Projects As "Sufficiently Complex"

Listed below are those obstacles which can cause a project to be determined as "Sufficiently Complex". Projects which have at least one obstacle and which are exclusively <2 barg. will only be determined to be Sufficiently Complex if they are likely to cost in excess of £50,000 including overheads.

Projects that require TFL, 3D rendering, Laser scanning, directional drilling

Multi Occupancy Buildings may be deemed complex the decision will be made by the design engineer

Works which involve the crossing of, or which are affected by, the presence of motorways, dual carriageways or highways, which have been designated by the Highway Authority to have Special Engineering Difficulties.

Works which involve the crossing of, or which are affected by, the presence of Bridges

Scheme outside the competency of Cadent's internal Design team, example temporary structures to support bridge rebuilds

Works which involve the crossing of, or which are affected by, the presence of a railway line, tramway, docks, airports/airside works

Works which involve the crossing of, or which are affected by, the presence of a river, stream, estuary or canal (navigable or otherwise), body of water, aqueduct, or a drainage channel.

Works which involve the crossing of, or which are affected by, the presence of motorways, dual carriageways or highways, which have been designated by the Highway Authority to have Special Engineering Difficulties.

>2barg diversions / G17 applies as it requires tendering to outside parties

Pipes 18"/450mm and above in diameter

Works where AGI/BGI are affected/Gorvenor based work - This is where the Govenor is directly implacted i.e having to be repositioned.

Where works are in, or likely to affect, a Site of Special Scientific Interest, nature reserve, scheduled monument or archaeological site.

Where works are situated within, or likely to affect, a woodland, marsh, peat bog or coastal wetland.

A connection to a listed building or conservation area.

Connections to existing blocks of flats where any service pipe will terminate more than two stories above the adjacent ground level or where internal risers are requested.

Connections to new blocks of flats where any service pipe will terminate more than five stories above the adjacent ground level.

Works which involve any requirement for a public enquiry or planning permission, including planning permission associated with any buildings including meter housings.

Projects that require TFL, 3D rendering, Laser scanning, directional drilling

Multi Occupancy Buildings may be deemed complex the decision will be made by the design engineer

Where the route of any apparatus involves a significant (greater than 2 metres) change in elevation within a short horizontal distance e.g. a cliff or retaining wall.

Where any apparatus will be laid in contaminated ground, disused slag heaps or rubbish dumps.

Where any apparatus will be laid in land likely to suffer from severe subsidence or other significant ground movement including the laying of apparatus near to disused mine shafts / workings.

Where works are likely to be affected by special security provisions, e.g. military bases, prisons etc.

Where works will take place within top tier COMAH (Control of Major Accident Hazard) sites.

Where an easement or other legal permit has to be obtained from any person other than the person requesting the works.

Any other works where special difficulties or unusually high costs might occur.

# *Appendic C* - Additional Information On Availability And Allocation Of Capacity

**Capacity booking**

The provision of a connection to our system does not confer any rights on a party to offtake or introduce gas. Gas may only be off-taken / introduced by a Registered User who is a party to the Uniform Network Code and has been licensed by the Gas and Electricity Markets Authority to do so.

**Allocation of available capacity**

We will allocate any available capacity on a first come first served basis. This means that (except where an ARCA is applicable) where a main, or other apparatus, has surplus capacity that capacity will be provided to the first Registered User that books it in accordance with the Uniform Network Code. Capacity will be allocated on the basis of the date when a Registered User confirms their site nomination and has nothing to do with any connection contract.

**Construction of capacity**

It is sometimes necessary for us to reinforce our system to enable additional gas to be off-taken or introduced into our system. This work, particularly where it affects an above 7 barg. system, may take a period of time to complete. We will endeavour to inform customers planning to connect to our system, as soon as is reasonably practical, how long a proposed reinforcement project is likely to take and consequently the likely date when gas may be off-taken / introduced.

# *Appendic D* - Provision Of Meter Housings / Boxes

We will provide and charge for meter housings / boxes to customers that have requested a service pipe from us, with the exception of cavity/inset meter boxes, which the customer must procure and install prior to commencement of our engineering works.

When we install a meter housing the associated labour cost is chargeable.

We will not provide a meter housing / box or transport it to site unless we are also going to be installing it.

All charges made in respect of the installation of meter housings / boxes will include applicable overheads.
A meter housing (or meter box) becomes the property of the owner of the premises after it has been installed; consequently maintenance is the responsibility of the premises owner.

We offer a 1 year guarantee in respect of meter boxes that we supply, however this is invalidated if any defect or damage has been caused other than by fair wear and tear. We do not offer a guarantee in respect of meter housings.

**Notes:**

**i)** For the purpose of this Statement a meter box refers to a meter housing, which is designed to contain a gas meter of a volumetric flow capacity of six cubic metres per hour or less. Meter housings refer to all other structures, which are purposely designed to contain gas meters.

