



ES PIPELINES LTD

Transportation Charges Statement

Effective from 1st April 2014

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2. Introduction

This document sets out the gas transportation charges which apply for the use of the ES Pipelines Ltd (“ESP”) gas transportation networks. It is prepared in accordance with the requirements of Condition 4 of ESP’s Gas Transporters (“GT”) licence, the Utilities Act 2000 and the Relative Price Control (“RPC”) guidelines. It is important to note that this document does not override or vary any of the statutory, licence or Network Code obligations upon ESP.

For more information on the charges set out below, please contact ESP at the following address:

ES Pipelines Ltd
Hazeldean
Station Road
Leatherhead
KT22 7AA

Tel: (01372) 227 560
Fax: (01372) 377 996

3. Persons Entitled to Ship Gas

A suitably licensed gas Shipper that has agreed to the ESP terms and conditions to enable it to ship gas through ESP’s gas transportation systems. This includes being a signatory to the ESP Network Code.

4. Standards of Service

Where the applicant is not satisfied with the terms and conditions offered, and an agreement with ESP cannot be reached within a reasonable time, either party may request settlement by Ofgem (9 Millbank, London SW1P 3GE).

ESP has produced a document outlining its standards of service to end users on its networks. For a copy please contact ESP at the address given.

5. ESP Network Code

The ES Pipelines Network Code (incorporating the iGT Uniform Network Code) is the legal document that defines the rights and responsibilities of ESP and its shipper customers in relation to the use of the gas transportation and storage systems. There are a number of areas of the ESP Network Code that impact upon the cost to Shippers of using the ESP transportation network, therefore reference should be made to the ESP Network Code (as modified from time to time) for details of such charges and liabilities.

6. Payment Terms

A more detailed description of the payment terms can be found in the ESP Network Code (incorporating the iGT UNC). A summary is provided below.

Invoices

Shippers will normally be invoiced on a monthly basis and the invoice will be for the applicable charges for the previous month. The invoices are derived from the transportation charges shown within this document.

A Shipper will normally be invoiced for a supply point as soon as they take responsibility for that supply point.

Units

Charges expressed in pence per kilowatt hour or pence per peak day kilowatt hour are definitive charges for billing purposes.

The tables show capacity charges for peak kilowatt hours at a daily rate which will be used for capacity, commodity and fixed charges.

In the formulae describing the charges there are terms which are defined as follows:

PL_{SP}	This is the Peak Load of the individual supply points on the ESP networks (also known as the SOQ) which are calculated from the End User Category load factors (applicable at the time) and the supply point's AQ_{SP} . This will change if the AQ_{SP} and/or load factor changes in the future.
PL_{CSEP}	This is the aggregated Peak Load obtained from the AQ_{CSEP} for each ESP network (also known as the AQ_{CSEP} SOQ) which are normally calculated by the DN Operators applying the domestic load factor to the AQ_{CSEP} . Occasionally ESP and the DN Operators may agree this to be inappropriate (e.g. there is a large dominant premises with a load factor significantly different to the domestic one) and therefore agree on a different load factor value being used. This is the aggregated Peak Load which the DN Operators use to calculate the CSEP LDZ capacity and commodity unit charges at any one time.
PL_{RPC}	This is the Peak Load of the individual supply points on the ESP networks (also known as the SOQ) which are calculated from the End User Category load factors (applicable when the RPC charges were calculated) and the supply point's AQ_{RPC} . Note that once set the PL_{RPC} does not change even if the supply point's AQ and SOQ changes in the future.
$CSPL_{RPC}$	This is the aggregated Peak Load obtained from the total of all PL_{RPC} s for each ESP network (also known as the $CSAQ_{RPC}$ SOQ).
AQ_{SP}	This is the forecast annual consumption of gas for the individual supply points on the ESP network, which is used to calculate the PL_{SP} from the load factors given by the End User Categories. These AQs are used by the DN Operators to calculate the individual CSEP capacity and

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commodity charges for each supply point. It should be noted that these would change when an AQ review is carried out.

AQ_{CSEP}	This is the aggregated consumption nominated at the CSEP for each ESP network (also known as the CSEP AQ) which the DN Operators use to calculate the CSEP capacity and commodity unit charges. This includes supply points not yet connected to the ESP network, but predicted to connect in the future. It should be noted that this aggregate AQ will not change when the individual AQ_{SP} change because of an AQ review, therefore it is not the Aggregate of the “current” AQ_{SP} but the aggregate of the “initial” AQ_{SP} .
AQ_{RPC}	This is the deemed annual consumption of gas for the individual supply points on the ESP network based on the principles of RPC (also known as the RPC AQ).
$CSAQ_{RPC}$	This is the aggregated consumption for the ESP network when fully developed based on the principles of RPC (also known as the RPC CSEP AQ) which are calculated from the total of the AQ_{RPC} described above.

NOTE: The AQ_{CSEP} and the $CSAQ_{RPC}$ would be in most cases the same. This is because when a connection agreement is made with the DN Operators it is based on the aggregated initial AQs of all supply points expected to connect to the ESP network when it is fully developed, which generally is the same as the aggregate of the AQ_{RPC} s. However they may differ because:

- ESP may use different initial AQ values for the supply points when dealing with the DN Operators where it believes the AQs calculated using the principles of RPC are not suitable, as it should be noted that the DN Operators and ESP also use the AQ_{CSEP} for designing the network.
- The network may be extended which requires the AQ_{CSEP} to be increased (for both charging and design purposes), for example, another GT connects another network to ESP's. Under the principles of RPC, the $CSAQ_{RPC}$ cannot always be increased to reflect this.

