



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

The Regulatory Treatment of the BGÉ Interconnectors

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Abstract:

This paper outlines the Commission for Energy Regulation's (CER) proposed decision with respect to the regulatory treatment of the BGÉ Interconnectors.

Target Audience:

Gas Customers, Suppliers, Shippers and Producers

Related Documents:

- CER/11/112 – Consultation (2) – The Regulatory Treatment of the BGÉ Interconnectors.
- CER/11/002 – Consultation – The Regulatory Treatment of the BGÉ Interconnectors in relation to Security of Supply.

Executive Summary

The CER has concluded that the current regulatory treatment of the BGE gas interconnectors with GB will no longer be fit for purpose when new sources of gas come on stream. If the system is unchanged, it will result in significantly higher gas tariffs to all gas customers, and will distort efficient economic signals for the future use of the transmission system. The CER has considered stranding parts of the interconnector that are not used when new sources are available, but currently remains of the view that any benefits from such an approach are outweighed by the increased risk for network investments and contingent increased costs to consumers. Thus CER is not planning to strand unused parts of the interconnectors but will consider any further arguments in this regard before making a final decision.

The CER outlined four potential options for addressing this issue in its July 2011 Consultation Paper. It has now concluded that there are significant shortcomings to each option, with any advantages likely to be outweighed by disadvantages.

Instead the CER is proposing that the transmission tariff regime should be amended to incorporate the following provisions:

- The historical differentiation between onshore and offshore tariffs will cease and the Interconnectors (ICs) will be deemed to be as much a part of “the transmission system” as other transmission assets included in the Regulatory Asset Base (RAB).
- The “entry points” to the system for tariff setting purposes will be located where the assets transporting the gas from source actually join up with the transmission system assets comprising the RAB. Specifically the entry point for gas from GB will be deemed to be Moffat.
- Entry tariffs will be determined by auctions of capacity at each entry point with a reserve price set by the regulated entry tariff. The CER has not come to a final view on the precise methodology to be used, but is currently proposing to calculate this on the basis of the estimated Long Run Marginal Cost (LRMC) of transporting gas at each entry point. The paper gives an indicative tariff range for the resulting Moffat entry tariff using LRMC (see Section 7.0). The main alternative to this is to use a

Short Run Marginal Cost (SRMC) methodology, and the CER is interested in views with respect to this alternative.

- The overall entry/exit system will be similar to the current GB system. The total revenue required by the system will be split 50/50 between entry and exit. Where entry capacity auctions under-recover this 50% of revenues, common charging will be applied at all entry points to meet the total required revenue for entry.
- The proposed changes to tariffs for entry points to the gas system in Ireland could retain elements of a diversity premium where cheaper entry points could receive an infra-marginal rent when selling gas at the Irish Balancing Point (IBP). This should provide a stimulus to encourage new efficient entry to the Irish system. Clearly the level of stimulus depends on how LRMC will be set, and the differentials between LRMCs at entry points.

The CER is satisfied that this proposed solution will enable an effective and efficient framework for gas infrastructure, and is in keeping with the letter and spirit of relevant EU law, and in particular the developing rules for gas market convergence across the EU. The CER is also satisfied that it is not precluded by domestic law, or legitimate expectation considerations, from directing the system operator to adapt the current regime to incorporate the above provisions. The new tariff regime is expected to be in place by October 2014.

CER will engage in future consultations to set out the exact methodology to be employed in calculating marginal entry costs.

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1.0 Introduction

The paper sets out the Commission for Energy Regulation's (CER) proposed decision on the future regulatory treatment of the Bord Gáis Éireann (BGÉ) subsea gas interconnectors in the light of new gas supply sources coming on stream.

The likely effect of any new sources will be to reduce significantly the gas throughput coming from the UK through the interconnectors.¹ The investments in the interconnectors were made a number of years ago with the vast majority of costs being incurred at the time of construction. It was envisaged that much of this cost would be recouped over time through users of the interconnectors paying for shipping gas through them. To date the CER's position has been that the interconnector costs, having been approved by the Government of that time, should continue to be underwritten through the regulatory regime for network tariffs. If we assume no change in this position or in the design of the current tariff regime, the result in any reduction in throughput will be a significant increase in the interconnector unit tariff ("the IC tariff"). To the extent that the IC tariff continues to be a key determinant of the wholesale price of gas in Ireland this will, in turn, result in upward pressure on gas tariffs to all customers, residential and commercial. Dealing with this issue and addressing the optimal sustainable structure of network tariffs is the subject matter of this proposed decision paper.

The legislative basis for the decision is Section 14 of the Gas (Interim) (Regulation) Act, 2002. This provides that CER is responsible for regulating network charges in the natural gas market and may give directions to a pipeline operator from time to time in respect of the basis for charges for the transportation of natural gas through, or connection to, the pipeline of the pipeline operator.

The proposed decision paper follows on from a comprehensive public consultation exercise carried out earlier in 2011, most recently in July 2011 (CER/11/112). The CER received 17 submissions in response to the July consultation paper. The respondents are listed in **Appendix 1**.

¹ Other factors will, it is true, also exert downward pressure on gas throughput on the Interconnectors - e.g. the East West Electricity Interconnector and increasing wind generation.

2.0 Consultation Process to Date

For some while now, the CER has indicated that the regulatory treatment on the two gas interconnectors between Ireland and Moffat in Scotland was being kept under review. Later on in this paper we look in more detail at the historical dimension to this debate. For the immediate purpose, however, we will focus on two consultation papers issued last year.

On **4th January 2011** the CER published a Consultation Paper (CER/11/002)² on the two Bord Gáis Eireann subsea interconnectors. The paper focussed in particular on the security of supply benefits afforded by the interconnectors. It sought views on the guiding principles which should apply to the future regulatory treatment of the interconnectors. It proposed three broad principles:

- Efficiency
- Equity
- Practicality

CER/11/002 also went on to suggest three alternative high level methodologies for recouping the costs of the security of supply benefits of the interconnector assets. These were:

- Movement to Onshore Regulated Asset Base (RAB)
- Back-Up Booking Requirement on All Shippers
- Levy at all Entry Points, akin to a Public Service Obligation (PSO).

