Connection Charging Methodology

22nd July 2025

WALES&WEST UTILITIES

Section 1 – General Principles

1.1 Overview

Wales & West Utilities Limited (WWU) will charge for connections and service alterations in accordance with the principles in the Gas Act and its Gas Transportation Licence. In general terms this means that, in accordance with section 9 and 10(5) of the Gas Act, customers will pay the cost of their service subject to any applicable allowances (including fuel poor allowances) or other provisions. In accordance with the obligation in section 9 of the Gas Act to develop and economic and efficient pipeline system WWU has developed an Economic Test, a key principle of which is that existing customers are not made worse off by the connection of a new customer.

WWU aims to recover those costs that it reasonably expects to incur when it provides connection services. Charges will reflect the cost of labour, reinstatement and materials, and any other expenses required to carry out the work to the customer's requirements including applicable charges relating to traffic management legislation. Each cost element will carry an appropriate level of overhead. The connection will be provided using the solution that is expected to provide the least cost fit for purpose scheme. This ensures that the connection is efficient in terms of the ongoing operating costs of the WWU network.

WWU does not make adoption payments for connections constructed by itself nor for those constructed by a third party which are subsequently adopted. This applies to connections both above and below 7 barg except for fuel poor network extension constructed by a Utility Infrastructure Provider (UIP) for adoption by WWU.

Standard charges will be applied for some categories of works as described in Section 3.2.2.

WWU may carry out work additional to that which is required to meet the requirements of the customer to ensure that it complies with the requirement in section 9 of the Gas Act to develop its pipe-line system in an economic and efficient manner. Where this occurs the cost of any additional works will not be charged to the customer.

All charges are made subject to the appropriate contract which will either be provided or referenced on the quotation and be made available on request.

Section 2 – Design

2.1 General

WWU will charge for the design of new connections where a bespoke design is required to enable a quotation to be produced. Design charges will not be applied to proposed reinforcement apparatus except Sufficiently Complex reinforcement (see Section 2.2). Design charges will be identified within quotations and will be based upon the anticipated cost of design works. The design charge is included in the charge for non-standard quotations, standard quotations for new housing developments and for Sufficiently Complex connections / reinforcement. For other works, the design charge will only be payable by the customer when WWU is requested to install the quoted apparatus. Any charge made in respect of Sufficiently Complex jobs may be refunded subject to the Economic Test, where applicable, when the project proceeds.

In all cases WWU retains the intellectual property rights associated with any design and provides the design information to customers for information only. Customers must ensure that WWU's designs are not made available to third parties.

2.1.1 Reasonable Demands for Capacity

Operating under the Gas Act, WWU has an obligation to develop and maintain an efficient and economic pipeline system and, subject to that, to comply with any reasonable request to connect premises. However, in many instances, specific system reinforcement may be required, for example to maintain system pressures for the winter period after connecting a new supply or demand.

Details of how WWU charge for reinforcement and the basis on which contributions may be required can be found later in this statement in section 3.3. 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, WWU will typically require one to two years' notice of any project requiring the construction of high-pressure pipelines or plant, although in certain circumstances, project lead-times may exceed this period.

2.1.3 Connection Design Philosophy

WWU will construct apparatus on least project cost fit for purpose basis taking into account the customer's requirements and WWU's statutory obligations. This means that where there are different fit for purpose design solutions, which meet a customer's requirements, WWU 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 of WWU such as to take into account future development will not be charged to the customer requesting the connection.

'Fit for purpose' refers to a design that satisfies the required engineering standards that will safely transport the required quantity of gas at an appropriate pressure throughout the life of the apparatus taking into account the Gas Act obligation for economic pipe-line system development.

2.1.4 Standard Designs and Source Pressures

WWU will use standard designs and source pressures in respect of certain connections, where:

- WWU believes that the benefit of using standard designs benefits customers overall and the designs have been produced in accordance with the principles and methods of this statement; and
- The resulting standard designs do not result in charges which entail undue preference or undue discrimination.

WWU 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. Standard Source Pressures are published by WWU in T/SP/NP/14/E Specification for the Design of 3rd Party System Extensions and Connections to WWU systems, subject to change as required.

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 WWU at the address given in Appendix B.

2.1.5 Load Evaluation Service

WWU will not carry out any load evaluation services except under the circumstances detailed below, in which case such load evaluation will be a basic evaluation only:

- To determine whether a potential consumer will require an Advance Registration of Capacity Agreement (ARCA);
- To determine whether a potential customer will require a Supply Point Network Exit Agreement (NExA);
- Where it is necessary to determine which connection charge category applies to a potential consumer; or
- Where WWU is obliged to make a connection under S10 (2) (a) of the Gas Act and the person requesting the connection has submitted a request outside of the Quotation Compensation Scheme.

2.2 Complex Connections (Sufficiently Complex Jobs)

2.2.1 Complex Connections

Paragraph 10(1) of the Gas (Standards of Performance) Regulations provides that the regulations shall apply to connections except for certain connections of which Complex Connections are one. WWU defines Complex Connections as follows:

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

When a project is determined to be of Sufficient Complexity WWU will quote for, charge and carry out the design of apparatus prior to estimating the cost of constructing any equipment. WWU may decide that it is appropriate to split the design works into stages for example feasibility study, conceptual design study etc. with each stage being quoted, charged and completed before commencing a subsequent phase.

WWU charges for Sufficient Complexity Jobs on the basis of anticipated cost-plus applicable overheads.

In the interest of consistency WWU uses published criteria (detailed below) to determine whether a request is of Sufficient Complexity. Connection and reinforcement related apparatus might be of Sufficient Complexity if a project includes both reinforcement and connection work then each part will be considered separately when determining whether the project is of Sufficient Complexity. The criteria for determination are:

- Sufficiently Complex connections occur when the connection is to be made to an above 7 barg system for both entry and exit; or where there are known obstacles (see Annex E) on the proposed route of the new apparatus and the anticipated total cost of the construction works including applicable overheads required to overcome the obstacle is expected to exceed £10,000; or where the total construction costs including applicable overheads of a connection where there is no obstacle, based on past experience of projects of a similar nature, is expected to exceed £100,000; or where the customer is likely to require a number of alternative quotations.

- Sufficiently Complex reinforcement occurs when the reinforcement includes any apparatus that is designed to operate at above 7 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 required to overcome the obstacle is expected to exceed £10,000; or where the total construction costs including applicable overheads of a connection where there is no obstacle, based on past experience of projects of a similar nature, is expected to exceed £100,000.

- All Storage and Hydrogen blending entry connections are treated as being of Sufficient Complexity.

Once completed WWU will supply the customer with a design report in respect of Sufficiently Complex connections. The customer may use the information in this report, under licence, in respect of the hire of an UIP to construct the connection apparatus with the exception of any Minimum Connection element.

WWU will not provide a design report in respect of Sufficiently Complex reinforcement jobs. Only WWU can construct Specific Reinforcement.

2.3 Self-lay pipes and Adoption of Apparatus

2.3.1 Self-lay Pipes

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 WWU and the customer in respect of the proposed connection, where a party wishes to lay their own service pipe to premises expected to consume 2,196,000 kWh (75,000 therms) a year or less, ownership of the pipe will vest in WWU once the connection to WWU Limited's system has been made.

In accordance with Section 10(8) of the Gas Act, where the connection is for a pipe laid to premises expected to consume more than 2,196,000kWh (75,000 therms) a year or the connection is to a pipe in Wales & West Utilities Limited's system which is not a relevant main, self-laid pipes do not automatically vest in WWU Limited. However, subject to the principles set out in the published Standard Licence Condition 4B Statement and the relevant contractual terms and conditions, WWU may take ownership of pipes to such premises.

Any party considering laying a pipe that will either vest in WWU or is intended to come into WWU ownership must refer to the published Standard Licence Condition 4B Statement and make contact with WWU at the address given in Appendix B before the planning phase of any project.

2.3.2 Adoption of below 7 barg Apparatus

Subject to the exception detailed in the paragraph below WWU will adopt any fit for purpose below 7 barg connections apparatus that is connected to its system and that is not intended to be operated by another system operator (for example another Gas Transporter). WWU does not make adoption payments for the adoption of below 7 barg apparatus.

WWU 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 WWU.

WWU will adopt free of charge below 7 barg connections apparatus installed by UIPs that are registered with the Gas Industry Registration Scheme.

WWU 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 Connection Services Charges Document.

Where a person is not registered with the Gas Industry Registration Scheme they must contact WWU 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 WWU will adopt.

2.3.3 Taking ownership of above 7 barg apparatus

With the exception detailed below, WWU will take ownership of fit for purpose above 7 barg connections apparatus that is connected to its system and that is not intended to be operated by another system operator (for example a Connected System Operator that has received a Gas Act derogation).

WWU will not take into ownership 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 WWU.

WWU will charge to determine whether above 7 barg connection apparatus, to be installed by a third party and adopted by WWU, is fit for purpose. WWU does not make adoption payments for the adoption of above 7 barg apparatus.

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

Customers must contact WWU 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 WWU to take into ownership.

2.3.4 Illegal Connections

Where a third party makes a connection to the WWU Distribution Network without seeking design approval and providing evidence of competence and correct installation, WWU will treat this as an illegal connection and take steps to disconnect the illegal pipework and recover all costs from third parties.

2.3.5 Distribution Network-Embedded Entry or Storage Connection Assets

WWU will provide a minimum connection for the connection of Distribution Network (DN) Embedded entry or storage facilities, without offering to take ownership of such assets.