For charging purposes the PL_{SP} and PL_{CSEP} used are those calculated at the end of each month.

VAT

All charges in given in this Statement of Transportation Charges are net of VAT. Where VAT applies, it will be added at the appropriate rate according to the tax laws prevailing at the time.

7. Modification of Gas Transportation Charges

The gas transportation charges will be reviewed on an annual basis and any adjustments will become effective on the relevant day in accordance with RPC guidelines. Because RPC charges are a defined methodology ESP will be deemed to be following its methodology when carrying out such modifications, and so ESP will not be required to give shippers prior notification of the change.

There may be occasions when the gas transportation charges will need to be modified before the annual review, and on these occasions all reasonable endeavours will be made to forewarn the relevant Shippers and any other relevant parties before the changes become effective. Some examples of when such modifications may be required are as follows:

- Directed to do so by Ofgem, or the Director.
- Changes in the regulations, or the law.
- Unforeseen expenses and significant changes in the economic environment.
- Modifications to the DN Operators' and other GTs' transportation charges.
- The formulas for the DN Operators' tracking need changing to ensure RPC is adhered to (see section 10.0 for more details).

8. Costs Used to Derive the Gas Transportation Charges

The charges are designed to reflect the relative costs of constructing, maintaining and operating the different parts of the ESP gas distribution systems, the main elements of which are as follows:

Mains Network

Gas currently enters the ESP networks mainly from connection points onto the DN Operators' national gas transportation network, but also from connection points to other iGT networks. These connection points are referred to as "Connected System Exit Points" ("CSEPs"). In the future other types of entry points may be added which could include storage facilities, and terminals.

The cost for the ESP mains network is therefore the gas pipeline system which brings the gas from the CSEP to the service pipes of the end users. The main constituent costs for these Mains Networks are as follows:

- Provision of the CSEP connection.
- The installation of the gas mains pipes.
- Any apparatus which forms part of the mains network, for example pressure regulating units or compressor stations.
- Consents required for the network, for example easement payments to landowners.
- Operation, maintenance and repair of the mains network.

Service Pipes

The gas supply is brought from the ESP mains network to the premises by way of dedicated service pipes. The main constituent costs for Service Pipes are as follows:

- Provision of the connection to the ESP mains.
- The installation of the service pipe.
- Any apparatus which forms part of the service pipeline, for example pressure regulating units or compressor stations.
- Consents required for the service pipe, for example easement payments to landowners.
- Operation, maintenance and repair of the service pipe.

Meters

End users have a choice of who provides their metering service and therefore are not restricted to having an ESP meter to measure their gas offtake. If the end user does choose ESP as their meter service provider then there will be an additional metering charge added to the transportation charges to cover the installation, maintenance and repair of the ESP meter. Details of ESP's metering charges can be found in the document "Gas Metering Charges", a copy of which can be requested by contacting ESP at the address given.

Emergency Service

ESP is responsible for the emergency service to deal with gas escapes both upstream and downstream of the end user's meter. A full repair service is provided to deal with escapes on the ESP network, and a "make safe" is provided for escapes downstream of the end user's meter, following which the end user is responsible for any necessary repairs.

Theft of Gas

The licensing regime places incentives on transporters, shippers and suppliers to take action in respect of suspected theft of gas. Certain costs associated with individual cases of theft are recovered through transportation charges. ESP's charges reflect these requirements, with ESP remaining cash neutral in the process. The charges below do not include any adjustment relating to costs associated with individual cases of theft.

Business Rates

Business rates are levied on gas pipeline assets and therefore these need to be included in the gas transportation charges as an operating cost.

Meter Reading

There is a requirement to periodically read the meters at an offtake point, the conditions for which are set out in the supply licence and the ESP Network Code (incorporating the iGT UNC). Shippers are required to organise the agent that will read the meters they are responsible for.

General Administration and Development Costs

There are general administrative and development costs which ESP incurs through operating its gas networks. These can include the following:

- Operation of a supply point administration service.
- Operation and development of the required computer databases.
- Billing and other financial functions.
- Network Code upkeep and modifications.
- Safety Case upkeep and development.
- Production and upkeep of other required documentation.
- Gas Transporter licence fee.
- Gaining accreditation and complying with industry standards and schemes.

9. Methodology Used to Calculate Gas Transportation Charges

9.1. Introduction

When a gas Shipper brings gas from a terminal to a meter connected to an ESP network there are two sets of gas transportation charges levied upon it. The first are the DN Operators' charges which cover the transportation of the gas from the terminal through a DN Operator's gas network(s) to the CSEP. These are referred to as the (DN Operators) "CSEP Charges". The second set of charges are ESP's to bring the gas from the CSEP through ESP's gas network to the meter. These are referred to as "ESP Charges".

It should be noted that if the meter were connected directly to a DN Operator's network, only that DN Operator's charges would be levied because the gas would only pass through the DN Operator's network. These charges are referred to as the "DN Operators' Supply Point Charges".

The DN Operators are the dominant GTs within the United Kingdom and therefore the majority of meters are connected directly off their networks. As a result, gas shippers generally base their pricing strategy on the DN Operators' Supply Point Charges. Therefore as an industry they have expressed their preference that the DN Operators' CSEP Charges and the ESP Charges when added together should equal the DN Operators Supply Point Charges. This ensures that supply points on ESP's network can be priced in line with their pricing strategy (known as "the DN Operators Equivalent Charges"). This preference also extends to the majority of end users who would like their gas costs to be the same regardless of whether they are connected to an ESP or a DN Operator's network.