The Consultation Paper CER/11/002 focused primarily on security of supply. A number of respondents raised broader issues such as the effect of volatile interconnector tariffs setting a high price for gas on the island, thereby allowing indigenous gas producers³ achieve a higher price for their gas than would occur under a different tariffing regime.

In response to these comments on **1 July 2011** the CER set out a broader and more detailed examination of the issues in Consultation Paper CER/11/112. This

² The Regulatory Treatment of the BGE Interconnectors in relation to security of Supply

³ In this document we use the term “producer” to mean both indigenous production and local LNG production. It is important to differentiate producers from “shippers” who are taken to be customers of producers. In reality a producer may also hold a shipping licence.

focused on, among other things, what it termed the “diversity premium” associated with the current regulatory treatment of network tariffs (see further below on this). The paper also discussed investor incentives, tariff volatility and the implications which the planned all-island common arrangements for gas (“CAG”) may have for a future CER decision on the treatment of the interconnectors.

The July Consultation Paper set out four high level options that it considered to be the most appropriate as a mechanism for dealing with the regulatory treatment of the ICs:

- (i) Do nothing
- (ii) Strand the unused part of the ICs
- (iii) Retain a premium for diversity of gas supply and capping it.
- (iv) Remove the diversity premium altogether.

The CER also held a public workshop on 3rd August at which the CER and some respondents presented.

Finally the CER has had a number of bilateral meetings with stakeholders at their request. The CER has also met with and corresponded with the European Commission on these issues.

3.0 Background and Policy Context

The interconnectors (IC1 & IC2) provide two separate physical sub-sea connections to the GB gas market. They are owned by Bord Gáis Éireann and operated by Gaslink. The first interconnector (IC1) was built in 1993 and the second interconnector (IC2) was built in 2002/03. IC1 has a capacity of 17mcm/d⁴ with IC2 having a capacity of 23mcm/d⁵. Currently over 90% of all of Ireland's gas comes from Great Britain (GB). Gas from the North Sea flows through Scotland (Moffat) through the interconnectors to Ireland.

IC2 serves to replicate the maximum of 17mcm/d made available from IC1 and also serves to provide an additional 6mcm/d of capacity to the Irish market (and to the Isle of Man which can take 1mcm/d⁶).

The combined interconnectors lie in the BGN Regulated Asset Base (RAB) and form the basis for a standalone regulated interconnector tariff. The assets in the RAB are, in accordance with standard regulatory practice, considered as a “natural monopoly” and are subject to direct price regulation, which is usually conducted in 5-year periods. The annual revenue allowed to the interconnectors is circa €44m (for gas year 11/12) with 90% recovered through capacity charges⁷ and 10% recovered through commodity charges⁸.

While customers are paying for 40mcm/d (17mcm/d + 23mcm/d) worth of assets, the current feasible throughput of IC1 & IC2 is limited to 23mcm/d, due to system constraints on the Scottish onshore side. It could be argued that 17mcm/d “additional” capacity is being paid for as insurance policy in case of a supply interruption. The ICs were constructed at the then Government's behest to meet Ireland's security of supply needs as these were perceived at the time. We return to this point further below. The tariff regime which applies to ensure their cost recovery was to a large extent inherited by the CER when it took over regulation of the gas sector in 2002.

⁴ mscm/d : million standard cubic meters. Average daily demand in Ireland demand is 14 mscm, peak demand in 2010/11 was 22.8 mscm/d.

⁵ These capacities depend on a number of factors in particular, the prevailing pressure in GB and Ireland.

⁶ Capacity shown for indicative purposes only

⁷ Capacity Charge : charge for reserving space on the pipe to flow gas

⁸ Commodity Charge : Charge for gas molecules transported through the pipe

The decision to build both interconnectors raises a number of issues. For instance, is it efficient for network tariffs to reflect such a security of supply element? Should the network tariff regime actively encourage development of new sources of gas supply, and, if so, how far should it go in that regard? While requiring customers to pay for security of supply may be sensible it only seems fair if all customers who can be reasonably assumed to receive the same benefit pay the same price. These issues may have not been extensively discussed to date because the bulk (>95%) of our gas comes from the ICs and the other entry point at Inch accounts for less than 5%. However, they become more pressing with the prospect of significant new entry sources.

Core Issue

The earlier Consultation Papers discussed the likely effects on producers and consumers of natural gas of the current network tariff regime as new sources of gas come on stream. To a large extent these reflect certain economic and regulatory aspects of the Irish gas wholesale market. To illustrate the core issue clearly, we initially make some assumptions:

Assume

- The ICs continue to be treated as a set of underwritten assets which will not be stranded by the CER (we return to this assumption further below).
- Gas shippers are legally and contractually free to book capacity at new entry points as these come on stream.
- Despite the presence of these new entry points the ICs remain the marginal source of supply to Ireland (i.e. the combined capacity of the new entry point(s) falls short of aggregate gas demand). This means that some gas from the UK will continue to be shipped across the ICs.
- Gas is an internationally traded homogenous product – akin to oil – so Ireland continues to be, for all practical purposes, a “price taker”, with no influence over the price at which it buys gas.
- Gas wholesale prices in Ireland will therefore continue to be determined by the marginal source of supply – i.e. the market clearing wholesale price in GB (“the National Balancing Point (NBP) price”) - plus the cost of

transporting that price into Ireland (i.e. the GB exit tariff plus the regulated IC network entry tariff – or “the IC tariff”). Put another way, Ireland will continue to be a satellite of the GB market and it is unrealistic to anticipate that the Irish clearing price for gas as a commodity (i.e. excluding transportation costs) will depart to any material extent or for any material length of time from the NBP price.

