



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

**COMMISSION DECISION ON GAS
DISTRIBUTION CONNECTION POLICY**

7th August 2003

CER/03/190

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1 INTRODUCTION

On 16th June 2003, the Commission for Energy Regulation (“the Commission”) published a Consultation Paper entitled “Proposed Gas Distribution Connection Policy” (CER/03/141). This was the publication of the Commission’s proposals on the policy for connection to any natural gas Distribution system, to apply from 1st October 2003. A summary of the comments received can be found in document CER/03/169. The Commission has considered these comments in its final decision as shown below.

In carrying out its functions the Commission is required to:

- Secure the continuity, security and quality of supplies of natural gas;
- Secure that there is sufficient capacity in the natural gas system to enable reasonable expectations of demand to be met;
- Promote competition in the supply of natural gas;
- Act in a non-discriminatory manner, such that the Commission does not discriminate unfairly between holders of licences, consents and Bord Gáis Éireann (BGÉ);
- Protect the interests of final customers of gas.

This document sets out the Commission’s proposal on the policy for connection to any natural gas Distribution system, to apply from 1st October 2003. This proposal will form the basis for regulations to be developed and published by the Commission. This connection policy decision for the Irish natural gas Distribution network has been developed to ensure that:

- The principles of the customer connection charges are applied consistently to each group of customers, irrespective of the ownership of the Distribution network or where they are connected to the network;
- Customer connection charges are designed to ensure that customer transportation tariffs recover costs from both the Distribution network and the gas connection itself in the medium term;
- Customer connection charges are cost reflective;
- Investment appraisals for network extensions are based on an NPV economic test that ensures that tariff revenues recover the costs for all the tiers of the Distribution network that are utilised;
- The connection policy accommodates the possible introduction of Distribution competition by enabling separate NPV calculations for both upstream spine mains and downstream new development Distribution networks. In the event of Distribution competition, the policy also maintains a consistent approach to customer connection charges and the appropriate recovery of costs for all the Distribution asset tiers utilised by the competitive connections.

The policy covers two specific areas:

- Section 2 - Customer Connection Charges;
- Section 3 - Investment Appraisal Methodologies.

2 CUSTOMER CONNECTION CHARGES

The principles of these charges are applied consistently for each customer group throughout Ireland, irrespective of whichever company owns the network, or the location of the connection on the Distribution network.

The customer groups are:

- Existing Housing;
- New Housing Developments;
- Existing Industrial & Commercial (“I&C”) (i.e. non-residential);
- New I&C.

Any contribution from the customer is offset against the asset values added to the regulated asset base.

This policy seeks to achieve the appropriate balance between incentivising customers to connect to the gas network and minimising the period before new customers transportation charges start contributing to the overall Distribution network. For the period that new customers transportation revenues contribute only to the cost of their connection, the burden of recovering the costs of the Distribution network is placed on the existing customers, as those new customers would provide no contribution to the Distribution tariff for the period. Therefore, it is the Commission’s view that the earlier the new customer contributes to the overall Distribution network (i.e. tariff), then the earlier the existing customers benefit from the added load in reduced tariffs.

2.1 Existing Housing (including small developments of 1, 2 or 3 houses)

These customer groups, once connected, tend to remain gas consumers and provide a long-term contribution to the Distribution network. A connection allowance is therefore applied to incentivise these customers to convert to gas. The customer allowance decided on is the equivalent to ensure an average break even of the NPV for the cost of the connection within 10 years. The costs included in the NPV calculation are all attributable capital expenditures (CAPEX) for the connection only and operating expenditures (OPEX). Thus before the 10-year period has elapsed, the connectee must effectively only pay for its connection assets. Beyond this 10-year period the connectee must start contributing to the overall costs of the upstream Distribution system. The revenue to be included in the NPV calculation is the full Distribution tariff over 10 years for an average consumption of 16,000kWh. As the number of existing customer connections is high (around 10,000 per annum), it is appropriate for a single average allowance to be calculated for all existing housing customers based on the average costs and revenues.

By subtracting this allowance from the average cost of a 15 metres service, a standard charge for an existing housing customer can be calculated.

The customer will pay for any incremental costs for a service longer than 15 metres.

BGE are being requested to develop proposals for standard charges adopting the above principles. These proposals shall include charges for different property types and the incremental cost if the length exceeds 15 metres. The Commission may also require BGE to publish charges on its web site, for transparency.

If the payback period is lengthened to 20 years, then the customer does not contribute to recovery of Distribution assets upstream of the new connection until 20 years after the connection. This places an increased burden on existing customers who are contributing to the Distribution and Transmission assets, and the existing customers will not receive any benefit (i.e. contribution to the tariff by new connected customers) of the added load for 20 years.

2.2 New Housing Developments

Connections to new housing developments are commissioned by housing developers, normally via an infrastructure agreement that commits the developer to ensure all houses in the development use gas for space heating. The installation of the gas infrastructure at the time of development utilises trenches excavated by the house builder, and therefore normally provides a low cost connection.