The only exception to this market preference is found when a network to an estate or village of existing domestic premises (known as an "infill network") is developed. This is because to keep to the DN Operators' Equivalent Charges would require ESP to charge customers a connection charge which would be too high to encourage enough of them to take a gas connection to make the project economically viable. However, if the charges were increased above the DN Operators Equivalent Charges, ESP would be able to invest more capital into the project, as it would receive a higher income stream, and so enable it to reduce the connection charge down to a level where the project becomes economically viable. If the increase is not too large (i.e. the price of gas remains competitive) then the domestic customers prefer this method of charging as it firstly allows the project to proceed so giving them the option of taking a gas supply and also it reduces the connection charge to an affordable level.

In recognition of the market's preference Ofgem has subsequently introduced Relative Price Control ("RPC") as a method of ensuring all independent Gas Transporters apply the DN Operators Equivalent Charges (except for domestic infill networks, where a 10 pence per therm supplemental charge is permitted under relevant circumstances).

9.2. Relative Price Control

Basic Principle

The basic principle of Relative Price Control (RPC) is that the maximum charge levied by ESP ("TC") should be the difference between the DN Operators' Single Supply Point ("SSP") Charge and the DN Operators' charges to the CSEP ("CSEP") with the exclusions listed below. The individual supply points are then divided into four types and each is treated as follows:

New Housing: The initial charge calculated is expressed as a fixed amount in "£ per year" based on the charges applicable at the time. Then each year Ofgem will issue an average "% Change" based on how the DN Operators' charges have changed on average that year. The iGT must then multiply the % Change by the initial £ per year to calculate its new charge for the coming year. (For example if the initial charge was £50 per year and Ofgem issues an average price rise of 2% the new charge will be £51 per year.) As this is a fixed charge it will not vary in line with the AQ of the property, therefore if the AQ is varied because a review was carried out using meter reads the fixed charge will NOT change as a result. This charge is also subject to a floor and ceiling as outlined below.

Domestic Infill: The initial charge calculated is expressed as a unit charge in "pence per kWh" based on the charges applicable at the time. Therefore, the actual charge for an individual property is the current AQ for that property multiplied by the unit charge. Each year Ofgem will issue an average "% Change" based on how the DN Operators' charges have changed on average. The iGT must then multiply the % Change by the current base unit charge to calculate its new charge for the coming year. (For example if the initial charge was 6.25 pence per kWh and the AQ is 800 kWh then the annual charge will be £50. If Ofgem then issues an average price rise of 2% the new charge will be 6.375 pence per kWh, which if the AQ does not change,

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means an annual charge of £51.) As this is a unit charge the total charge will vary with the AQ of the property, therefore if the AQ is varied because a review was carried out using meter reads the total charge WILL change if this actual AQ is different from the initial AQ used. This charge is also subject to a Floor and Ceiling as outlined below.

In addition to this unit charge based on the DN Operators' equivalent charges, an iGT has the option of adding a Supplemental unit charge of up to 0.3412 pence per kWh for up to 20 years (from the date of the first connection) for domestic premises only. (This cannot apply to commercial premises even if they use less than 73,200 kWh annually.) This Supplemental charge is increased every year from the entry date in line with inflation.

Industrial and Commercial ("I&C"): An iGT has two options for these premises. Either:

1. use charges that are calculated and modified using a unit charge in "pence per kWh" and the current AQ for that property, in the same way as Domestic Infill. (This charge is also subject to a Floor and Ceiling as outlined below.) Or;
2. the iGT can continually track the DN Operators' charges making sure its charges are always the difference between the SSP and CSEP based on the DN Operators' current methodology and the premises' actual AQ. These charges are NOT subject to a Floor and Ceiling in recognition that these charges will never deviate from the DN Operators Equivalent prices.

It should be noted that an iGT can only use one option for all of its networks (i.e. it cannot mix the two charging methodologies for sites connected to its networks). However, it can split its sites into two types; above and below 732,000 kWh per annum, and can apply either option 1 or 2 to each type.

ESP has taken the decision that all its networks with I&C sites will be charged using Option 2, and so will continually track the DN Operators' charges to ensure they are always the DN Operators' Equivalent. This is because from its own analysis ESP has concluded that using a unit charge based on an initial AQ that is not updated when the AQ is changed will result in the future charges deviating - sometimes quite significantly - from the DN Operators' Equivalent charges. This is the reason for NOT choosing Option 1.

It should however be noted that even with Option 2 there is a number of discrepancies in how the RPC CSEP charges are calculated and how the DN Operators actually calculate the CSEP charges that are billed to the shipper. This will inevitably affect the iGT charges calculated, as the differential between CSEP and SSP charges (as calculated by RPC) will be different to the differential calculated by the DN Operators using their methodology (these discrepancies are discussed in the section entitled "The DN Operators' CSEP Charges"). However, currently these discrepancies in the majority of cases favour the shipper because the DN Operators' methodology produces a lower CSEP transportation charge with the result that overall the shipper is not charged as much as the equivalent DN Operators' SSP charge. Where this is not the case ESP will endeavour to adjust its RPC charges to ensure the shipper does not pay significantly more overall than the equivalent DN Operators' SSP charge (subject to no significant changes to the DN Operators' current methodology).

ESP reserves the right to review its I&C methodology should changes to arrangements outside of our control result in a significant impact on costs or revenues at affected supply points.

Exclusions from RPC

When calculating the SSP and CSEP charges based on RPC it should be noted that the following charges are NOT included in any calculations:

- All charges for the provision and operation of meters.

- Meter reading services.
- The DN Operators CSEP administration charge (if applicable).
- NTS entry capacity charges where determined by auction (currently that would include all National Grid's NTS entry charges).
- Any other charges determined by Ofgem (currently there are no other exclusions).