- This IC tariff will continue to be set by the CER on the basis of the aggregate capital and efficient operating costs of both ICs (in 11/12 this will be circa €44m).
- As a consequence of, for example, half of our gas supplies moving away to a new source such as Corrib or indeed any new entry point, the unit IC tariff will double and gas imported across the IC will then command a higher price on the Irish wholesale market (“the NBP price” plus the higher unit IC tariff). See Table 3.1 below.
- Producers of gas at these new sources will also, however, be free to price up to this new higher price of imported gas which, as the marginal source of supply, will continue to determine the Irish wholesale price of gas. While these producers may offer a marginal discount in order to maintain a competitive edge on IC gas imports, nevertheless the economically rational decision on their part would be to keep any such discount to the minimum necessary.
- Irish customers will see a greater geographic diversity in their sources of gas supply. But they will pay a significant premium for this in the form of potentially higher wholesale gas prices as described above.
- This premium will accrue to the benefit of the new producer(s) who will be able to sell gas on the wholesale market at a higher price than would be the case under a different network tariff regime. The IC owner will remain revenue neutral (assuming no stranding of assets by the CER), although the throughput across the IC will have halved.

This scenario illustrates the core of the issue: new sources of gas will decrease use of the ICs, thus forcing up the cost of importing gas from the UK through higher IC tariffs. The increase in tariffs will give an incentive to owners of new sources to increase their gas prices to just under the IC price, which will lead to an overall increase in the price of gas for customers.

The CER referred to this potential increase in the price of gas as the “diversity premium” in the July Consultation Paper. Note that this is a purely neutral term and should not be considered as a good or a bad thing, *per se*. It can be seen as an inherent feature of the design of the development of the current network tariff regime. The question facing the CER is the wisdom and economic merits of retaining the tariff regime in its current form and whether it meets the best needs – long term and short term – of Irish gas consumers.

The assumption of Ireland continuing to be a gas wholesale price taker is a key element of the above assumptions. Putting it in the language of competition law, the relevant geographic market is Ireland and GB, at least for as long as the interconnectors are uncongested. It is very unlikely that Irish gas wholesale prices would depart materially for any significant period from those prevailing in GB.

This assumption on the geographic market is, in the CER’s view, well grounded in economic theory. It is also well supported in documentary evidence and precedents. For example, it underlay the CER’s decision not to apply Regulated Third Party Access (rTPA) rules to Marathon’s gas storage licence in 2006. It also underlay the CER’s June 2010 decision to grant an exemption from rTPA to Shannon LNG. In that case the European Commission also accepted that, for competition analysis purposes, the relevant geographic market for wholesale gas purposes was GB and Ireland.

The implications of this assumption of the relevant geographic market are that it would not be profitable for a gas supplier in Ireland to seek to increase the commodity price above the prevailing GB price. The corollary of this is neither would it be economically rational for a supplier to the Irish market to offer significant sustained discounts on the GB price to its Irish customers.

Another key element of the above assumptions is that Ireland continues to be a *net importer* of gas. If we were to assume Ireland as an exporter of gas (e.g. Corrib and Shannon LNG flows on a sizeable scale) then any “diversity premium” would more likely become a net charge to such producers. A shipper buying gas in Ireland for export to GB would have to deduct the cost of transport out of Ireland from the NBP price it would get paid in the GB market.

Table 3.1 below give a numerical example of how new sources of gas supply could affect gas prices to consumers under the current tariff regime. In this particular example, the potential for the gas bill in Ireland to rise by approximately 1.4% per annum.⁹

Table 3.1 IC Tariff and Impact of 50% of Shippers moving from IC¹⁰

Current Regime			
[1]	2011/12 ICs Total Required Revenue	€m	44.4
[2]	90% Required revenue from capacity bookings	€m	40
[3]	Peak Day bookings	GWh	210
[4]	Capacity cost per MWh [2]/[3]	€/MWh	190
Assume IC throughput is halved			
[5]	Peak Day bookings 50% of current IC bookings move to new source	GWh	105
[6]	Capacity cost per MWh [2]/[5]	€/MWh	381

Security of supply and tariff volatility considerations

Those shippers who decide to source their gas from somewhere other than the ICs entry will still, arguably, benefit in terms of security of supply from the availability of the ICs, as will their customers. As against this, producers might

⁹ Taking 2bn therms of gas coming into Ireland @ 55pence/therm divided by the exchange rate of 0.83. Add on T&D (€351.59m in 11/12) and an estimated cost to serve (€30m), giving a total gas bill of €1.707bn. Cost of the IC's is approx €44m. If 50% of booking move to new entry points, ICs will only recover approx €25m.

¹⁰ See Appendix 4 for a more detailed example

argue that they should not be required to “subsidise” those shippers who choose to continue to source their gas from the ICs.

A further issue arises with regard to tariff volatility. With large movement of capacity bookings away from the interconnectors comes significant tariff volatility. This has a knock-on effect to the entire gas market (not just interconnector users) as interconnector gas effectively sets the wholesale price of gas in Ireland.

The scenario set out above suggests that, if the current regime is maintained and new sources of gas do come on stream, gas prices to Irish consumers will rise as a result. This is a serious concern to the CER. The protection of consumers’ interests – both short and long-run - is the key purpose of the CER, and such an increase in gas prices would detrimentally affect consumer welfare, and potentially harm Ireland’s competitiveness. This is particularly the case where such an increase in price would result from what is, essentially, an artificial regulatory tariff construct and not from an underlying increase in world gas prices.

Finding an appropriate solution to this issue, which is efficient, rational and in consumers’ best interests is the main goal of this proposed decision. Before turning to potential solutions, we will look at the historical background in more detail as well as to respondents’ submissions to the July Consultation Paper.

3.1 Historical Dimension to the debate

The debate on the regulatory treatment of the ICs is not new. A number of stakeholders have focussed on the historical dimension to the debate in their submissions. It is therefore worthwhile looking back briefly at this historical dimension.

The then Minister for Public Enterprise on 1st November 2001 signed directives putting in place new gas transmission tariffs. Under the new arrangements the then prevailing single overall transmission charge was changed to an “Irish Entry¹¹/Postalised Exit¹²” model, as it became known. These Ministerial directives covered the tariffs over the ten year period 2001/02 to 2010/11.

This decision by the Minister was based in part on the recommendation of a report to the Minister from the Brattle Group. The purpose of the Brattle Report was to recommend a policy for the authorisation of new pipelines and to advise on tariffs for third party access to the transmission network¹³. It made a series of recommendations concerning new pipeline authorisation and third-party access tariffs. These recommendations were made on the grounds that ‘cost reflectivity should be a basic principle for setting entry tariffs’.