2.4 Other

2.4.1 Network Approach Mains

WWU has no obligation to offer a service to extend its system to a Connected System Exit Point. However, we may provide a design and quotation to lay a main infrastructure only. Where pressure reduction equipment is also to be installed to feed a new mains infrastructure, we may include future operating costs in our charges.

WWU does not offer a service to complete part of a system of pipes that is being constructed, or that is proposed to be constructed, by a Utility Infrastructure Provider (UIP).

2.4.2 Entry and Exit Agreements and ARCAs

WWU has 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 WWU 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 WWU's Network Code). NEXAs will also be applied where the demand profile is nonstandard or where the pressure is boosted after the meter to supply CHP apparatus.

An ARCA (Advanced Reservation of Capacity Agreement) is an agreement that commits WWU to provide capacity by an agreed date and where the customer commits to paying Transportation charges associated with that capacity for an agreed period from the agreed date whether or not they use any or some of the capacity. The customer's commitment provides some protection for WWU against the capacity being constructed but not used. The period for which the customer is required to commit to paying transportation charges will increase as the risk to WWU increases, for example as the proportion on reinforcement cost funded by WWU increases, the risk to WWU increases because the customer is funding a smaller part of the cost of the reinforcement and therefore are less exposed to the cost should the capacity not be used.

An ARCA will always be required for any load that is expected to consume more than 58.6 GWh a year. For loads of 58.6 GWh and below, WWU may require an ARCA where the cost of WWU funded Specific Reinforcement upstream of the Connection Charging Point (that is the total cost of the Specific Reinforcement minus any customer contribution) is £100,000 or more.

The period for which capacity can be reserved under and ARCA will be decided on a case-by-case basis to reflect the time reasonably required to complete the project; A Customer may request an ARCA from WWU for any load over 73,200kWh a year if it wishes to guarantee the capacity and is willing to accept the commitments in the ARCA.

2.4.3 Connection – load size thresholds

Loads (or sources of gas) of 2,196,000kWh (75,000 therms) a year 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.

2.4.4 Connections to the other Gas Transporters networks and private networks

WWU are unable to make connections to other Gas Transporters networks or private networks operated by third parties. WWU will provide a quotation from its nearest relevant main, but permission will need to be sought from the pipe operator if our pipes will run through their geographical area.

2.4.5 Connections to the WWU LPG Independent Undertakings

With respect to any independent systems (Independent Undertakings), which are not connected to the main Distribution Network System, but which remain part of WWU Limited's asset, (being separately supplied Liquefied Petroleum Gas (LPG)), WWU will apply the same principles and charging methodology in respect of connections to apparatus situated within these Independent Undertakings that it applies to connections to other parts of its system.

2.5 Excluded Connections

WWU will classify all new connection request and alteration requests in accordance with the Gas (Standards of Performance) Regulations 2005 as amended.

As defined in those Regulations, WWU defines the following as Excluded Connections:

- Infills;
- Requests deferred by the customer;
- Budget Indication requests;
- Requests for connections or alterations for 5 or more properties, this includes new builds;
- Mains only infrastructure; and
- Requests that meet the Sufficiently Complex Job Criteria defined in Section 2.2.1

Section 3 – Connection Charges

3.1 Quotations

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

Standard Quotation - A desktop quotation for an individual one-off domestic new service or alteration or disconnection request resulting in the application of a standard price.

Non-Standard Quotation - Any quotation other than a Standard Quotation

With regard to the provision of Non-Standard Quotations, where it is necessary for WWU to make assumptions, to determine the cost of a connection, these will be stated on the quotation.

Quotations will include a statement to the effect that the customer, in accepting the quotation will also be accepting that the assumptions are appropriate and understood. If it is later determined that any stated assumption is materially wrong, WWU will decide whether the customer's charge should be varied. In circumstances where the charge is increased WWU may cease, or delay works pending a customer's agreement to pay the increased charge.

Note: The name of the WWU publication, which includes a full list of Standard Charges, is the "Connection and Other Distribution Services Charges" document. It can be obtained by writing to the address given in Annex B; it has also been included within the WWU web site under 'Our Publications'.

3.1.1 Charges for Quotations

WWU charges for providing quotations for Non-Standard Quotations due the bespoke design required and also for quotations for where significant design work is required for quotations for works subject to a Standard Quotation. As most Standard Quotations are based on desktop quotation, we do not believe that the additional administration required to charge for quotations for these works is efficient. Non-Standard Quotations and quotations for new housing developments require more individual attention and we believe that charging for these is appropriate to discourage requests being made for works that are not likely to go-ahead.

WWU will charge for Non-Standard Quotations and those for new housing developments as shown in our "Connection and Other Distribution Services Charges" document.

WWU does not charge for other quotations and the cost of providing these quotations are recovered from the charges for these works. These charges recover the costs of providing quotations for those works carried out and the cost of quotations for works that were not accepted by the customer and completed by WWU.

3.2 Charges for Connection Works

3.2.1 General

Charges for connection works are calculated using:

- Current materials costs and any special expenses required to carry out the connection plus overheads related to the management of materials and other bought in services including reinstatement and traffic management;
- Current labour rates, - except for large projects which are individually tendered plus overhead costs related to the management of the work and the general costs of providing connections activities;
- Application of inflation factors to reflect the level of costs expected during the period to which they apply;
- Back-office overheads (including costs of issuing quotations except where the works follow from an accepted chargeable quotation)
- A margin will be added to all works other than single new connections or alterations to domestic properties.

Charges for connection, except where the connection is made under Standard Condition 4B(1), include excavation, backfill and reinstatement in the public highway.

Charges include excavation, backfill and routine reinstatement on private land except where requested otherwise. WWU will not provide a quotation to match specialist surfaces such as impressed concrete.

Plants that may be affected by the works carried out by WWU should be moved or protected by the customer before work commences. WWU will try to avoid damaging growing plants, but damage is possible and WWU is not able to replace plants that are damaged or destroyed.

Pressure Reduction Apparatus is charged for as follows:

- If it forms part of the Supply Meter Installation, then it is not covered by the provisions of this statement;
- If it is located along the connecting pipework, it is charged for at cost plus overheads,
- If it is part of any Specific Reinforcement downstream of the Connection Charging Point it is charged for at cost plus overheads;
- If it is part of any Specific Reinforcement, upstream of the Connection Charging Point, WWU funds it, subject to the Economic Test in respect of Distribution Network System apparatus; or
- 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

Note: please refer to section 3.3.1. for full details of how we charge for specific reinforcement.

When a premise 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 WWU to replace or duplicate an existing service pipe.

In accordance with Section 10(8) of the Gas Act, 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 73,200kWh (2,500 therms) a year and there is no change in the meter position. In other circumstances WWU will charge for works as if the consumer required a new connection.

Duplicate service pipes are not permitted for domestic premises unless the second service pipe is provided for a separate building, for example an annex which is self-contained dwelling from the main building or a supply to a swimming pool and is independently metered.

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 732,000kWh (25,000 therms) a year are not permitted to receive their gas at a pressure higher than 21 mbarg nominal owing to the provisions of the Gas (Calculation of Thermal Energy) Regulations.

3.2.2 Standard Charges

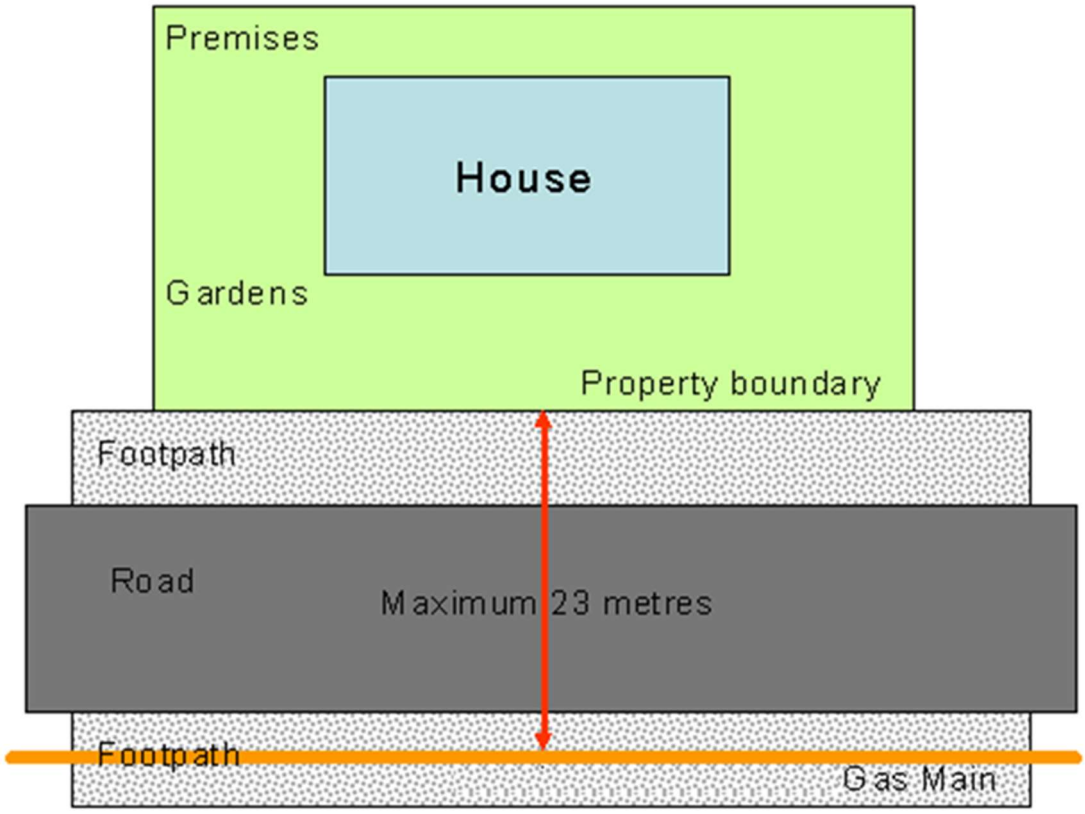
Standard charges for new connections, disconnections and service alterations will be calculated to reflect the typical costs which we reasonably expect to incur in carrying out the requested works during the period in which the standard charges will apply, using the following cost elements:

- Analysis of labour and materials costs incurred, carried out on a sample of completed jobs in each type within an appropriate period of approximately 12 months and/or data collected by trained observers using established work measurements techniques;
- A weighted average for each type of work in that standard charge category derived from the analysis and other detailed information on job costs;
- Application of forecast inflation, as appropriate, to labour and materials costs, 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;
- The applicable overheads for labour and materials respectively; and
- Domestic Load Connection Allowance where applicable.