Floor and Ceiling

Ofgem has issued a forecast of how the DN Operators' charges are expected to change in 8 regions of the country. A tolerance of + 5% and – 5% on each side of these expected changes is the range that the iGTs charges are allowed to vary within and so set the Floor (below –5%) and Ceiling (above +5%). Therefore, if after Ofgem has issued an average “% Change” based on how the DN Operators' charges have changed on average that year, and this causes the fixed or unit charge to go above the Ceiling then the iGT **cannot** increase its charges to this amount. Instead it can only increase to the Ceiling's value. Likewise, if the fixed or unit charge goes below the floor then the iGT only has to decrease its charges to the Floor's value, although this is at the iGT's discretion.

The path of the Floor and Ceiling declines (on a real basis) in accordance with a fixed percentage set out in the iGT's licence. This is designed to reflect the relevant decline in the DN Operators' charge over a twenty year period as forecast by Ofgem.

It should be noted that the Floor and Ceiling are only applied at the Entry Date of a network. Therefore, regardless of how the DN Operators' charges have changed in the past and whether other networks have been restricted by either the Floor or Ceiling, new networks will start on the basis that there is no variance from the DN Operators' charges.

Entry Point

To determine which of the DN Operators' transportation charges should be used to set the initial fixed or unit rate, an “Entry Date” needs to be set. An iGT has 2 options when deciding the entry date, which are as follows:

1. The date of a binding contractual agreement, which relates to the whole network. If this is used then the initial charge is calculated for ALL supply points which are expected to connect off the network using the DN Operators' charges. This is the simpler of the two options as it only requires a single set of calculations initially for all supply points and these are all modified by Ofgem's yearly adjuster regardless of whether or not individual supply points are connect to the network. These charges which are calculated and adjusted annually for supply points not yet connected are termed “Shadow Charges”.
2. The date of connection for each premise. This method is more complex as it requires the iGT to calculate the individual charge for each connection point based on the DN Operators' transportation charges current at the date of connection. Also the NExA AQ (discussed below) for new housing will change over time adding to the complexity of the calculation of charges.

ESP has decided that it will use Option 1 for all its networks as it is less complex to apply and the resulting ESP charges will be much easier for shippers to verify. It also gives shippers a long-term certainty as to all the charges for the future supply points on a network as they will be published at the start, not as the network is developed. To determine what is a binding contractual arrangement ESP will use the following principles:

- This concept of a binding contractual agreement is simple to define for new housing developments, as there is generally a developer which the iGT contracts to for the installation of the gas network for all houses. This is also generally the case for new I&C estates where a developer is building the site in the same way.

- However, for domestic infill and I&C projects where individual customers are dealt with this is not easily defined because contracts are issued over a period of time, as and when connections are required. Therefore for these projects the Entry Date will be when the iGT informs Ofgem of its intention to develop a project and so will be making a commercial commitment to the project within the near future. This commercial commitment usually starts with contracting to a contractor for the installation of the network, which takes the form of a binding contractual agreement. It should also be noted that because these projects can have a significant lead-in time the Entry Date could be much in advance of the first connection.

Gas Consumption Values

There are several different types of gas consumption values used for the purposes of RPC depending on the circumstances. They are as follows:

New Domestic Housing: Within the NExA there is a table which lists the average annual gas consumptions for different property types depending on their location. When calculating the initial charges for new housing the iGT must only use these NExA AQ values. It should be noted that the NExA AQ table may be updated periodically when iGTs carry out a review of their Aqs using meter reads (as a larger sample of actual Aqs can be used to determine the average AQ for each house type). This change to NExA Aqs may be proposed either by iGTs or by shippers. The $CSAQ_{RPC}$ used for the calculation of the CSEP charges must also be an aggregate of the NExA Aqs.

Domestic Infill: There are no standard AQ values which can be used for domestic infill premises as the variation in property type is so great and because how the gas is to be used is not readily known (e.g. will it be used just for a cooker, or will a gas boiler be installed?). Therefore ESP can only estimate an average AQ_{RPC} based on an overall assessment of the types of properties within the network's area. Also ESP cannot agree initial AQ_{RPC} values with shippers as when the charges are being calculated the network is unlikely to be installed and so there will be no gas contracts between suppliers and customers in place. Therefore the initial AQ_{RPC} s will be determined by ESP and the $CSAQ_{RPC}$ used for the calculation of the CSEP charges must also be an aggregate of these AQ_{RPC} s. It should be noted that there is **no difference** in the unit charge if different AQ_{RPC} values are used anyway, therefore it does not matter if accurate AQ_{RPC} s are used or not. (For example taking a theoretical network using an AQ of 1,000 kWh the ESP charge would be 0.241 pence/kWh, however if the AQ used was 70,000 kWh the ESP charge would STILL be 0.241 pence/kWh.)

Industrial and Commercial ("I&C"): Unless an existing site is being connected where the gas load required could be accurately calculated from the existing fuel usage, in most cases AQ values are difficult to calculate accurately, if at all. For example if it is a new industrial estate the occupants of the units are unknown when the calculations need to be carried out and the actual occupants may have very different gas requirements (i.e. it could be only a small office heating requirement, or it could have a process load using a very large amount of gas). Also if an existing premise does not want to connect to the gas network initially it is not possible to forecast what AQ it will have when it does connect in the future. In addition ESP cannot agree initial AQ_{RPC} values with shippers as when the charges are being calculated the network is unlikely to be installed and so there will be no gas contracts between suppliers and customers in place. Therefore the initial AQ_{RPC} s will be determined by ESP and the $CSAQ_{RPC}$ used for the calculation of the CSEP charges must also be an aggregate of these AQ_{RPC} s.