With this in mind Brattle recommended that the two interconnectors – IC1 and IC2 - should have separate tariffs (*“BGE should keep the rate-base and tariffs on Interconnector 1 entirely separate from the prospective rate-base and tariffs for its proposed Interconnector 2”*). Brattle also recommended that the Government should authorise the construction of any pipeline that could show long term contractual commitments for a specific amount of capacity (*“recommend a requirement to show contracts of at least ten years duration, for 4.5TWh per year”*).

Brattle also considered competition between entry points. The authors stated that under the “Irish Entry/Postalised Exit” model a difference in transportation prices would emerge, and Corrib’s gas could command “a premium”. This “premium” at that time was calculated to be in the order of 1.2p/therm, assuming a wholesale price of around 10p/therm to 15p/therm. In euro the premium amounts equates to

¹¹ **Entry** points are those locations where natural gas is delivered to the transportation network from other connected systems (those at Moffat and Inch).

¹² **Exit** points are points at which natural gas is off-taken from the network.

¹³ <http://www.dcenr.gov.ie/NR/exeres/4722B54B-70B0-44B5-A215-3B23075F1F4D.htm>

1.5c/therm. At that time Brattle considered that the absence of such a premium “may have been sufficient to prevent Corrib from becoming commercially viable”.

Since then, of course, gas prices have risen very significantly and therefore the relative value of the “premium” contemplated by Brattle gas will have fallen and should therefore be less likely to deter or make new exploration projects commercially unviable.

Brattle noted that in choosing a postalised exit tariff¹⁴ there existed the prospect of “cherry picking” and “inefficient bypass” thereby leading to higher prices for customers who remained on the BGE system. To avoid this, Brattle recommended a “Public Service Levy” to be applied to all pipelines, whose proceeds would be paid into a “Geographic Equalisation Fund”. Therefore the postalised exit charge would have both a cost related charge and the Public Service Levy (PSL).

In the event, the Ministerial directives subsequently chose to introduce the Irish Entry/Postalised Exit which was broadly in line with the Brattle report, but with several significant variations:

- The two ICs were combined into one entry tariff rather than treated separately;
- The recommendation that the second new interconnector should have long term contractual commitments to take up capacity as a precondition to being authorised was not followed up.
- The Public Service Levy idea was not taken up.

It would appear that at least one of the reasons for departing from the Brattle recommendations was a practical one of timing: There was a perceived urgency to construction of the second interconnector to meet Ireland’s security of supply requirements.

Whatever the precise reasons, these variations from the Brattle recommendations meant that the incentive function which was built into the entry tariff regime was significantly greater than the Brattle recommendations would have suggested. If IC2 had been underpinned or “market tested” by long term contracts – as recommended - then these users would presumably not offer a new entry point any premium as they would be contractually obliged to pay for

¹⁴ Determined by the average cost of the onshore transmission system, i.e. all exit points pay the same tariff.

IC2 even if they did not use it. In such a scenario the new entry point could only garner this premium from users that had not signed long term contracts with IC2. However, as there were no long term contracts on the ICs *all* the IC users were free to move away to new entry points. Thus, if a new entry point came to the market all the users of the ICs could move to that point and pay close to NBP + IC. In other words users would be paying a “premium”.

The above, in essence, is the historical basis for the IC tariff regime which has largely remained in place since the Ministerial directives of 2001/02. The CER has indicated for some years now that the regime would be kept under review and would likely be revised when new sources (e.g. Corrib) come on stream. We return to this point in Section 5 under “Legitimate Expectation”.

Having considered the background and the key issues to be decided on, we now summarise the submissions made to the most recent consultation.

4.0 Comments Received

The respondents commented on various aspects of the CER proposals in CER/11/112. This section summarises some of their high level comments.

Ballylongford Enterprise Association (BEA) state ‘we need competition in this market for the benefit of the consumer and tax payer. Obstacles should not be placed in the way of competition which Shannon LNG could provide’.

Bord Gáis Energy (BG Energy) agrees with the CER’s proposal to rule out option 2 - ‘strand the ICs’ - and considers it essential that the CER stand firm on this position in the final decision paper. Regarding the option proposed by the CER to deal with the ICs issue, BG Energy favours the adoption of option 3 ‘keep the diversity premium but cap it’. BG Energy believes it strikes the correct balance between facilitating the appropriate level of new investment in the gas system and containing costs for gas customers.

Bord Gáis Networks (BGN) note that any adverse amendment to a regulatory decision including the stranding of regulated assets would adversely impact not only on the gas sector but also on electricity and other regulated sectors. It would lead to higher costs as developers would require a higher cost of capital to compensate for the risk of regulatory uncertainty. This would increase costs to customers, who in the end pay for all infrastructure.

BGN does not believe there are grounds for stranding the IC assets. However, the mechanism for the recovery of IC revenue recovery should be modified in order to ensure an efficient gas market into the future.

BGN would propose setting the IC tariffs at a level reflecting the LRMC of providing additional pipeline capacity and any over/under recovery in revenue would be applied to the Onshore system. BGN estimate savings of circa €25m - €40m p.a. to the Irish gas market if the current IC tariff structure is amended and the LRMC approach is adopted. BGN stated “in the UK, long term entry capacity at each entry point is auctioned and the reserve price applied is the LRMC as calculated for each entry point”.

BGN believes the CER must consider protecting consumers in any decision it takes. BGN believe their proposal (LRMC) will ensure 2 key issues in the consultation are addressed. It will protect consumers by ensuring stable and

sustainable tariffs and ensure that the customers who are paying for Security of Supply receive a fair service in return.

Economic and Social Research Institute (ESRI) strongly recommends treating the gas interconnectors as part of the essential gas infrastructure on the island and recovering their capital costs through the use of system charges paid by all users. This would secure the guaranteed revenue to cover the historic costs of providing security of supply and it would ensure that price facing domestic customers would be invariant as to the quantity of gas sourced domestically.

The ESRI stated also that the existing interconnectors between Ireland and Great Britain have been paid for by way of a guarantee by the state that their costs can be recouped from consumers. Consumers have carried all the risk of the investment and are committed to paying the full cost of this infrastructure. In a very real sense the consumers of Ireland “own” the gas transmission infrastructure, including the onshore transmission, because they are paying for it. As owners who are committed to paying the full cost of the infrastructure they are entitled to see it used in a manner that minimises the cost of their gas supply consistent with security of supply.