3.2.4 Domestic Load Connection Allowance

For individual new connections to domestic premises situated within 23 metres of a relevant main, Standard Condition 4B of our Gas Transporter Licence requires that we only charge the customer for the provision of the service pipe on the customer's premises and the amount laid in public use land in excess of 10 metres from our Relevant Main. The net investment cost which we bear in respect of these connections is known as the Domestic Load Connection Allowance (DLCA).

A person may request multiple connections, each benefiting from this allowance, provided that each connection is to a different eligible premises and it can be demonstrated that there is a present intent by an identifiable domestic consumer to use gas at each premises.



DLCA = Connection and first 10m on land outside customers ownership dedicated to public use

3.2.5 Infills

An Infill is the extension of the network to serve a community which doesn't currently have gas. In an Infill, the proportion of any shared costs to be paid at each premises will be calculated as follows:

i. 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) and, if applicable, the charge for the provision of capacity on the existing WWU system.

ii. For WWU to proceed with an Infill, WWU 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. We will include any new development which has planning permission within the scope of the infill.

iii. It is this number, which is used to apportion costs not the total number of premises in the area. We will set a minimum number of acceptances required in order to justify the initial investment in the mains infrastructure and to enable the scheme to proceed.

iv. Subject to the Gas (Connection Charges) Regulations 2002 as amended, the appropriate proportion of the shared costs (adjusted for changes in the Retail Price Index) 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.

v. The twenty-year period starts on the day the Relevant Main is commissioned.

vi. In an Infill, the cost of the service pipe will be charged on an individual basis in the same way as any other connection. Customers will not be entitled to a Domestic Load Connection Allowance (DLCA) whilst the Infill is live.

vii. Where a consumer, likely to consume more than 2,196,000kWh (75,000 therms) a year, is situated within the Infill, and will connect to gas at the time when mains are laid, they will pay a mains contribution in direct proportion with their share of the total annual offtake quantity within the Infill.

viii. Where a consumer, likely to consume more than 2,196,000kWh (75,000 therms) a year, 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 twenty-year Infill period has expired or

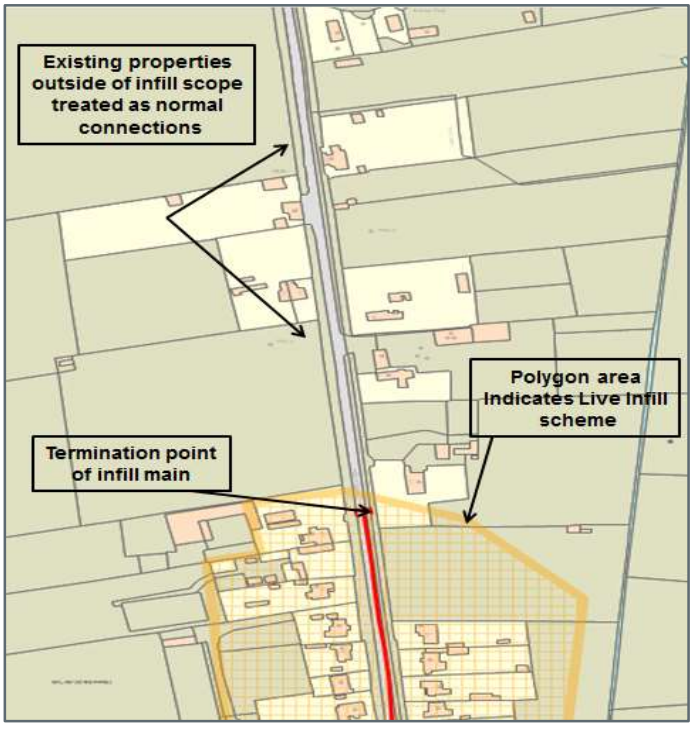
b. They fund sufficient reinforcement to enable the remaining not above 2,196,000kWh (75,000 therms) a year premises within the Infill, which might connect to gas, to be connected without there being any requirement for any additional reinforcement within the twenty-year period.

Where the household being served by the network extension or Infill satisfies the Fuel Poor Network Extension Scheme criteria then Section 5 will apply.

Any connections, including IGT networks, made within the Infill area as detailed on WWU maps must pay the mains Infill contribution for each property to be connected whilst the Infill is live

Any connections outside the Infill area will be treated as normal connections from the nearest relevant main including any mains laid as part of the Infill scheme they will not pay a mains contribution charge. This is subject to the network having sufficient capacity, if not reinforcement may be required and economic test applied accordingly.

Example of existing Infill area showing existing properties outside of the infill area.



3.2.6 Charging for Minimum Connections (>7 barg connections)

WWU will follow the same principles that it applies to other connection works in respect of charging for Minimum Connections.

3.2.7 Traffic Management Charges

With the exception of where, as a result of legislative or licence requirements, WWU has to provide connection services at no initial charge, WWU will pass on to customers the appropriate cost incurred pursuant to prevailing traffic management legislation[1] in force at the relevant date. The charges associated with the Traffic Management Act 2004 will be applied to each connections job at the rate appropriate for the Highways Authority in which the work takes place. This policy has been adopted because it is likely that different Highways Authorities will implement permit charges and other charges at different times.

Where a job results in abortive visits by WWU that are not due to the fault of WWU, and this results in additional Traffic Management Act charges then these additional costs will be charged to the customer where applicable.

3.3 Reinforcement

3.3.1 Reinforcement for System Exit connections capacity

WWU develops its network against one, five and ten year planning horizons. Loads will be analysed based on the expected connection date and for the one-year horizon will be assessed against the system constraints in the next winter period. Winter is defined as 1st November to 30th April inclusive. Therefore, if a load is expected to be connected on or before 31st October in a given year the next winter period will be the period commencing on 1st November of that year. If a load is expected to be connected on or after 1st November in a given year, then the next winter period will be the period commencing on 1st November in the following year.

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. By capacity we mean one or more of:

Peak hourly capacity – the ability of the network to provide the flow rate required on a peak 1 in 20 day

Storage capacity – the ability of the WWU network to store the gas required to meet the customer's daily demand profile on a peak 1 in 20 day

Ramp rates – the ability of the system to accommodate the transient fluctuations in pressure caused by the customer's plant starting to take gas or ceasing to take gas

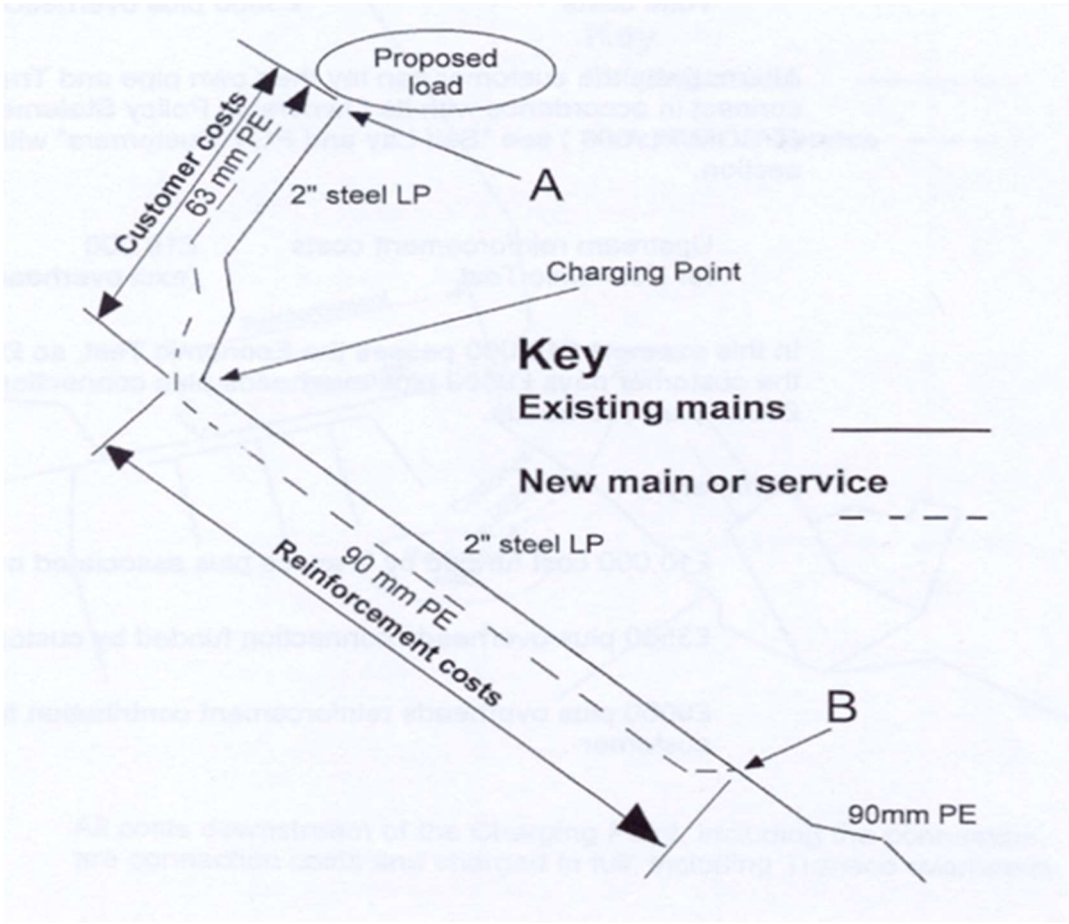
WWU attributes the cost of Specific Reinforcement according to its location in relation to the Connection Charging Point.