Mixed Developments: Where a network has a mixture of the above property types, then the $CSAQ_{RPC}$ is the sum of ALL the AQ_{RPC} s of all the property types, calculated by the principles described above.

Peak Loads (SOQ): To calculate the PL_{RPC} for all the above property types the applicable DN Operator's EUC load factor (current at the Entry Point) is applied to the individual AQ_{RPCS} . The $CSPL_{RPC}$ (total Peak Load for the CSEP) is the sum of all these PL_{RPCS} .

The DN Operators' CSEP Charges

The DN Operators' charges to the CSEP are based primarily on the Aggregate AQ for the network for ALL connections that are forecast to take gas from the network. Therefore, an iGT submits a 10-year forecast to the DN Operators when it requests a connection and the DN Operators take the 10th year's total AQ value (both domestic and I&C) as the AQ_{CSEP} . This is used from the outset and does not change in value unless the iGT needs to re-submit its connection request. This would occur where there has been a significant change to the network (e.g. it is extended, or a property requires an increase gas load) at which point the DN Operators will update the AQ_{CSEP} to reflect the new 10th year's total AQ value.

In theory the AQ_{CSEP} should be the same as the $CSAQ_{RPC}$. However, this is not always the case because the AQ_{CSEP} is used by both the iGT and the DN Operators for design purposes. Therefore the individual site AQs used for RPC may not be suitable for calculating the total AQ required at the connection point. Also there may be additional capacity required for loads the iGT cannot use in its RPC calculations, for example other gas transporters' networks that connect at a later date.

The aggregated SOQ (" PL_{CSEP} ") which a DN Operator uses to calculate the CSEP LDZ capacity and commodity unit charges are derived directly from the AQ_{CSEP} . Therefore this is calculated at the start of the project and remains fixed unless the AQ_{CSEP} is modified in the future. The PL_{CSEP} is normally calculated by the DN Operators applying the domestic load factor to the AQ_{CSEP} (i.e. no allowance is made for different load factors for any I&C AQs). However occasionally an iGT and the DN Operators may agree this to be inappropriate (e.g. there is a large dominant premises with a load factor significantly different to the domestic one) and therefore agree on a different load factor value being used.

It should be noted that as the $CSPL_{RPC}$ (total Peak Load for the CSEP) is the sum of all the PL_{RPCS} which use individual load factors, where a network has I&C sites the PL_{CSEP} will not be the same as the $CSPL_{RPC}$ even if the AQ_{CSEP} is the same as the $CSAQ_{RPC}$, as the DN Operators only use the domestic load factor. The only exception to this is where the iGT agrees with the DN Operators to use another load factor.

Therefore in summary the AQ_{CSEP} and PL_{CSEP} are calculated at the start of a network being installed and they remain FIXED (apart from changes to PL_{CSEP} when the domestic end user load factor changes) unless there is a significant change to the network requiring them to be updated. It should also be noted that $CSAQ_{RPC}$ and $CSPL_{RPC}$ are set at the same time as the AQ_{CSEP} and PL_{CSEP} and these also remain FIXED unless modified in agreement with Ofgem.

For Option 2 charges for I&C supply points (as chosen by ESP) when calculating the CSEP charges the iGT must use $CSPL_{RPC}$ to calculate both the capacity and commodity unit charges, not PL_{CSEP} as used by the DN Operators.

The individual AQs of the connections (" AQ_{SP} ") used to nominate gas at the CSEP will however change over time as they are updated from AQ reviews carried out periodically. This means the individual SOQs (" PL_{SP} ") will also change as the AQ_{SP} changes, and in addition if the EUC of the connection point crosses over a threshold, or a winter ratio changes.

Region and Relevant Load Factors

The calculation of all charges should use the same regional values as defined by the DN Operators. Also any load factors used should be calculated using the same End User Categories (“EUC”) and their associated load factors as used by the DN Operators.

Interruptible Transportation

Currently ESP has not formulated a reduction in charges if a supply point is nominated as interruptible on an ESP network, as there are currently no ESP networks on which it is appropriate to offer an interruptible connection. However Shippers may have an interruptible service from the DN Operators up to the CSEP and for these Shippers ESP will offer a reduction in its transportation charges. This is to ensure its charge plus the DN Operators’ CSEP charge is the same as the DN Operators’ (interruptible) Supply Point Charge, in line with the RPC DN-tracking methodology. Therefore, for these DN Operators’ interruptible CSEPs the “Capacity Charges” in the Mains Network Charges for the supply point will not be charged.

9.3. Methodology Used to Calculate Charges

As the transportation methodology is based on keeping the charges to the same level as the DN Operators’ Supply Point Charges, the following methodology is used to ensure that the transportation charges are reflective of the costs incurred by:

Step:

1. Using the gas transportation charges detailed in section 10 “Gas Transportation Charges”, the income which ESP would reasonably expect from the network over a period of time is calculated. This will take into account the assumptions detailed in this Statement of Transportation Charges and any other considerations which are specific to the network.
2. The expected operating costs for the network over a period of time are then calculated which will take into account the assumptions detailed in this document (including tax, business rates and interest rates on capital) and any other considerations which are specific to the network.
3. The operating costs calculated in Step 2 are subtracted from the transportation income calculated in Step 1 to provide the profit from which any capital ESP invested in the network is recouped.
4. An assessment will then be made on the individual networks as to the risks involved in investing in the network, which includes the following considerations:
 - Possible reductions in gas offtake from the network due to inaccurate forecasts by end users, switches in fuel usage, bankruptcies or closures of commercial premises, etc.
 - Delays in end users taking a gas supply due the development of the site, conversions to gas usage, etc.
 - Possible increases in the operation and maintenance costs.
 - Additional capital invested during the installation of the network which was not budgeted for.
5. Using risk assessment, a commercial payback period is calculated for the network and then the total profit which is expected from the network (as calculated in part 3) over that period is determined. This total profit is then the investment which ESP will budget to make in the network and any remaining capital investment will be provided by other interested parties, usually the end users of the network.