Endesa Ireland notes that the second BGÉ IC (IC2) was built under Government mandate, and cost recovery must be ensured. Endesa Ireland considers that the promotion of competition is best served by ensuring recovery of BGÉ’s costs without inflating costs for consumers via a ‘diversity premium’. Endesa Ireland would be particularly concerned if only one CAG jurisdiction was paying this premium. A contribution should be made by Northern Ireland and the Isle of Man insofar as benefits are enjoyed by those jurisdictions.

Endesa Ireland is not in favour of the capped tariff proposal, strongly opposes the proposal to require shippers to double book capacity and also questions whether the concept of double booking is compatible with European Policy for congestion management.

Endesa Ireland proposes a Security of Supply PSO as the best solution for the market to meet EU legislative requirements.

ESB Energy International (ESB EI) strongly supports the view that no diversity premium is necessary and supports a move to Option 4. ESB EI state that in principle any increased supply of gas on the island of Ireland must result in a reduction in the wholesale price that it is available at. ESB EI believes our

response must be understood in the context of the wider CAG programme and the potential target models that are presently being developed at the EU level. Any programme of change to the current arrangements must seek to add liquidity to the market and as we transition to the new EU target model it must reduce duplicating costs of change by selecting a sustainable model for the coming decade.

ESB EI wants to see reduced costs for all customers through the efficient transportation of gas on the island and through more gas entry on the island. ESB EI note the need to develop Irish price signals on the island should not weaken competition by pricing out access to the very liquid UK NBP because of regulatory methods for revenue recovery of assets.

Irish Offshore Operators Association (IOOA) questions the decision to dismiss the status quo option and press ahead for a change to the current tariff regime.

IOOA is satisfied that the CER has the legal power to partially strand the interconnectors and draws comparisons with the powers invoked by Ofgem in recent price control settlements. The IOOA urges the CER to reconsider its views on stranding all or part of the interconnector investment, even on a temporary basis. This could be achieved by limiting the Moffat Entry tariff level for a set duration. This period could be consistent with the projected lifespan of the Corrib field.

It would be inappropriate to move any resultant shortfall onto the onshore network; such a move would be inconsistent with European Regulations and in any event does nothing to reduce the cost of transportation associated with BGE's over-investment in the interconnectors.

The IOOA thereby proposes the stranding of IC2 to the extent that alternative revenue recovery mechanisms become unnecessary.

Manx Electricity Authority (MEA) believes that the key to this matter is to find a long-term, stable and sustainable tariff structure that delivers a balance between incentivising new entry points in Ireland, and not setting IC costs at levels that might incentivise 'non-economic' entry points in Ireland, to the detriment of IC users and ultimately all customers in both Ireland, and of course, captive customers in the Isle of man.

MEA would consider it completely unreasonable for the MEA to effectively bear those security of supply costs that are enjoyed by customers in Ireland, when the Isle of Man receives no such benefit, and bears such costs merely because of its vulnerable status as a captured customer of IC2.

MEA would be broadly supportive in principle of a tariff based on long-run marginal costs (LRMC) for additional IC capacity, and strongly support the implementation of a long-term tariff structure that is not based on year-to-year interconnector throughput and bookings.

National Electricity Association Ireland (NEAI) considers that Option 4 (Remove Premium) best aligns with the development and competitiveness of the gas market on the island and is the option that most closely allays concerns relating to minimising the cost of regulatory intervention in the market. NEAI note that Option 4 would appear to be relatively more conducive to the objectives being pursued under CAG and could better facilitate future gas market developments emanating from Europe.

NEAI members would be unwilling to accept a situation whereby additional costs would be placed on them arising from the developments of indigenous gas resources.

NIE Energy (PPB) believe decisions made by CER in relation to the Regulatory Treatment of the BGE interconnectors may have a material impact on competitiveness of generators operating in the SEM and may impact users in Northern Ireland depending on the design of CAG.

PPB strongly opposes any attempt to transfer costs associated with BGE Interconnector infrastructure to Northern Ireland gas users and any notion of a hub concept in the CAG design. PPB is disappointed that the Governments and Regulatory Authorities have not provided a clear indication as to their intentions in relation to a Single Security Standard.

Paul Hunt (PH) believes that any rational and sustainable regulatory determination would split the cost recovery for these unused and potentially useless assets between the owner/investor and final consumers in a time-limited manner.

PH strongly recommends that the Commission pass responsibility for this problem back to the Government – where it began and where it belongs, so that

all options are available to allow it to make an efficient, equitable and practicable determination.

Failing this, since the Commission seems determined to retain responsibility for this problem – which is probably the most likely outcome – it appears that the first sub-option (auction IC capacity and move the recovery of any un-recovered IC costs to the onshore system) of the fourth option presented will be developed as the most ‘pragmatic’ approach. It appears to be the most favourable/least objectionable to most market participants – with the exception of final customers (though it might not escape legal challenge by prospective producers).

Safety Before LNG (SBLNG) is in full support of option 4, is opposed to any diversity premium at all because it is anti-competitive, not in the interest of consumers and is putting the interests of Shannon LNG before the interest of state-owned Bord Gáis by promoting market share for Shannon LNG rather than security of supply. SBLNG note that allowing a diversity premium to exist would place no incentive therefore on Shannon LNG to compete directly with its real competitors – namely other suppliers of LNG-sourced gas.

SBLNG also note with some cynicism that while Shannon LNG criticises the CER proposals as contravening EU law, it is nevertheless engaging in the process and proposing its own readymade tariff design. This is akin to saying that they will agree with the process if they gain financially with their own tariff proposals but will threaten legal redress if the CER does not do as they wish.