- Specific Reinforcement downstream of the Connection Charging Point is fully chargeable to the customer.
- Specific reinforcement upstream of the charging point will be chargeable to the customer unless it passes the Economic Test.

A description of the Economic Test is provided in Annex G.

[1] WWU is obliged to pass on only those costs which have been efficiently incurred

The **Connection Charging Point (CCP)** is the closest economically feasible[2] point taking into account any customer request for gas to be made available at a particular pressure) on the WWU 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 WWU subject to any contractual requirements.



Where WWU connects premises and selects an alternative route that provides lower overall reinforcement and connection costs, the customer contribution will be no more than that charge made if the connection was made at the original connection point. Specifically, the customer contribution will be based on the lower of:

- The overall costs of the alternative to reinforcement including any associated contribution towards any specific reinforcement that is associated with the alternative connection, or
- The connection costs plus any contribution towards specific reinforcement associated with the original Connection Charging Point route.

In respect of such "alternative to reinforcement connections" by UIPs 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 WWU estimates will be associated with their being asked to connect at the alternative point.

2 A consumer's premises may be closer to a main that is on the 'wrong' side of a significant obstacle (for example 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.

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

Where WWU has 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 obviates the requirement for specific reinforcement, WWU shall 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.

If any Distribution Network System Specific Reinforcement that is subject to the Economic Test does not pass the Economic 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 the quotation for the works.

3.3.2 Reinforcement for System Exit connections pressure

Where requested by the customer, and where practicable and consistent with the other provisions of this Statement and the Uniform Network Code, as appropriate, WWU will provide pressure at a new Supply Point or Connected System Exit Point (CSEP), consistent with the standard pressure tables in WWU's NP14 document[3] free of charge. The pressure quoted is the 1:20 peak winter day pressure and not a minimum guaranteed pressure at all times. For the avoidance of doubt this also includes pressure quoted off the standard pressure matrix. Users of CSEP connections should ensure that their system is designed on this basis. If the requested pressure is determined to be unavailable at any time within the planning period reinforcement will be required. The planning period is 5 years for below 7 barg networks and 10 years for above 7 barg networks

Subject to the exception detailed in the paragraph below, the cost of these works will be charged to the person requiring the elevated pressure. Similarly for new supply points WWU is not able to offer guaranteed pressure on its Low Pressure system (less than 75mbar).

For Medium Pressure and Intermediate Pressure systems WWU will provide elevated pressure to sites connected to networks operating between 75mbarg and 7 barg on a reasonable endeavours basis however this is not a guarantee that the pressure will be available at all times and does not oblige WWU to inform the user if the pressure is likely to drop below the elevated pressure that the customer originally requested.

3.3.3 WWU enhancements to Specific Reinforcement

As a result of the Gas Act obligation Section 9 (1) upon gas transporters to develop an efficient pipeline system WWU has 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. Any specific reinforcement upstream of the charging point designed to provide this pressure where it is not available will be chargeable to the customer unless it passes the Economic Test.

It is sometimes necessary for WWU to upsize a connection or reinforcement pipe beyond that which is required to enable the connection of a load. WWU does this to ensure efficient system development. WWU 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, WWU will fund the marginal cost of upsizing apparatus that it adopts from an UIP. In this circumstance WWU will ask the UIP to quote for the upsizing works and will use this quotation when deciding whether to proceed with upsizing.

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3 Specification for the design of system extensions, connections and services to below 7 bar Wales & West Utilities Systems

3.3.4 Sufficiently Complex Reinforcement

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 them 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 any subsequent study and may receive their money back for the original design study subject to the outcome of the Economic Test.

Section 4 – The Economic Test

4.1 Introduction

The Economic Test is a financial assessment tool that is designed to ensure WWU 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))

The Economic Test is used to identify new requests for capacity where the level of investment would be considered 'uneconomic', and so avoids existing WWU customers subsidising the new firm load.

The Economic Test compares the cost of system reinforcement required to take on the new load with the additional transportation revenue from the load net of the additional operating costs of accommodating the new 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 additional reinforcement cost is greater than the capitalised net transportation revenue the net 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 net transportation revenue.

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

4.2 Methodology

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.

Specific reinforcement costs are the engineering costs of providing capacity for the new load excluding back-office overheads. The treatment of specific reinforcement costs depends on whether they are upstream or downstream of the Connection Charging Point (CCP), which is the point on the transportation system that is deemed to have enough capacity (see 3.3.1) to supply the new load disregarding existing loads. Specific reinforcement costs downstream of the CCP are always fully chargeable to the customer requesting the connection 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.

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 WWU average values:

1. Additional operating costs. These have been derived from WWU's regulatory financial return information.
2. 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.
3. Additional Formula Rates (business rates). These annual operating costs are estimated based on a fixed percentage of the capital expenditure. This reflects the fact that the level of business rates in respect of a distribution network is linked to the Regulatory Asset Value of the network business.

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.

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.

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(s) or CSEP, as appropriate.

Factors used to assess the General Additional Costs for a New Load

Description	Value for Load	Unit
Throughput		
Cost of transporting additional gas volumes i.e. gas odourisation and LDZ Gas Shrinkage	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	SOQ (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	SOQ	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	Number of Supply Points	Number
Xoserve cost of administrating an additional CSEP	Number of CSEPs	Number
Xoserve administration cost per supply point	Number of Supply Points	Number

NB: Note that both the cost associated with additional NTS exit capacity bookings and the revenue attributable to the NTS Exit Capacity transportation charge (ECN), introduced with effect from 1st 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.

4.3 Comparison of Costs and Income

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.

The result of the analysis is the determination of a level of investment (the allowed investment) that would make the Net Present Value (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 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 customer requesting the connection in order to make the new connection economic.

Note that within the Economic Test itself, overheads are not applied in respect of specific reinforcement costs. However, if a contribution is payable under the Economic Test, overheads are applied when assessing NPV at published rates. This approach is aligned to that applied in respect of other charges that WWU make for example the charges applied to rechargeable diversions where there is betterment.

Key points underlying the Discounted Cash Flow (DCF) calculation are:

- Both Income and Costs of Growth are assumed to be constant in real prices over the appraisal period, that is they do not take account of overall prices reducing under WWU's price control nor individual prices falling due to growth in volumes;
- 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; unless it is clear that the load has a shorter lifetime in which case a shorter period will be used as appropriate.
- It is assumed that the depreciated allowed investment costs 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 WWU's price control;

- The Economic test calculates the allowed investment so that the relevant cash flows, discounted at a discount rate in accordance with the WWU licence, generates an NPV of zero; and
- Costs and transportation income include only distribution elements (not NTS).

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 5 – Fuel Poor Network Extension Scheme (FPNES)

5.1 Overview

WWU have agreed with Ofgem a Fuel Poor Network Extension Scheme (FPNES) which is intended to facilitate fuel switching where that offers the best costs option for a household. Where a potential new domestic connectee has been designated as eligible under the scheme, they can receive a Fuel Poor Voucher, which may partially or wholly offset the cost of that connection to our Distribution Network System.

Wales & West Utilities has branded its Fuel Poor scheme as 'Warm Home Assistance'.

Qualifying connection requests may take the form of individual domestic customers seeking a connection to an existing relevant main, or groups of existing domestic premises seeking connection collectively by means of an extension to our Distribution Network System. The methods applied in determining eligibility and connection charges for Fuel Poor domestic connections are described in more detail below. Examples of Fuel Poor Connections are provided in Annex F.

5.2 Eligibility Criteria

In order for a domestic connectee to qualify for funding under the FPNES the connection request must relate to existing domestic properties that:

- Are eligible for measures under Home Heating Cost Reduction Obligation (HHCRO) aspect of the Energy Company Obligation (ECO) in England and Wales or NEST in Wales only; or
- Are in fuel poverty based on the standard Government definition. This is currently:
    - In England, the Low-Income High Cost Indicator where a household is considered to be fuel poor if its income is below the poverty line (taking into account energy costs) and its energy costs are higher than is typical for its household type
    - In Wales, a household spends more than 10% of disposable income on all household fuel use

Note that eligibility does not extend to non-domestic premises or domestic new build premises, regardless of location. Developers will continue to pay for the full cost of connections for new build domestic properties.

The assessment shall be undertaken against the tenants of the property and not the requester.

5.3 The Fuel Poor Test and Resulting Fuel Poor Voucher

For domestic connectees who have been designated as eligible for the scheme, a Fuel Poor Test is applied. The Fuel Poor Test is an alternative economic test, which compares the total cost of that connection with a standard net present value (NPV) of transportation revenues to be realised from a domestic load over its regulatory asset life to determine the value of the Fuel Poor Voucher (which may take a notional form) and any net contribution payable by the customer.

Ofgem have published a calculator which shall be used to establish the maximum value of the funding in each LDZ.