6. For domestic infill networks if the capital to be invested by ESP (as calculated in part 5) is too little and needs to be increased to enable the network to be installed, then a Supplemental Charge is applied to the network to increase the income calculated in part 1 to a level where the capital invested by ESP (as calculated in part 5) is increased to the required amount.

Hence the transportation charges will be cost reflective of the capital invested in the network by ESP, the operating costs for the network, and the risks undertaken by ESP in investing and operating the specific networks.

10. Gas Transportation Charges

10.1. Introduction

The RPC fixed and unit charges for each network are listed in “Appendix B: Network Transportation Charges”. This is updated to include new networks and when the charges are reviewed each year.

For I&C sites the charges track the DN Operators, therefore the following formulae are used to calculate their charges:

10.2. Mains Network Charges

The Mains Network Charges are calculated by taking the relevant DN Operator’s LDZ capacity and commodity charging formulae for Supply Points and subtracting the relevant DN Operator’s LDZ capacity and commodity charging formulae for the CSEP. The charges are therefore designed to ensure that they produce values which when added to the relevant DN Operator’s CSEP Charges would be the same as the equivalent DN Operator’s Supply Point Charges. For example taking NG’s East of England DN as an example (**unit rates from October 2008**) the formulae would be as follows:

Note that:

Where ^ is shown it means “to the power of”.

For the DN Operators interruptible CSEPs the “Capacity Charges” for the supply point will not be charged.

If applicable, any proportion of the CSEP’s Peak Load which is nominated as the DN Operators interruptible may not be included in the aggregated $CSPL_{RPC}$ used in “Capacity Charges” formulas.

Capacity Charges

Load Size (Annual consumption)	CSEP Size (Annual consumption)	pence per peak day kWh per day
Up to 73,200 kWh	Up to 732,000 kWh	0.0108
Up to 73,200 kWh	Over 732,000 kWh	$0.1495 - 0.6945 \times (\text{CSPL}_{\text{RPC}})^{-0.1939}$
From 73,200 kWh to 732,000 kWh	Up to 732,000 kWh	0.0
From 73,200 kWh to 732,000 kWh	Over 732,000 kWh	$0.1387 - 0.6945 \times (\text{CSPL}_{\text{RPC}})^{-0.1939}$
Over 732,000 kWh	Over 732,000 kWh	$0.6567 \times (\text{PL}_{\text{SF}})^{-0.1806} - 0.6945 \times (\text{CSPL}_{\text{RPC}})^{-0.1939}$

Commodity Charges (with no reconciliation)

Load Size (Annual consumption)	CSEP Size (Annual consumption)	pence per kWh
Up to 73,200 kWh	Up to 732,000 kWh	0.016
Up to 73,200 kWh	Over 732,000 kWh	$0.0217 - 0.1189 \times (\text{CSPL}_{\text{RPC}})^{-0.2131}$
From 73,200 kWh to 732,000 kWh	Up to 732,000 kWh	0.0
From 73,200 kWh to 732,000 kWh	Over 732,000 kWh	$0.0201 - 0.1189 \times (\text{CSPL}_{\text{RPC}})^{-0.2131}$
Over 732,000 kWh	Over 732,000 kWh	$0.1245 \times (\text{PL}_{\text{SP}})^{-0.2121} - 0.1189 \times (\text{CSPL}_{\text{RPC}})^{-0.2131}$

ESP does not carry out any reconciliation for the Commodity Charges and therefore these charges are based on the allocated AQ only and will not be adjusted retrospectively based on actual meter reads. The AQ will however be reviewed each year (subject to the required meter reads being available) therefore the commodity charges will be based on actual consumption, however it will be for gas consumed in the previous year.

In addition, ESP will accept the monthly gas consumption of individual sites based on meter reads from the shipper and use these in calculating the commodity charges for that month. Therefore this gives the shipper the option of having the commodity charges based on actual gas consumption similar to daily read sites. If a shipper does choose this option then it must

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give ESP prior warning of its intention, and it must provide the information as the total gas consumed (corrected for temperature and pressure) within the first five working days of the following month.

It should be remembered that the ESP element of the commodity charge is not the whole commodity charge the shipper would normally pay to the DN Operator for a supply point, as it is split between the DN Operator's CSEP charges and ESP charges. In addition for the bigger sites, as a general rule, most of the commodity charge is levied by the DN Operator at the CSEP as the site will dominate the AQ_{CSEP} and so will receive only a small discount at the CSEP making ESP's commodity charge only a small proportion of the overall commodity charge.

Therefore as the DN Operators do carry out reconciliation for the CSEP commodity charges ESP believes that even if a shipper decides not to provide monthly gas consumption figures, the amounts the shipper would receive, or pay, through ESP reconciliation would not be significant. Also on average a shipper should see less of a difference when it takes all of its sites and calculates an overall average (receipts and payments should even each other out).

Where the reconciliation amounts may become significant for shippers are for the very large sites, however these will be daily metered and so shippers will have the monthly gas consumption sent to it by the DN Operators. It is therefore relatively straightforward for these to be passed on to ESP by the shipper.

For the reasons described above ESP believes there is very little benefit of ESP carrying out reconciliation for the commodity charges as the extra administration required would outweigh any benefits (if any). Also shippers should be aware that to do reconciliation ESP would require the weather corrected data the DN Operators hold which is not readily available to it (only provided once a year).