Shannon LNG (SLNG) states that the CER is trying to achieve three irreconcilable policy objectives:

- No stranding of any part of BGE’s regulatory asset base (RAB)
- No increase in the tariff revenues collected from customers in Ireland
- Compliance with Irish and EU regulations and directives

SLNG also argues that the CER proposals are contrary to Irish and EU legislation as they: (i) amount to focused discrimination, (ii) propose tariff structures that are not cost reflective; (iii) provide a cross-subsidy in favour of GB suppliers and the Moffat Entry Point; (iv) distort intra-state trade; (v) constitute a fundamental barrier to entry for new market entrants such as Shannon LNG; and (vi) are in breach of CER’s duties to ensure effective competition and to protect consumers.

SLNG also stated that the CER does not have the required powers under the legislation to impose a cross subsidy on market participants in favour of BG and/or GB gas suppliers, nor to limit or interfere with competition, nor to interfere with Shannon LNG's property rights and related legitimate expectations, in the manner envisaged in the options identified by the CER. Accordingly, a decision by the CER that reflects any of the CER's option 3 or 4 or the Hub Proposal or any equivalent measure, would be *ultra vires* the powers of the CER.

SLNG argues that a departure now from the established and repeatedly confirmed Irish Separate Entry/Postalised Exit tariff structure, would be a material breach of the CER's statutory duty to act in as consistent manner as practicable.

SLNG have also been advised by the Brattle economic consultants Group that Option 3 potentially offers an IC tariff policy which balances the interests of all parties, as long as the CER sets the tariff at a reasonable level. Brattle state "that removing the IC tariff and the basis differential could eliminate the business case for the Shannon LNG terminal and strand €40 million of investment that has been made in the SLNG terminal. An amended Option 3 avoids this scenario." Brattle rule out Option 4 as having a number of significant disadvantages for economic efficiency, security of supply and long term interests of consumers. Brattle also state "Option 4 does not respect the legitimate expectations of investors".

SLNG ask that if the CER cannot develop Option 3 along the line of SLNG's proposal ("*set a stable IC tariff that does not vary with throughput*"), then the current tariff structure, introduced by the Government in 2001, should remain in place for an extended period of time that recognises the large capital requirements and long term nature of the investment to be made by Shannon LNG. SLNG contend that an amended Option 3 is consistent with previous policy decisions and historic tariff levels adjusted for the expectations of investors had when they committed capital to projects in Ireland. Any costs of the ICs not recovered in revenues would be recovered from onshore exit points allowing entry points to compete based on their costs.

SLNG stated they are "still interested in working with the CER to find a stable, predictable and long term interconnector tariff design that recognises the costs of transporting gas from Scotland to Ireland while protecting consumer and investor interests".

Shell E&P Ireland (SEPIL) believes that a plausible and acceptable way forward has been identified and put forward by the IOOA. SEPIL supports IOOA's

compromise position that is based around a temporary limit on some proportion of interconnector revenue, until throughput naturally increases, via what might be termed a 'cap and deferral' mechanism in relation to the Moffat tariff.

Statoil (SEIR) supports the IOOA position that once new sources of supply in Ireland come on stream and utilisation of the interconnector declines, the most efficient and non-discriminatory solution is to defer recovery of the costs of the interconnector until such time as utilisation again increases. SEIR note that should there be a transportation constraint on the GB system, two interconnectors, connected to the same supply source will not deliver security of supply benefits and so SEIR refutes the claim that the second interconnector provides an insurance policy in case of supply interruption.

Tarbert Development Association (TDA) are very concerned that SLNG, having worked through all of the planning and regulatory process over the past 5 years, would find that the imposition of a levy to support the cost of the BGE interconnectors (which will not be used by them) to be unacceptable to them. TDA believes that a gas import/storage facility such as that proposed by SLNG can offer real competition into the gas market in this country.

TDA asks that the decision of the Regulator must be open, transparent and equitable and must avoid discrimination against new suppliers of gas at new entry points now and in the future.

Vermillion Energy stated their support for the IOOA position, which is deferring recovery of interconnector costs until Irish imports through Moffat increase again. Vermillion Energy reiterated its view that potential increases to the cost of gas in Ireland are not due to new or diverse sources of supply but rather to the fact the BGE has a protected rate of return on its investments, regardless of whether these investments would have been made by a company without such protection.

5.0 Legal Considerations

This section deals with a number of issues brought forward in the consultation exercise which raise legal questions, including questions of EU law.

5.1 *Legitimate Expectations*

It has been put to the CER by a number of stakeholders that CER is precluded from altering the existing interconnector tariff methodology, or, at least, precluded from doing so to any material extent. This is because, they argue, CER has a duty to act consistently and to uphold alleged legitimate expectations it has earlier created that it would retain the existing tariffing methodology.

In support, these stakeholders cite the CER's **2003 - 2007 Price Control Review (PC1)** and its corresponding **2007 – 2011 Price Control Review (PC2)**. They argue that both of these papers stated that the then prevailing tariff structure – essentially locational/geographic entry charges and postalised exit charges as provided for in the 2001 Ministerial directive – would continue to apply throughout the relevant 4/5 year tariff regimes. Therefore, it is argued, the CER is precluded from revisiting the tariff structure.¹⁵

The CER sees two sets of issues arising with this argument. First, as a matter of *fact*, has the CER actually given rise to an expectation that the current interconnector tariff methodology would remain largely in place for the indefinite future? Secondly, as a matter of *principle* – and only if the answer to the first question is in the affirmative – to what extent would the CER be bound by such an expectation if it concluded that it is not in the wider public interest to do so?

On the first question, in the CER's view the factual evidence simply does not support the argument that it has given rise to a legitimate expectation on the part of developers that they could rely on an indefinite continuation of the prevailing interconnector tariff methodology and that CER has precluded modifying the

¹⁵ Any question of the CER being bound by the Ministerial directives of 2001 themselves does not arise at this stage, in the CER's view. Even leaving aside the fact that the directives were never incorporated into the subsequent legislation giving CER regulatory powers on gas, the 10 year time period covered by the directives themselves – 2001/02 to 2010/11 gas years - has now elapsed. This also means that any potential issue of reconciling regulatory independence under EU law and compliance with the Ministerial directives is now a moot point.

current tariff regime – and possibly very materially so - in earlier decisions it has taken. In fact, the contrary is the case.