The **Fuel Poor Voucher** for any domestic Fuel Poor connectee, will have a value equal to the lesser of:

- The total connection cost determined for that connection, or
- The Standard Domestic NPV Transportation Revenue calculated using the following assumptions:
    - A Standard domestic AQ value (in kWh) equal to the prevailing Typical Domestic Consumption Value (TDCV) in use by Ofgem at the point at which the Fuel poor Test is applied;
    - A regulatory asset life of 45 years;
    - A discount rate equal to the pre-tax WACC in accordance with the WWU licence;
    - The transportation charges in force for WWU at the time of carrying out the Fuel Poor Test.

5.3.1 Individual "One-off" Fuel Poor Connections

For individual domestic connectees whose premises are situated within 23 metres of a relevant main, the total cost of that connection will be determined by reference to the prevailing standard domestic connection costs for WWU, together with any Streetworks Scheme Charges. The standard domestic connection cost values will be published in an annex to the relevant Gas Distribution Connection Charges statement. For one-off Fuel Poor connections situated 23 metres or more from a relevant main, the connection cost will be determined on a bespoke basis. Where the total connection cost exceeds the maximum value of the Fuel Poor Voucher, the remaining cost will be payable by the connectee.

There must also be a declared intention to use gas as the primary fuel to heat the home. However, we will not carry out completion audits to verify this has taken place.

5.3.2 Domestic Load Connection Allowance (DLCA)

For domestic connections designated as Fuel Poor and which fall within 23 metres of a relevant main, the costs relating to the DLCA, which are otherwise deducted from the connection charge payable by the connectee, are included as part of the total connection cost for the purpose of applying the Fuel Poor Test, and this allowance therefore forms part of the value of the Fuel Poor Voucher.

5.3.3 Fuel Poor Network Extension Schemes (FPNES)

Where a community of two or more domestic Fuel Poor customers require connection to our Distribution Network System by means of an extension to that network, this will be treated as a Fuel Poor Network Extension scheme. For FPNES schemes, connection Costs will be calculated on a project-specific basis. For the purposes of applying the Fuel Poor Test, the total connection cost will be calculated as the sum of:

- The shared cost element – 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, together with any cost for reinforcement of our existing Distribution Network System attributable to that FPNES scheme. The shared cost element for each domestic connectee will be calculated by dividing the total shared cost for the scheme by the number of premises likely to connect within 20 years of the date of the relevant main being commissioned; and
- The service cost – Calculated for that connection within that FPNES scheme, in the same way as described for Infills in Section 3.4.

For each domestic Fuel Poor connectee, the Fuel Poor Voucher will be used first to offset the customer contribution required in respect of the shared cost element, and any residual Fuel Poor Voucher value will then be offset against the customer contribution required in respect of the service cost for that connection. Any remaining shared cost element or service cost will be payable by the connectee.

Any domestic connectee not designated as eligible under the scheme will be required to pay the total costs attributable to that domestic connection.

For any Fuel Poor connection requested in an area supplied by means of an FPNES scheme after the date of the relevant main being commissioned, the Connection Costs will be determined as the sum of:

- The shared cost element – Where the total shared costs have yet to be fully recovered for that FPNES scheme, the value of the shared cost element will be equal to that payable by previous Fuel Poor connectees in that scheme. Where the total shared costs for that scheme have already been recovered, this will have a value of zero;
- The service cost – Calculated for that connection as for an individual "one-off" connection except that where the shared costs have yet to be fully recovered and less than twenty years have elapsed since the initiation of the FPNES scheme, whichever is the earlier, the resulting value of the Fuel Poor Voucher will not include a Domestic Load Connection Allowance element.;

The value of the Fuel Poor Voucher will be used first to offset any customer contribution required in respect of the shared cost element, and any residual Fuel Poor Voucher value will then be offset against the customer contribution required in respect of the service cost for that connection. Any remaining shared cost element or service cost will be payable by the connectee.

5.3.4 Fuel Poor Connections in Connected Systems

Where an Independent Gas Transporter (IGT) proposes to undertake a network extension to a Fuel Poor community WWU will, on receipt of the necessary information, calculate the level of the Fuel Poor Voucher payment that will apply in respect of that Connected System Exit Point (CSEP). The value of the Fuel Poor Voucher payment will be equal to the lesser of:

- The NPV of the GDN transportation revenue attributable to the Fuel Poor connections in that CSEP; or
- The cost of the scheme multiplied by the NPV of the transportation revenue attributable to the Fuel Poor connections in that CSEP divided by the net present value of the transportation revenue which would be received if the customers were directly connected to the WWU network.

This ensures that the payment from WWU to the IGT does not exceed WWU's revenue from the connection over its lifetime and that WWU's existing customers do not fund a share of the connection cost greater than WWU's share of the total revenue received from that connection.

This calculation will be done using the same principles as used for WWU's Economic Test model.

WWU has allowances and defined outputs in its price control relating the number of fuel poor connections it expects to make during the price control period to its existing network. It has no such allowances relating to fuel poor connections made to connected systems and therefore to avoid WWU having to fund the working capital of these payments, WWU will only guarantee making fuel poor payments for connections made to connected systems at the end of the price control; and on the submission of the appropriate records; however in order to encourage connected systems to connect fuel poor customers WWU will voluntarily make the payments to the IGT upon receipt of the appropriate records subject to WWU being able to bear the cost of the working capital and it have no effect on the operation of WWU's business.

The appropriate records are 'As Laid' drawings and confirmation that heating systems have been installed in all of the properties.

5.4 Adoption of Networks constructed by Third Parties to Non-gas Fuel Poor communities

Subject to the provisions of section 2.3 of this statement, WWU will take ownership of any Fit for Purpose network extension to domestic non-gas Fuel Poor customers constructed by an UIP. Where WWU takes ownership and the network extension contains premises that would have formed an eligible Network Extension Fuel Poor scheme if constructed by us, then we will make a Fuel Poor Voucher payment to the UIP concerned at the time of adoption only where we have received a statement from the UIP concerned, signed by a duly authorised officer of that company, confirming the following:

- Evidence of the eligible Fuel Poor premises connected by means of that network extension from an Ofgem approved fuel poor partner as appointed by the third party.
- The Connection Costs determined by the UIP in respect of each Fuel Poor premises connected by means of that network extension and confirmation that these are a fair and true representation of the actual costs incurred by that company in relation to the specified Fuel Poor connections; and
- That the Fuel Poor Voucher payment will be passed on to the relevant Fuel Poor connectee in respect of each eligible connection in that network extension.

For the reasons given in section 5.3.4 WWU does not receive allowances for these fuel poor connections and therefore WWU will only fund these connections at the end of the price control period. As these connections are likely to include a fairly large number of fuel poor connections with consequent impact on WWU's working capital then WWU cannot make the same voluntary arrangement as for individual fuel poor connections to connected systems and UIPs constructing networks to non-gas fuel poor communities should assume that funding for these connections will only be provided by WWU at the end of the price control.

5.5 Connections to District Heat Networks

Under the FPNES, we can also provide funding towards the supply to a gas fired District Heat Network where it is serving individual customers that would be eligible in their own right for individual connections.

The amount that can be funded will be derived using the approved Ofgem fuel poor calculator by taking the annual gas consumption for the meter point and multiplying this by the percentage of eligible homes within the scheme under the FPNES criteria.

Example

Scheme of 50 homes to be supplied

Gas input to communal boiler is 500,000kWh a year

50% of homes are eligible for funding under the FPNES criteria

Therefore, load used in the Ofgem fuel poor calculator is 500,000kwh x 50% = 250,000kWh.

Section 6 – Disconnection and alteration of gas connection apparatus

A disconnection occurs when a person requests that an existing gas supply pipe(s) is cut off.

An alteration occurs when a person requests the relocation of a gas service pipe, without there being any significant variation in the load at the premises.

In general, WWU will follow the same principles that it applies to connection works in respect of pricing disconnection and alteration services.

6.1 Disconnections

WWU will disconnect service pipes or mains pipes that it owns when requested by the Shipper. If a person who owns or occupies the premises, or a person acting as their agent, contacts WWU to request a disconnection, WWU will disconnect the premises once the Supplier has removed any metering apparatus on that site.

This document, which relates to connection services, does not contain any detail of meter disconnection services or charges.

WWU will charge the cost that it reasonably expects to incur when disconnecting a service pipe. In some instances, WWU will make use of standard charges. In these respects, charges will be levied in the same way as for a new connection. Charges will include appropriate overheads.

WWU will not charge the additional cost where it carries out works, which are in addition to those required to fulfil the requirements of a disconnection customer, and which are designed to enhance its system.

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, WWU may charge an abortive visit charge.

It is possible for service pipe disconnection works to be designated as Sufficient Complexity works.

6.2 Alterations

WWU will alter the position of any service pipe it owns when this is requested by the Shipper or the person who owns or occupies the premises, supplied by that pipe, or a person acting as their agent.

In addition, WWU may relocate the position of any Supply Meter Installation and reconnect outlet pipework on the customer side of the meter installation where this is required as a result of the relocation of a gas service pipe. However, this service will only be offered subject to a survey and being able to utilise the existing meter installation materials.

WWU will charge the cost that it reasonably expects to incur when altering the position of a service pipe. In some instances, WWU will make use of standard charges. In these respects, charges will be levied in the same way as for a new connection.

Where WWU has been requested by a supplier to alter the meter position and / or service pipe to meet the physical needs of:

- The disabled;
- Chronically sick; or
- Persons of pensionable age.

WWU will not charge the customer for this work but will charge the supplier requesting the work. In this instance, 'needs' means that as a result of a person's physical condition, the alteration is required to allow that person to operate the emergency control valve, and / or read the meter.