10.3. Customer Charges

The customer charges reflect the DN Operators' customers charge, for example taking NG's East of England DN in October 2008 the inputs would be as follows:

Up to 73,200 kWh per annum

	pence per peak day kWh per day
Capacity Charge	0.0751

From 73,200 kWh to 732,000 kWh per annum

	pence per day
Fixed Charge	21.9715

	pence per peak day kWh per day
Capacity Charge	0.0022

Over 732,000 kWh per annum

	pence per peak day kWh per day
Capacity Charge	$0.0533 \times (PL_{SP})^{-0.21}$

10.4. Changes to the Mains Network and Customer Charges

As the basis of these charges is “to track the DN Operators’ charges on a continual basis” as required by RPC, they must be modified when the relevant DN Operators’ charges are modified, and must also be levied from the same date as the modified DN Operators’ charges. Because of these requirements, ESP charges will be deemed as following its methodology when carrying out such modifications to its charges, hence ESP will not be required to give shippers prior notification of these modifications.

Although ESP may endeavour to give prior notification of these modifications, as these changes must occur under RPC this will be for information purposes only. Also it should be noted that shippers would already be aware of the impending modifications through the DN Operators’ notification process.

11. Meter Charges

End users have a choice of who provides their metering service and therefore are not restricted to having an ESP meter to measure their gas offtake. If the end user does choose ESP as their meter service provider then there will be an additional metering charge added to the transportation charges to cover the installation, maintenance and repair of the ESP meter.

Details of ESP’s metering charges can be found in the document “Gas Metering Charges”, a copy of which can be requested by contacting ESP at the address given.

12. Other Charges

In addition to the transportation charges there are other charges which are applicable in relation to the use of ESP gas networks. These are described below.

Meter Reading Charges (Limited Service)

There is a requirement to read the meters at an offtake point, the conditions for which are set out in the ES Pipelines Network Code (incorporating the iGT UNC). Shippers are required to organise the agent that will read the meters they are responsible for.

ESP has in the past offered a meter reading service. However, because most, if not all, shippers and suppliers now use their own meter reading agents, this service is no longer viable for ESP to provide at a competitive rate. Therefore ESP has withdrawn its meter reading service and intends to provide only a limited service at its own discretion under special circumstances on a short-term basis. This limited service will only be offered where a shipper has specific problems with getting a meter reading agent organised initially for specific sites, and is therefore designed as a last resort service for a limited period.

Further information on ESP's meter reading service can be obtained from the contact specified in the introduction, however an indication of the ESP meter reading charges are provided below (note: All meter read types include for a meter inspection at the same time).

Up to 73,200 kWh per annum

	£ per read per meter
	5.00

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Over 73,200 kWh per annum

	£ per read per meter (for the first meter of a Supply Point)	£ per read per meter (for any additional meters of a Supply Point)
Non-Monthly Read	10.00	4.00
Monthly Read	10.00	4.00
Opening Read	10.00	4.00
Ad hoc: Same day	23.00	10.00
Next day	17.00	7.50
4 days	11.00	5.00

Datalogger (includes annual check read)

£ per read per meter	£ per annum
104.1068	379.99

Note: Where it is a DM site for the DN Operators' purposes, it will be the DN Operators Datalogger fitted and the DN Operators will charge for the Datalogger through the CSEP Charges.

Must Reads

If a Shipper is unable to provide meter readings in compliance with the ESP Network Code, then ESP may initiate processes to obtain a meter read, referred to as a "Must Read". A charge will be made for each Must Read and will depend on the number of meters at a supply point requiring a Must Read at the same time. If there is one meter at the supply point the charge will be £45.00, for two meters the charge will be £65.00 and for three or more meter reads the charge will be £85.00

These Must Read charges are based on the average costs associated with obtaining a single meter read, which is not part of a scheduled visit to an area by a meter reader. Therefore it includes the full cost of travelling to and from the site, additional administrative costs, possible multiple visits to the site and obtaining warrants of entry if required.

Estimated Reads

If a Shipper has not provided a meter read within a specified period of time, as described in the iGT UNC, ESP will estimate the read ("Estimated Read") and for this ESP will charge £10.00 for each Estimated Read. The Estimated Read will be calculated in a manner consistent with that of National Grid and the DNs.

Connected System Exit Points

A connected system exit point ("CSEP") is a system point comprising one or more individual exit points which are not supply points. This includes connections to a pipeline system operated by a Gas Transporter ("GT") other than ESP. Currently there are no ESP CSEPs, however if this situation changes this section will be updated.