In each of its PC1 and PC2 Decision Papers cited above the CER was at pains to point out that the prevailing tariff structure would be subject to review and possible serious modification when the prospective significant change in the Irish gas market (i.e. Corrib and possibly LNG) became clearer in terms of timing or likelihood. The decisions in PC1 and PC2 to retain the prevailing entry/exit regime in their current format were expressly confined to the 5 year revenue review periods. They were not presented as regulatory commitments into the indefinite future.

As early as 2003 the CER discussed the issue of the treatment of the ICs. In CER/03/060 the CER examined what was described as **“Options for Allocating the Spare Capacity Costs of IC2”**. No less than eight different *“remedial”* options were put forward in that consultation. Examples included that current Moffat shippers pay only for IC2, introducing a PSO, storage, reducing the allowed rate of return etc. In the event the CER decided to apply an extended different depreciation profile to IC2. This was essentially a “holding” measure, partly in view of uncertainty on when gas from Corrib would come on-stream.

The CER returned to this theme in its 2007-2012 BGN revenue review decision. The following extracts from CER/07/110 illustrate the point clearly.

“Once the next indigenous source of gas (expected to be Corrib) comes on-stream the IC tariff will increase in future price control periods since utilisation on the interconnector will drop as flows move to other entry points. As such, CER has decided to undertake a more fundamental assessment of the underlying issue and is undertaking a separate consultation process to determine the best way forward.

Some of the factors driving these proposed regime changes are set out below – a more comprehensive explanation is provided in the main body of the report:

- *The volatility in prices during PR1 that arose from gas supplies shifting between entry points;*
- *The nature of Entry / Exit Transportation and the Irish Balancing Point (IBP – the national delivery point at which gas is priced), since this incorporates the existing interconnector control which is extremely sensitive to the flow*

of gas through the two interconnectors as well as the capacity bookings made on the interconnector;

- The impact that any indigenous source of gas, such as Corrib or an LNG terminal would have on the flows and capacity bookings for the interconnector and the consequent impact that an increase in the IBP would have on the prices paid by all gas customers in Ireland”.*

In CER/07/112 the CER reiterated its view that “a fundamental assessment of the tariff structure and a separate consultation will be undertaken. The current transmission tariff structure will remain in place at least until the end of the 2008/9 gas year. The CER would like to point out however that the review is necessary due to an anomaly in the current transmission tariff regime highlighted by the forthcoming introduction of indigenous gas production”

The PC2 Decision Paper outlined a number of alternatives to the existing tariff regime. These included, for example, a single entry price control, “on-shoring” some or all of the costs of the interconnector, case for stranding some or all of the interconnector costs. The CER concluded by committing to examine the implications of these options in more detail in a separate future consultation paper.

The next substantive consultation paper on this topic issued in late 2008 in the form of a Common Arrangements for Gas (CAG) paper¹⁶. This paper discussed tariff regimes for Ireland and Northern Ireland as part of CAG. One of the topics which was given close consideration was options for mitigating the effect low IC utilisation. See **Appendix 3** for further details.

In passing, it should be noted that any perceived “delay” by the CER in deciding on its review of the IC tariffing regime reflected the very significant and well documented delays in the Corrib gas coming on-stream.

In the light of this evidence, it is very difficult to see how the CER could be said to have given a legitimate expectation in the legal sense that it would retain the prevailing tariff structure regime into the indefinite future. On the contrary, the CER went out of its way on several occasions over the years to alert

¹⁶ CER/08/207 – Draft Conclusions on CAG Transmission Tariffs Harmonisation in Ireland and Northern Ireland

stakeholders of a forthcoming significant review and likely revision of the interconnector tariff regime.

In conclusion, the CER does not accept that it has given a legitimate expectation that the prevailing interconnector tariff regime would remain unchanged, regardless of developments on the Irish gas market. Stakeholders were clearly aware, or should have been aware, of the prospect of a substantive review of the tariff regime. Of course this review would have to be reasonable and proportionate and not “sprung on” the industry as it were. However, these are separate to any legitimate expectations argument.

5.2 Constitutional Property Rights.

An argument has been advanced by Shannon LNG that the CER could be adversely interfering with Shannon LNG’s legitimate property rights. These rights, it is argued, relate to the investment costs incurred to date by Shannon LNG on foot of its “legitimate expectations that the regulatory regime was settled and (Shannon LNG) relied on this to incur considerable expenditure”. For the reasons set out earlier, the CER does not accept that Shannon LNG was entitled to such a “legitimate expectation” in the first place. Therefore the CER is not acting disproportionately or infringing any alleged constitutional property rights.

5.3 Compliance with EU Law

The CER has been very mindful throughout this consultation exercise of its duties to uphold EU law and to ensure that its decision does not, intentionally or otherwise, frustrate the core objectives of, in particular, Directive 2009/73/EC or Regulation 715/2009. A number of submissions from stakeholders on the July Consultation Paper deal, in one way or another, with the EU law dimension to the issue of the regulatory treatment of the interconnectors. The matter has also been the subject of correspondence between at least one stakeholder and the European Commission. The CER has met and discussed the issues with the European Commission.

Some stakeholders have argued that some of the options cited in the July Consultation Paper – in particular Option 3 and 4 – are not compatible with Ireland’s obligations under **Directive 2009/73/EC** and/or **Regulation 715.2009**.

Ultimately, it is only the actual final decision taken by the CER that matters for EU compliance purposes. We will return to this when we present the proposed decision in Section 7. Meanwhile, it is helpful to set out the CER's thinking on some of the EU legal issues raised in submissions.

5.3.1 Regulation 715/2009/EC and Network Access Tariffs

Article 13 of Regulation 715/2009 (“Tariffs for access to networks”) sets down core principles that should apply to network access tariffs. These include:

- Tariffs should be cost reflective, transparent and take account of the need for system integrity.
- They should include an appropriate return on efficient investments.
- They should be non discriminatory, facilitate trade and competition and avoid cross subsidies between network users.

Importantly, Article 13 also provided for “entry/exit tariff regime” – as it is generally known in the industry.¹⁷ Specifically, Article 13.1 provides as follows:

“Tariffs for network users shall be non-discriminatory and set separately for every entry point into or exit point out of the transmission system. Cost-allocation mechanisms and rate setting methodology regarding entry points and exit points shall be approved by the national regulatory authorities. By 3 September 2011, the Member States shall ensure that, after a transitional period, network charges shall not be calculated on the basis of contract paths.”