WWU will not charge the additional cost where it carries out works, which are in addition to those required to fulfil the requirements of an alteration customer, and which are designed to enhance its system.

It is possible for service pipe alteration works to be designated as Sufficient Complexity works.

6.3 Built over mains and services

WWU may find or be informed of a gas main or service that has been built over without the main or service being altered.

In these cases, a risk assessment shall be undertaken. Where the service pipe is deemed to be at low risk (example PE service terminating in a meter box in a new conservatory) we will not alter the service unless the customer pays for the alteration.

If the risk assessment classifies the risk as higher such as a multi occupancy building or a service operating at medium pressure or intermediate pressure within a building, then we will either issue a quotation with a deadline for the works to be accepted and completed by or immediate action may be required to make the situation safe with costs being recovered from the customer.

In either case, the charges will be as described for any other alteration work in Section 6.2.

6.4 Traffic Management Charges

WWU will pass on to customers the appropriate cost incurred pursuant to prevailing traffic management legislation in force at the relevant date. The charges associated with the Traffic Management Act 2004 will be applied to each connections job at the rate appropriate for the Highways Authority in which the work takes place. This policy has been adopted because it is likely that different Highways Authorities will implement permit charges and other charges at different times.

Where a job results in abortive visits by WWU that are not due to the fault of WWU, and this results in additional Traffic Management Act charges then these additional charges will be charged to the customer where applicable.

6.5 Competition in disconnection and alteration services

Competition was introduced into the disconnection and alteration of below 7 barg gas service pipes on the 15th of September 2003.

Where a <=2” steel service pipe is altered by a third party, WWU may require the remaining existing metallic components of the pipe to be replaced by them. In this circumstance WWU will pay a fixed standard contribution to the person carrying out the alteration. Details relating to this contribution are in the Connections Services Charges Document.

Further details may be obtained by writing to the address in Annex B.

Section 7 - System Entry and Storage Connections

7.1 General

All Storage and Hydrogen blending entry connections are treated as being of Sufficient Complexity.

7.1.1 Entry of biomethane and other gases wholly or predominantly methane

WWU will provide connections for entry of biomethane and other gases wholly or predominantly methane to both the above and below 7 barg systems. As stated in section 2.2.1 entry connections to an above 7 barg system are treated of being Sufficient Complexity. Entry connections are provided on a minimum connection basis with WWU owning and operating the minimum connections and the site operator owning and operating the other parts of the entry facility. WWU will allow the site operator to own the gas metering, gas quality, pressure control and odourisation equipment subject to it being properly installed, inspected and maintained in accordance with applicable regulations and access being granted to WWU and any other authorised parties for audit and inspection. All entry connections will be required to sign a Network Entry Agreement before gas is allowed to flow.

The entry point into WWU's system will be as near to the plant producing the gas as practicable. The location of the connection point will need to take into account gas quality including the effect on flow weighted averages and any contaminants that may be present in gas from new sources; odourisation; and flow rates, particularly at times of low demand. In general, WWU will follow the same principles that it applies to Entry and Storage connections as it applies to Exit connections. In all cases, WWU will charge for a remotely operable valve and telemetry at the interface of the connecting pipeline and the system operated by the other party.

Further details are given in WWU's distributed gas connections guide. This has been written for biomethane connections, and we are considering what changes are required for hydrogen entry connections.

http://www.wwutilities.co.uk/media/1351/wwu-distributed-gas-connections-guide.pdf

WWU will work with biomethane producers to facilitate entry of biomethane into the WWU system, this may include manually adjusting system pressures, installation of smart pressure control apparatus or other measures. There may be a charge for some of these interventions. We will accept connections of reverse compression apparatus operated by an Independent Gas Transporter where it is feasible to do so, subject to it not compromising our statutory or other obligations and where other measures to provide entry capacity are not sufficient. A Network Entry Agreement will be required for reverse compression connections. Charges will be applicable for work carried out by WWU to connect reverse compression apparatus to the WWU system.

7.1.2 Entry of hydrogen for blending

Connection enquiries and applications for injection of a gas that is wholly or predominantly hydrogen will be managed using our existing processes subject to changes in Government regulation and policy which is expected to develop over time. These hydrogen connections may include:

a) injection of 100% hydrogen to blend in the WWU mains up to a specified proportion of the volume of gas in that system, and
b) proposals to offtake gas from the WWU system, blending off the WWU network and injection of the blended gas into the WWU system.

arrangement (a) does not require changes to the Uniform Network Code, but arrangement (b) will do. Hydrogen blending requires additional considerations compared to biomethane injection and WWU, in conjunction with other gas transporters, is working on a number of projects to consider and address these issues.

All Hydrogen blending entry connections are treated as being of Sufficient Complexity.

7.1.3 Entry of Hydrogen into 100% hydrogen systems

WWU does not currently have any part of its system where customers are using 100% hydrogen. Such systems and arrangements will be considered in future.

7.1.4 Further information for Entry and Storage operators

Prospective Entry and Storage facility operators should contact WWU for details using the address in Annex B.

7.2 Charging for Connections to Entry or Storage Facilities

Where pipework is required to connect to the existing WWU main then this can be procured by the customer in the same way as for an exit connection, either from a UIP or directly from WWU. To ensure transparency the work for the connecting pipeline will be treated separately from the work required to provide the entry connection.

Where the connection is provided by a third party, WWU offers 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 it applies to other connection works in respect of charging for connections to such facilities (Please also refer to Section 2.14).

When a biomethane plant requests to enter gas into the WWU system, WWU charges for the physical connection and also has two fixed charges listed in our Connection and other distribution services charges statement. There is a charge to carry out a capacity study and a charge to book entry capacity, pay for the satellite and communications equipment that will be owned by WWU and for the support needed from WWU for site commissioning. Should the connection not progress to completion, any funds not spent or committed by WWU will be refunded. The payment secures the capacity agreed to between WWU and the connecting party as stated in the Network Entry Agreement subject to satisfactory progress being made with the connection. A milestone document outlining the key stages in site construction and commissioning will be agreed between WWU and the connecting party. WWU will continue the capacity booking and can extend this period as long as a valid milestone document is in place and progress is being made.

7.3 Reinforcement for Distribution Network-embedded System Entry and Storage Connections

Where connection of Entry or Storage facilities to Distribution Network Systems triggers reinforcement of Distribution Network Systems, the costs of such reinforcement will be charged to the customer within the connection charge.

Annex A – Definitions

1. An **Alteration** is any change made to an existing service pipe, and associated equipment, to premises.
2. An **Approach Main** is a pipe that will become a Relevant Main (not necessarily a Relevant Main that is part of WWU Limited's system) that is designed to connect a new system of pipes with an existing transportation system.
3. **ARCA** stands for Advanced Reservation of Capacity Agreement. An ARCA is required when a firm load is to be booked (this includes load increases).

   An ARCA will oblige the person making the connection (or load increase or transfer) to either ensure that their Shipper books firm capacity (in respect of their supply point, to at least the level of the ARCA) or to pay WWU an appropriate amount to compensate for the loss of transportation revenue. Each ARCA will remain in force for the time specified within it.

4. The **Connection Charging Point (CCP)** is the closest economically feasible[4] point (taking into account any customer request for gas to be made available at a particular pressure) on the WWU system, which is deemed to have enough capacity see (section 3.3.1) 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 WWU subject to any contractual requirements.
5. **Connection Costs** (in respect of system Exit connections) 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.
6. **Design Study** is the design work, which must occur before construction works can commence. Very small projects for example the connection of a small domestic premises requires little in the way of design and no charge is made in respect of design for these projects. WWU applies 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, for example a project may require a feasibility study before it is possible to proceed to a detailed design study.
7. **Design works** can be defined as the preparatory work required before the Physical Connection activity can commence.
8. A **Disconnection** occurs when a service pipe is disconnected from the main.
9. The **Distribution Network System** means the relevant gas pipe-line system owned by WWU within the Distribution Network, as defined in ~~Paragraph 1 in~~Standard Special Condition A3~~E2A~~ of the WWU Licence.
10. 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.
11. The **Domestic Load Connection Allowance** is the contribution that WWU is required to make towards the cost of installing the connection from a premise to the main as required by Condition 4B paragraph 1 of its licence. The contribution is for the laying of the first ten metres of pipe in land that is dedicated to public use. The allowance only applies where the premise is wholly or mainly used for domestic purposes and is situated within 23m of a Relevant Main.

    For the avoidance of doubt, where the customer is statutory fuel poor customer the total allowance received by the fuel poor customer will include the DLCA.
12. The **Economic Test** calculates the maximum economic investment for Specific Reinforcement, which WWU 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.
13. The **Fuel Poor Test** is the test applied within the Fuel Poor Network Extension Scheme.
14. The **Fuel Poor Voucher** describes the value of the Connection Costs which are offset as a result of the application of the Fuel Poor Test and is determined in the manner set out in Section 4.2 of this document. The Fuel Poor Voucher can be used as full or partial payment of the cost of connection by the Fuel Poor connectee.

[4] 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.

15. The **Final Connection** consists of the labour and materials to physically connect the pipe at the point where it interfaces with the WWU Relevant Main but does not include costs of excavation, backfill or reinstatement.
16. **General Reinforcement** of WWU Limited's pipeline system is reinforcement for load growth associated with individual premises expected to consume 73,200kWh a year or less, and for general load growth where this cannot be associated with specific requests for a new or an increased load or an interruptible to firm load transfer.
17. 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.