**ii)** Retail outlets stock certain types of meter box.

Provision of the above services is open to competition. Details of independent providers of meter work services can be obtained from the following web sites:

http://www.sbgi.org.uk/home
http://www.lloydsregister.co.uk/mam.html

# *Appendic E* - Contact Information

**1 Requesting our Domestic Connections Services**

To obtain any of the domestic services set out in this document, apply online at: http://cadentgas.com/Get-connected

or contact

**Cadent**

**Connections**

**Tel:** **0800 074 5788**

**Email:** connectionshelp@cadentgas.com

**2 Network Strategy Team**

**Please Contact:** **Network Strategy**
Cadent
Customer Support Ansty Park
Coventry
CV7 9JU

**3 Further Information on this document**

Any comments or enquiries regarding this document should be forwarded to our gas distribution Pricing Team:

**Courtney Murray**

**Email:** Courtney.Murray@cadentgas.com

## 4 Complaints

### 4.1 Making a complaint or checking progress of a complaint.

Please contact us by phone, email or in writing.

**Phone:** **08450 700203** (All calls are recorded and may be monitored for training purposes)

Typetalk for consumers with hearing difficulties: **0800 371787**

**Email:** complaints@cadentgas.com

**Post:** Cadent
Customer Support Ansty Park
Coventry
CV7 9JU

If English is not your first language we will find an interpreter who can translate for you.

We treat all complaints seriously and guarantee:

- A full investigation;
- A detailed response within 10 working days
- If we are unable to fully investigate your complaint within 10 working days we will keep you informed of our progress and let you know when you can expect a response.

If we do not give you a response within 10 working days you may be eligible for a compensation payment under our standards of service.

### 4.2 If you are unhappy with our first response

You can ask for your complaint to be referred to our escalated complaints team. This team will review your complaint, try to resolve any outstanding issues and provide you with a further response within 10 working days

You can ask for your complaint to be referred to this team, or write to the following address quoting your complaint reference number.

**Phone:** **08450 700203** (All calls are recorded and may be monitored for training purposes)

Typetalk for consumers with hearing difficulties: **0800 371787**

**Email:** complaints@cadentgas.com

**Post:** Cadent
Customer Support Ansty Park
Coventry
CV7 9JU

### 4.3 If you are unhappy with our second response

If you are still not satisfied or you think we may not have followed our complaints procedure correctly, you can ask for your complaint to be referred to the Customer Support Manager. How we have dealt with your complaint to this point will be reviewed and you will receive a response which explains our final position within 10 working days.

Please contact us by phone, email or in writing to the address details given in 4.2.

### 4.4 Independent review

We realise that you may not always be happy with the way we deal with your complaint. If you are not happy you can get in touch with Consumer Direct an independent consumer organisation. They will be able to tell you what your rights are and what you can do to settle your complaint. They will expect you to use our complaints procedure first though. You can contact them in the following ways:

**Consumer Helpline:** 0845 040506

**Typetalk:** 08451 281384

**Website:** www.consumerdirect.gov.uk

### 4.5 Energy Ombudsman

If we have taken longer than eight weeks to deal with your complaint, or we have written to tell you that we aren't able to resolve it, you can contact the Energy Ombudsman. If they are able to help, they will study your complaint, make a final decision and let you know what they have decided. If the Ombudsman believes there is a case to answer, we may be required to:

- Provide an apology; or
- Provide an explanation; or
- Take corrective action; or
- If appropriate, pay compensation

The Ombudsman is not able to help you unless you have gone through our complaints procedure first. By law, we have to accept the decision of the ombudsman. You can contact the Ombudsman service in the following ways:

**Consumer Helpline:** 0845 0550760

**Typetalk for consumers with hearing difficulties:** 08450 511513 or 01925 430886

**Email:** enquiries@energy-ombudsman.org.uk

**Post:** Energy Ombudsman
PO Box 966 Warrington
Cheshire. WA4 9DF

## Additional Information

It will be helpful if you can give us any additional information to do with your complaint (such as reference numbers) so that we can deal with it more quickly. We will always try to answer your complaint by telephone. If you would like a written response to your complaint, please let us know. If we decide we need to visit you at home to discuss your complaint or enquiry, we will get in touch with you to arrange an appointment. So that we can make improvements, we use the information gathered from complaints to identify failures in the service we provide.

The Energy Ombudsman is a free service created by Parliament to settle disputes between gas and electricity companies and their customers. For additional information please refer to the full version of our Code of Practice. A printed copy can be provided on request from Customer Support.

Ofgem has provided the following definition of a complaint:

*"Any expression of dissatisfaction made to an organisation, related to any one or more of its products, its services or the manner in which it has dealt with any such expression of dissatisfaction, where a response is either provided by or on behalf of that organisation at the point at which contact is made or a response is explicitly or implicitly required or expected to be provided."*

The Department of Business Enterprise and Regulatory Reform (BERR) has provided the following definition of a small business that can use the Consumer Redress scheme:

*"An annual consumption of up to 200,000 kWh; or fewer than 10 employees (or their full time equivalent) and an annual turnover or annual balance sheet total not exceeding £2 million."*

### 4.6 Referral to Ofgem

If it ultimately proves necessary to refer the matter to Ofgem for a determination, correspondence should be addressed to:

The Chairman
The Gas and Electricity Markets Authority
Office of Gas and Electricity Markets
9 Millbank
London
SW1P 3GE