The charges for connection for new housing are therefore based on an economic test over 20 years for the whole development of gas infrastructure and connections, and the housing developer contributes any negative NPV. The details of the NPV test to be applied are outlined in Section 3 and ensures that the tariff recovers the costs of all tiers of the Distribution network that are utilised by the housing development.

Due to the potential time lag between the gas infrastructure agreement with housing developers and project commencement, any existing gas infrastructure contracts to new housing developments will be honoured. The policy will apply to new applications for new housing gas infrastructure.

2.3 Existing I&C Customers

The policy for charges for connection of existing I&C customers to the Distribution network is consistent with the Transmission Connection Policy (CER 03/173). Each new connection will be subject to an economic test over 7 years. The costs included in the economic test are the attributable CAPEX and OPEX required to meet the customer's load profile. A contribution shall be levied, if required, to ensure that the NPV of the cost of the connection, offset by the contribution, breaks even after 7 years.

In addition to the above, from 1 October 2003 25% of the costs of any connection (along with any contribution required under the economic test) shall be excluded from the Regulated Asset Base (used to determine tariffs). Therefore, all connecting facilities may incur a charge of up to 25% of the cost of the new connection (plus a contribution if required by the economic test). The remaining 75% of the cost of the new connection can be recovered by BGD through the tariff, via the Regulated Asset Base. This is a change from the proposed decision.

This policy provides an early contribution to cost recovery of the upstream Distribution assets, in addition to recovering the costs of connection.

Individual connection cost calculations are anticipated for large I&C customers, but as decided for existing housing customers, standard contribution charges based on average costing may be appropriate for small I&C customers.

Extending the payback period from 7 to 15 years effectively defers the time that customers contribute to the Distribution network, thus existing customers do not receive any shared benefits from the added load for 15 years. A period of 7 years (which is Bord Gáis' current practice) reflects the risk that I&C customers do not have the same longevity of connection as domestic customers.

2.4 New I&C Customers with a choice of location

In line with the Transmission Connection Policy, these customers contribute 100% to the attributable CAPEX costs of connection, and therefore their tariff charges immediately recover the costs of all Distribution assets utilised.

The CAPEX required for the connection will depend on the volumes and capacity required. The policy incentivises new customers to locate close to the Distribution network. Any incentives to attract the new customers should not be subsidised by existing gas customers.

3. INVESTMENT APPRAISAL METHODOLOGIES

The investment appraisal methodologies outlined below are applied to extensions of the Distribution network. The methodologies are all based on the standard NPV economic test, however in some cases, only a proportion of the ‘all the way’ Distribution transportation tariffs are to be incorporated in the income stream of the economic test. This is designed to ensure there is adequate recovery of costs from all tiers of the Distribution network utilised. The income revenues in the NPV calculations also include the customer contributions outlined in Section 2.

The investment appraisal methodology incentivises Bord Gáis to minimise CAPEX and OPEX in order to minimise customer contributions and hence promote network growth.

3.1 Investment Appraisals for New Towns Connected to the Transmission Network

The economic test for these investments are designed to recover the attributable CAPEX and OPEX for all the assets (including spine mains, local Distribution networks, services and meters) that are required for all new gas consumers that are reasonably expected to connect to the new gas Distribution network.

As the investment includes all the Distribution assets utilised by the connections, then the full Distribution transportation tariff shall be included in the NPV calculations for a period of 20 years for residential and 7 years for I&C. Additionally, the customer contributions from forecasted connections to existing housing and I&C premises should also be included in the revenues. The new housing developers should pay any resulting negative NPV.

The Commission’s use of the term “reasonably expected to connect” is designed to ensure that inefficient investments are not included in the regulated asset base. If an overly optimistic forecast in the number of connections were applied, then the resulting inefficient investment would not be included in the asset base.

3.2. Investment Appraisals for Network Extensions Connected to an Existing Distribution Spine Main

These network extensions are typically for new housing developments together with one off existing housing and I&C customers from existing Distribution mains.

The economic test for these investments should recover all the attributable CAPEX and OPEX for the network extension assets to be constructed and concurrently enabling the tariff from these connected customers to recover costs from the Distribution assets utilised upstream of the connection to network extension. Existing spine mains are generally designed with a 20-year planning horizon. It is therefore logical that new extensions that utilise these assets should have some of the transportation revenues from the network extension allocated to the recovery of the costs of the spine mains. It is therefore decided that only a proportion (e.g. 60%) of the ‘all the way’ Distribution tariff is allowed in establishing the income in the NPV calculations. This will ensure that a proportion of the tariff (40% in the above

case) recovers costs from the Distribution assets upstream of the connection to the network extension. A revenue recovery period of 20 years for domestic housing and 7 years for I&C is applied. Customer connection contributions (in line with Section 2) from customers directly connected to the network extension are also included as income revenues. Any negative NPV should be recovered from the new housing developers.

It is decided that the proportional split of the Distribution tariff is based on the statistical average of where these types of network extensions have been connected to the Distribution network. The proportional split of the tariff will then be based on the average proportion of the 'upstream' Distribution assets utilised by network extensions to new housing.