    WWU 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.
18. A **Minimum Connection** comprises the apparatus, determined by WWU Limited, required to connect apparatus laid by a third party to an above 7 barg system operated by WWU Limited. WWU will not permit a third party to install Minimum Connection apparatus. Minimum Connection apparatus will remain in WWU ownership irrespective of the ownership of the downstream system.
19. A **Multiple** is the provision of new services (which may include an element of mains infrastructure) to an area having new or existing premises, being constructed by a single person or venture, or where all of the owners or occupiers of those premises have expressed a desire to be connected to a gas supply, and where either a single contract to lay all pipes will be formed between WWU and an agent, acting on behalf of all those who wish to be connected, or where all the potential consumers individually contract to be connected to gas before main laying is commenced. It should be noted that a Multiple has more than two premises; one or two premises will be dealt with as if they were individual connections.
20. A NExA is a Network Exit Agreement. This will be applied to all connections to the above 7barg network and to below 7barg network connections where the load is unpredictable. The NEXA will state the maximum amount of gas that can be taken and the allowable profile as well as any restrictions at peak load on the gas network.
21. **Physical Connection Works** are works to supply and lay gas services and mains, including any associated equipment and works to reinforce WWU Limited's system.
22. 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, which is either:
    - Of pensionable age and / or
    - Is a registered disabled person and / or
    - Is a chronically sick person.
23. WWU must ensure that its 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 interruptible to firm load transfer or an increase in load at an existing connection) may cause WWU to need to **Reinforce** its pipeline system, prior to the load being offtaken. 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.
24. 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 2,196,000 kWh a year, 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.
25. **Specific Reinforcement** occurs when WWU has to undertake system reinforcement, or additional system reinforcement, as a result of one or more of the following:
    - An increase the capacity requirements at a supply point; or
    - An increase in the capacity requirements of a Connected System; or
    - The connection of a new supply point where the consumer in question is anticipated to be likely to consume more than 73,200kWh a year; or
    - The connection of a Connected System or where there has been an interruptible to firm load transfer.

26. A **Supply Meter Installation** is the gas meter and associated apparatus used to measure the volume of gas off taken at a Supply Point.
27. A Utility Infrastructure Provider (UIP) is an organisation which designs and constructs gas infrastructure for adoption by Gas Transporters (They may also offer to construct other utility related equipment for example a water service pipe and / or install gas appliances and / or offer other services.)
28. **Winter** is defined as the period from 1st November in any year until and including 30th April in the following year.

Annex B – Contact information

Requests for connections constructed by WWU should be sent to:

Connections Front Desk
Wales & West
Wales & West House
Spooner Close
Coedkernew
Newport
NP10 8FZ

Third party connections requests should be sent to:

3rd Party Connections
Wales & West Limited
Wales & West House
Spooner Close
Coedkernew
Newport
NP10 8FZ

Address for enquiries relating to this statement
Richard Pomroy
Regulation I Manager
Wales & West Limited
Wales & West House
Spooner Close
Coedkernew
Newport
NP10 8FZ

Or by email to CustomerService@WWUtilities.co.uk marked for the attention of Richard Pomroy

Complaints

If there is a problem with the service you receive from WWU then please contact us in writing, by telephone or by email.

Customer Services

Wales & West Limited

Wales & West House

Spooner Close

Coedkernew

Newport

NP10 8FZ

Telephone: 0800 2946645

Email address: enquiries@WWUtilities.co.uk

We will do all we can to solve your problem by working with you. However, if you are still unhappy with our actions and you have followed the necessary stages of our complaints procedure you have the right to contact the Energy Ombudsman who are a free and independent dispute resolution service.

Details of the stages of our complaints procedure and how to contact the Ombudsman are in our complaints procedure. For a copy of our complaints handling procedure please call, write to us or refer to our website at

http://www.WWUtilities.co.uk/Content/OurCompany/PDF/Complaint_handling_procedure.pdf

The Energy Ombudsman can be contacted as follows:

Energy Supply Ombudsman

PO Box 966

Warrington

WA4 9DF

Telephone: 0845 055 0760

Fax: 0845 055 0765

Email: enquiries@energy-ombudsman.org.uk

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

The Chairperson

The Gas and Electricity Markets Authority

Office of Gas and Electricity Markets

10 South Colonnade
Canary Wharf
London E14 4PU

Annex C – Additional Points Relating to Capacity

Capacity booking

The provision of a connection to WWU system does not confer any rights on a party to offtake or introduce gas. Gas may only be offtaken / introduced by a Shipper who is a party to WWU Limited's Network Code and has been licensed by the Gas and Electricity Markets Authority to do so.

Allocation of available capacity

WWU 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 Shipper, which books it in accordance with the WWU's Network Code. Capacity will be allocated on the basis of the date when a Shipper confirms their site nomination and has nothing to do with any connection contract.

Construction of capacity

It is sometimes necessary for WWU to reinforce its system to enable additional gas to be offtaken or to permit gas to be introduced into its system. This work, particularly where it affects an above 7 barg system, may take a period of time to complete. WWU will endeavour to inform customers, 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 offtaken / introduced.

Annex D – Provision of Meter Houses / Boxes

WWU provides meter houses / boxes to customers, which have requested a service pipe from WWU Limited.

WWU will charge for the procurement of meter houses / boxes.

WWU will fit bolt on, Uniboxes and kiosks where included in the quotation.

WWU will not install cavity (built in) meter boxes.

When WWU installs a meter house the associated labour cost is chargeable. WWU will not provide a meter house / box or transport it to site unless it is also going to be installing it.

All charges made in respect of the installation of meter houses / 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.

WWU offers a 1-year guarantee in respect of meter boxes that it supplies, however this is invalidated if any defect or damage has been caused other than by fair wear and tear. WWU does not offer a guarantee in respect of meter houses.

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.
ii. Meter housings refer to all other structures, which are purposely designed to contain gas meters.

Customers may construct their own meter box. Approval of the design must be given by WWU prior to construction.

Annex E – List of Obstacles

Engineering difficulties include, but are not limited to the following;

- river or canal crossings or any body of water, navigable or otherwise
- works that are likely to affect or are in the vicinity of or crossing railways, tramways and tunnels
- bridges that require investigation into the suitability and method of crossing
- sudden and significant changes in ground levels
- major road crossings, including motorways, dual carriage ways or roads that have special engineering difficulties as specified by the relevant highways' agency
- works that are in or likely to affect a SSSI (Site of Special Scientific Interest), Nature Reserve, Scheduled Ancient Monument or Archaeological Site
- infrastructure to any block of flats where the termination point is more than 5 stories above ground level or where a significant amount of internal pipe work is required
- works in any site with specific security restrictions, for example military bases, prisons etc.
- works carried out in top tier COMAH (Control of Major Accident Hazard) sites
- where any apparatus installed may be subjected to significant land movement or subsidence; including the laying of pipe work in the vicinity of mine shafts/workings

Sufficiently Complex reinforcement occurs when the reinforcement includes any apparatus that is designed to operate at above 7 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 required to overcome the obstacle is expected to exceed £10,000; or where the total construction costs including applicable overheads of a connection where there is no obstacle, based on past experience of projects of a similar nature, is expected to exceed £100,000.

A project may also be deemed to be Sufficiently Complex where the customer requires multiple options to be considered for the site, and/or requires more than 8 hours design work and consultation in order for a quotation to be issued.

Annex F – Connection charging examples

Notes on charging examples in this document:

1. Charges are indicative only;
2. Meter work charges are excluded here, but may be shown on connection quotations;
3. VAT is excluded, however will be applied as per the HMRC rules at the time of the quotation and acceptance;
4. Examples exclude any cost pursuant to Traffic Management Act legislation; and
5. Costs shown include overheads and margin.

Note:

Standard charges examples are shown in the Connections and Other Distribution Services Charges document published by WWU.

F1 Connection at a factory unit that is connected to a Distribution Network System

Job Detail

- Existing premises in a street with a WWU Relevant Main. Gas main 10m from curtilage;
- From the street the existing service pipe runs for 25m across a yard before terminating in a meter house;
- No anticipated difficulties associated with the construction works;
- Anticipated annual consumption: 2,100,000kWh; and
- Anticipated peak flow rate: 64 standard cubic metres per hour No requirement for mains reinforcement.

Quote details

Customer would receive a bespoke quotation.

Labour cost	£	5,380
Materials cost	£	1,210
Design charge	£	940
Total charge	£	7,530

F2 Connection from a Distribution Network System to a new housing estate

Job Detail

- 46 proposed properties, a combination of 3 and 4 bedroom houses. Gas main 10m from site entrance;
- 250m main on site;
- Developer excavating and backfilling trenches onsite;
- No anticipated difficulties associated with the construction works;
- Anticipated aggregate annual consumption: 890,000kWh;
- Anticipated peak 6-minute flow rate (entire estate): 58 standard cubic metres per hour; and
- No requirement for mains reinforcement

Quote detail

Customer would receive a bespoke quotation.

Labour cost	£	23,251
Materials cost	£	2,305
Design charge	£	243
Total charge	£	25,799

F3 Connection from a Distribution Network System to a new housing estate where a reinforcement is required

Job Detail

- The estate is identical to that in example 8.4; however, a reinforcement upstream of the Connection Charging Point is required.

Quote detail

Customer would receive a bespoke quotation.