13. Useful Contacts and Addresses

ES Pipelines Ltd
Hazeldean
Station Road
Leatherhead
KT22 7AA

Tel: (01372) 227 560
Fax: (01372) 377 996

email: info@espipelines.com
Website: www.espipelines.com

Ofgem
9 Millbank
London
SW1P 3GE

Tel: (0207) 901 7000
Fax: (0207) 901 7066

Health and Safety Executive
Rose Court
2 Southwark Bridge
London
SE1 9HS

Tel: (0845) 345 0055

Consumer Direct
4th Floor
Artillery House
Artillery Road
London
SW1P 1RT

Tel: 08454 04 05 06
Website: www.consumerdirect.gov.uk

14. Glossary of Terms

Word / Acronym	Definition
AQ	Annual quantity (of energy consumption)
CSEP	Connected System Exit Point
DM loads	Daily Metered Loads
DN	Distribution Network
DN Operators	National Grid and the iDNs
ESP	E. S. Pipelines Ltd
Utilities Act	Utilities Act 2000
HSE	Health and Safety Executive
iDNO	A licensed regional independent (gas) distribution network.
iGT	Independent Gas Transporter (all licensed gas transporters except The DN Operators)
iGT UNC	iGT Uniform Network Code
I&C	Industrial and Commercial
kWh	Kilowatt hours
NDM loads	Non Daily Metered loads
NG	National Grid (formally known as National Grid Transco)
Ofgem	The Office of Gas and Electricity Markets (the regulator)
GT	Gas Transporter
PL	Peak Load (same as SOQ)
Q_{max}	The meter's "badged capacity"
Reinforcement	Physical works to build additional capacity into the ESP system
T.T.	(Transco Tracking) Charges tracking those of the DN Operators (as defined by RPC)
scmh	Standard Cubic Meters per Hour
SOQ	Peak Load (same a PL)
SSP	Single Supply Point

15. Appendix A: Examples of Charges

There follows three examples demonstrating how the transportation charges are calculated. All unit rates are examples only and may not reflect current DN Operator charges.

Domestic Connections

a.) New Housing: A new 3 bedroom semi-detached (3BS) house connected to the network reference number ESN 0003. Based on RPC pricing for new homes the annual charge is £25.91 per year. There will also be a meter charge levied if it is an ESP meter.

b.) Domestic Infill (NO Supplemental Charge): An existing domestic home that has an annual consumption of 18,000 kWh per annum connected to an infill network. Based on RPC pricing the unit rate is 0.2859 pence per kWh. Therefore the total charge is equal to $18,000 \times 0.2859 = 5,146$ pence/year = £51.46 per year. There will also be a meter charge levied if it is an ESP meter.

c.) Domestic Infill (WITH Supplemental Charge): An existing domestic home that has an annual consumption of 16,000 kWh per annum connected to an infill network. Based on RPC pricing the unit rate is as follows:

0.3577 pence per kWh to make the charge RPC DN Operators Equivalent.

0.3613 pence per kWh for the Supplemental Charge.

Therefore the total charge is equal to as follows:

$16,000 \times 0.3577 = 5,723$ pence/year = **£57.23** per year.

$16,000 \times 0.3613 = 5,781$ pence/year = **£57.81** per year.

Total Transportation Charge = **£115.04** per year.

There will also be a meter charge levied if it is an ESP meter. Please refer to ESP's Metering Charges Statement.

Commercial Connection

Consider a commercial building LDZ East of England (2008 prices) which has an annual consumption of **6,000,000 kWh** with a load factor of **45%**. The building is connected to an ESP network which has a total annual consumption of **30,000,000 kWh** and an overall load factor of **72% (based on RPC)**.

Peak daily load of building = $6,000,000 / (365 \times 0.45) = \mathbf{36,530 \text{ kWh}}$

Peak daily load of CSEP = $30,000,000 / (365 \times 0.72) = \mathbf{114,155 \text{ kWh}}$

Mains Network Charges:

Capacity Charges = $[0.2728 \times (36,530)^{-0.1806} - 0.2885 \times (114,155)^{-0.1939}] \times 365$
= **3.92** pence per peak kWh per annum

Therefore charge = $3.83 \times 36,530 / 100 = \mathbf{£1,432.74}$

Commodity Charges = $0.9506 \times (36,530)^{-0.2121} - 0.9073 \times (114,155)^{-0.2131}$
= **0.0265** pence per kWh

Therefore charge = $0.0259 \times 6,000,000 / 100 = \mathbf{£1,591.98}$

Customer Charges:

Capacity Charges = $0.0460 \times (36,530)^{-0.21} \times 365$
= **1.65** pence per peak kWh per annum

Therefore charge = $1.85 \times 36,530 / 100 = \mathbf{£675.37}$

TOTAL CHARGE = £3,700.09

Meter Charges:

There will also be a meter charge levied if it is an ESP meter. Please refer to ESP's Metering Charges Statement.

Commercial Connection

Consider a small commercial building in LDZ East of England which has an annual consumption of **500,000 kWh** with a load factor of **52%**. The building is connected to an ESP network which has a total annual consumption of **6,000,000 kWh** and an overall load factor of **60% (based on RPC)**.

Peak daily load of building = $500,000 / (365 \times 0.52) = \mathbf{2,634 \text{ kWh}}$

Peak daily load of CSEP = $6,000,000 / (365 \times 0.60) = \mathbf{27,397 \text{ kWh}}$

Mains Network Charges:

Capacity Charges = $[0.0621 - 0.2885 \times (27,397)^{-0.1939}] \times 365$
= **8.15** pence per peak kWh per annum

Therefore charge = $8.15 \times 2,634 / 100 = \mathbf{£235.58}$

Commodity Charges = $0.1533 - 0.9073 \times (27,397)^{-0.2131}$
= **0.0505** pence per kWh

Therefore charge = $0.0497 \times 500,000 / 100 = \mathbf{£252.40}$

Customer Charges:

Fixed Charge = $19.4439 \times 365 / 100 = \mathbf{£70.97}$ per annum

Capacity Charges = **0.0022** pence per peak kWh per day

Therefore charge = $0.0022 \times 365 \times 2,634 / 100 = \mathbf{£21.15}$

TOTAL CHARGE = £580.10

Meter Charges:

There will also be a meter charge levied if it is an ESP meter. Please refer to ESP's Metering Charges Statement.

16. Appendix B: Network Transportation Charges

Full transportation charges may be requested for any specific network by contacting ESP using the details provided. This may include details of infill networks where a supplemental transportation charge of 10p per therm (0.3417p per kWh) is levied in accordance with ESP's gas transporter licence.