Connection Costs:		
Labour cost	£	23,251
Materials cost	£	2,305
Design charge	£	243
Total Connection Charge:	£	25,799
Reinforcement Costs:		
Labour cost	£	20,619
Materials cost	£	709
Design Charge	£	260
Allowed Investment	£	82,221[5]
Total Reinforcement costs charged	£	0
Total Charge	£	25,799

F4 Infill to a village outside of the gas supply area

Job Detail

- Existing premises in a village that has no gas supply;
- 60 premises in the village, 59 houses and one large public house. Nearest existing gas main 400m from village;
- 900m of infrastructure in village;
- No anticipated difficulties associated with the construction works;
- Anticipated aggregate annual consumption (provided all premises in the village connect) is 740,000 kWh;
- Anticipated number of connections within 20 years = 42 (based upon 70% uptake);
- Number of consumers that are required to sign up and pay before main laying will start = 17 (40% of the anticipate number of connections within 20 years);
- Anticipated peak 6-minute flow rate (assuming 42 properties including the public house connect to gas) = 64 standard cubic metres per hour; and
- No requirement for mains reinforcement

5 This information is not normally provided to a customer

Quote details

Potential consumers in the village are quoted on the basis of bespoke estimate of mains cost (divided by the number that are believed to be likely to connect in 20 years) plus a bespoke charge for each individual service (note: The 10m allowance is not applicable under the Gas Act where the customer is funding the mains infrastructure).

Mains Cost:

Labour cost	£	85,960
Reinstatement	£	47,900
Materials cost	£	12,820
Design charge	£	315
Total charge	£	146,995

Mains contribution required from each person requiring a connection = 146,995/42=£3,500

Typical domestic service cost = £500-£1300

Total cost to the connectee £4,500 (£3,500 plus assumed £1,000 domestic service cost)

WWU would therefore require 17 customers to initially pay the mains and service contribution in order for the scheme to proceed. Customers wishing to connect over the next 20 years would pay the mains contribution adjusted for inflation plus the service charge at the time of application or until the target penetration of properties was reached, whichever occurred first.

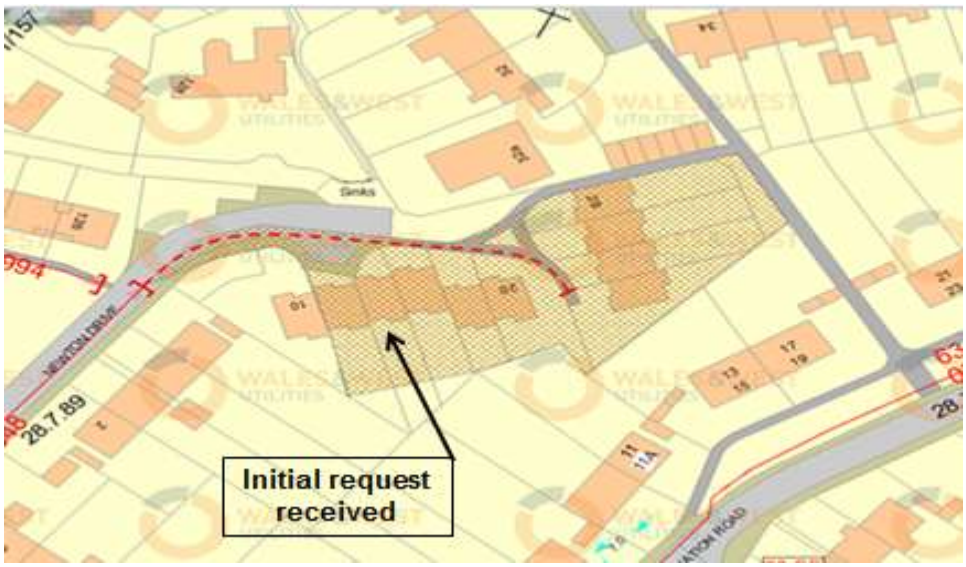
The owner of the public house would be charged a bespoke price for their service pipe, which would not include an allowance, however as their annual consumption is likely to be less than 2,196,000kWh they would pay the same mains contribution as the potential domestic consumers.)

Homes eligible for support under the FPNES would be funded up the NPV of the future transportation income, currently around £2,300. The customer would need to pay the balance of £2,200 (4,500 less 2,300) plus VAT the applicable rate.

F5 Infill to an off gas street

Job Detail

- Existing premises in a street that has no gas supply
- 9 properties within the scope of the mini-infill
- 66 metres of infrastructure main required for infill
- No anticipated difficulties associated with the construction works
- Anticipated number of connections within 20 years = 9 (based upon 100% uptake)
- Only 1 acceptance will be required to accept and pay before main laying will start
- No requirement for reinforcement



Quote details

The infill methodology quote is produced instead of a long service quote to a small number of customers to reduce costs and potential enhancements. The customer is quoted on the basis of infill cost (divided by the total number of properties within the scope which can potentially connect onto the infill main) plus a bespoke service charge for each individual service (note: The 10m allowance is not applicable under the Gas Act where the customer is funding the infrastructure)

Mains Cost:

Labour Cost	£ 6,268.52
Reinstatement	£ 1,290.55
Material	£ 3,234.64
Design Charge	£ 0
Total charge	£ 10,793.71

Mains contribution required from each person requiring a connection = £10,793.71 / 9 =£1,199.30

Bespoke service cost = £797.78

Total cost to the customer £1997.08 (£1199.30 plus bespoke service cost £797.78)

WWU would therefore require 1 customer to accept and pay for the mains and service contribution, WWU would set the scheme up as a Live Mini Infill scheme. Customers wishing to connect over the next 20 years would pay the mains contribution adjusted for inflation plus the service charge at the time of application, or until the total scope of the scheme have connected onto the infill main, whichever is the sooner.

F6 Fuel poor network extension built by UIP

The scheme will work exactly as for examples F4 except that the UIP costs would be substituted for WWU costs and any charges to customers amended as appropriate. The customers would deal with the UIP and then UIP would be required to organise the partners.

Any payment of the fuel poor allowance by WWU to the UIP will be made at the end of the price control period when WWU has demonstrated to Ofgem's satisfaction that the payment can be added to its Regulated Asset Value. The UIP will be responsible for organising the scheme, approving partners and providing sufficient information to WWU and will bear the risk of not receiving the contribution.

F7 Fuel poor network extension built by IGT

Job Detail

- Gas Transporter's system situated adjacent to an existing WWU Limited Relevant Main;
- Gas Transporter to install their system up to WWU Relevant Main;
- 9 houses planned to be connected;
- No anticipated difficulties associated with the construction works; and
- Anticipated aggregate annual consumption (CSEP AQ) 758,851kWh No requirement for mains reinforcement
- IGT connection cost (mains and service) £800 per house.

Based on above the NPV of CSEP revenue is £640 and the ratio of the CSEP revenue to the "all the way revenue" is 35%.

For each connection made to the IGT fuel poor network extension WWU will contribute to the IGT the lower of either the NPV of future transportation income to the CSEP for that connection (£640) or the total cost for connecting the customers multiplied by the share of the total all the way revenue received by WWU (£280(-£800*35%)).

Therefore, in this case WWU will pay the IGT £280 from WWU for each fuel poor connection.

WWU will only guarantee to make the payment will be made at the end of the current price control period when WWU has demonstrated to Ofgem's satisfaction that the payment can be added to its Regulated Asset Value. The IGT will be responsible for organising the scheme, approving partners and providing sufficient information to WWU and will bear the risk of not receiving the contribution.

F8 Connection from a Distribution Network System to another Gas Transporter's system supplying a housing development

Job Detail

- Gas Transporter's system situated adjacent to an existing WWU Relevant Main;
- Gas Transporter to install their system up to WWU Relevant Main;
- No anticipated difficulties associated with the construction works;
- Anticipated aggregate annual consumption 1,560,000kWh;
- Anticipated peak 6-minute flow rate: 45 standard cubic metres per hour; and
- No requirement for mains reinforcement.

Quote detail

Customer would receive a bespoke quotation.

Labour cost	£	1,976
Materials cost	£	220
Total charge	£	2,196

Annex G – Economic Test Examples

The following examples show how the Economic Test is applied to different types of connection requests, namely a housing estate, a connected system (which is also a housing estate) and an industrial or commercial connection. While the connection details are fictional, the other numbers shown in these examples have been produced by the new Economic Test model, effective from October 2017. Therefore, numbers may not reflect any period before 1st October 2017 or after 1st April 2018, although the principles will still apply.

G1 – Example Housing Estate

AQ:	2,800,000 kWh
SOQ:	22,560 kWh
SHQ:	1,800 kWh
No of Premises:	100 domestic properties

	Amount	Units
Load Income	24,570	£ p.a.
Marginal Opex	(2,060)	£ p.a.
Net annual income	22,510	£ p.a.
Income capitalisation factor	18.9	Number
Capitalised net income	425,490	£
One-Off Opex	(610)	£
General Reinforcement	(630)	£
Total One-off costs	(1,250)	£
Allowable Investment	424,250	£

G2 – Example Connected System operated by another GT

AQ:	2,800,000 kWh
SOQ:	22,560 kWh
SHQ:	1,800 kWh
No of Premises:	100 domestic properties

	Amount	Units
Load Income	10,260	£ p.a.
Marginal Opex	(1,760)	£ p.a.
Net annual income	8,500	£ p.a.
Income capitalisation factor	18.90	Number
Capitalised net income	160,640	£
One-Off Opex	(610)	£
General Reinforcement	(630)	£
Total One-off costs	(1,250)	£
Allowable Investment	159,390	£

G3 – Example Industrial or Commercial connection

AQ:	800,000 kWh
SOQ:	5,480 kWh
SHQ:	450 kWh
No of Premises:	1 Non-Daily metered industrial premises

	Amount	Units
Load Income	3,840	£ p.a.
Marginal Opex	(310)	£ p.a.
Net annual income	3,530	£ p.a.
Income capitalisation factor	18.9	Number
Capitalised net income	66,770	£
One-Off Opex	(610)	£
General Reinforcement	(150)	£
Total One-off costs	(770)	£
Allowable Investment	66,000	£