The rationale for requiring this entry/exit tariff methodology to be applied in all Member States by 2011 was provided in Recital 19 to the Regulation:

“To enhance competition through liquid wholesale markets for gas, it is vital that gas can be traded independently of its location in the system. The only way to do this is to give network users the freedom to book entry and exit capacity independently, thereby creating gas transport through zones instead of along contractual paths. The preference for entry-exit systems to facilitate the

¹⁷ An entry/exit regime can be distinguished from a postalised tariff regime where there is only one tariff for use of the gas system, or a point to point tariff regime where a tariff is set for transport from a specific point to a specific point.

development of competition was already expressed by most stakeholders at the 6th Madrid Forum on 30 and 31 October 2002. Tariffs should not be dependent on the transport route. The tariff set for one or more entry points should therefore not be related to the tariff set one or more exit points, and vice versa.”

The issue of the optimal network tariff design for the purpose of promoting EU cross border trade and competition in gas market has been the subject of much research and policy discussion. The clear preference which emerged at the Madrid 2002 Gas Forum was for an entry/exit regime. The essential feature of such a regime is that the tariffs which a shipper pays for bringing gas on to a system (the “entry tariff”) and for gas leaving the system to the premises of the end customer (the “exit tariff”) are calculated completely independent of one another. The “contract path” notionally followed by the gas shipped to the end customer has no bearing on the tariffs paid by the shipper. As the CEER Paper submitted to the Madrid 2002 Gas Forum put it:

“The key attribute of EETs and capacity is that entry and exit locations are independent. Trading in gas is facilitated under an entry/exit system because gas, which has paid entry capacity or other charges, is not committed to any particular exit point within that particular network. This means that this gas can be traded, for example, without the need to re-contract transportation capacity like in a point-to-point regime or the shipper may be required to pay additional tariffs to move the final destination of the gas.”

An important input to the adoption of the entry/exit methodology by Regulation 715/2009 was the above mentioned CEER Paper submitted to the Madrid 2002 Gas Forum which effectively endorsed this methodology, as the recital to the Regulation acknowledges. One of the key perceived benefits of the entry/exit methodology was its flexibility and adaptability to the differences and “national specificities” which were recognised as an inherent feature of the EU gas market which would have to be addressed. The same CEER Paper concluded:

“In summary, the CEER believes that current combination of tariff and capacity regimes are insufficient to secure an efficient and properly functioning internal gas market. The medium-term solution would be the implementation of an entry-exit regime in each Member State with sufficient flexibility to take into account national differences that may matter whilst maintaining the necessary coherence between each regime.”

Currently entry/exit tariff methodologies can – and do - differ within the EU. To the CER’s knowledge, there is no suggestion that such differences are necessarily incompatible with Regulation 715/2009. A good example of one such flexible methodology is that which applies in Great Britain. The essential features are summarised in the box below.

Table 5.3: Key Features of G.B. Gas Entry Exit Tariff Methodology.

- The price control for the National Grid National Transmission System (NTS) has been divided into Transportation Owner (TO) and System Operator (SO) controls. Transportation charges are split to reflect these price control arrangements.
- For NTS TO revenue, target is to recover 50% from exit capacity and 50% from entry capacity.
- Exit capacity charges reflect the estimated long run marginal cost (LRMC) of developing the system to meet a sustained increase in demand and are determined by the exit zone to which a particular off take point belongs.
- Charges for entry capacity are not fixed but are determined by auctions which apply to all entry points.
- The unpredictability of entry auction revenue means that the TO revenue 50/50 split between entry and exit may not be achieved in practice. In the event of a forecast under-recovery of entry auction revenue against the entry target level, a single TO commodity charge may be levied on all entry flows.
- SO revenue is recovered through the NTS SO commodity charge. This is a uniform charge, independent of entry and exit points, and is levied on both NTS entry and NTS exit flows. A distance related commodity tariff, the optional NTS commodity charge, is also available as an alternative to both the SO and TO commodity charges.
- Merchant LNG and pipeline facilities are not part of the National Grid underwritten system. It is for the merchant project to meet all their own cost of getting their gas onto the national grid. The cost of transportation once on the national grid system can be to a large extent smeared across all users (excepting some locational signals for entry and exit points).

A further relevant point to note on Regulation 715/2009 is that it does not purport to define a “transmission system” in geographic terms or to define what constitutes an “entry point” or an “exit point.” We return to this in Section 7 below.

This, then, is the context of the requirements of Regulation 715/2009 that Member States implement an entry/exit tariff methodology for the purpose of regulating access to gas networks. The Regulation does not, in the CER's view, preclude some adaptation of the methodology to the specific circumstances of Member States, providing this is fair, transparent and does not take from the core feature of the methodology.

5.3.2 State Aid

The CER is aware that a complaint has been made to the European Commission regarding potentially illegal State Aid arising from the July Consultation Paper.

The CER has provided input to the Irish authorities for the purpose of responding to follow up queries by the European Commission services. The CER is satisfied that any State Aid argument can be dealt with in the normal course between the Commission and the Irish authorities. For its own part the CER is not aware of any evidence being produced to date of State resources, within the meaning of Article 107 of the Treaty, planned or being made available to BGE or any other party on foot of the July Consultation Paper or the present Proposed Decision.

6. Options

The July Consultation Paper (CER/11/112) set out four broad options for dealing with the ICs in the coming revenue review and with the prospect of substantive new sources of gas coming on-stream. These four options did not purport to be the last word on the matter or to rule out possible variations or alternatives. Indeed some respondents, such as Shannon LNG, have suggested (albeit on a “without prejudice” basis) a variation on the particular Option 3 model advanced in the Consultation Paper.

The CER examines the four options further below.

Table 6.1: Options in July Consultation Paper.

Options	Effect on Producers	Effect on BGE	Effect on Consumer	Method
1. Do Nothing	Very high Premium arises	No change	Price of indigenous gas rises by uncapped amount	No change
2.Strand IC's (Strand unused part)	Capped premium arises	Lost revenue, Potential WACC issues	No change as premium paid to producers is offset by the stranding of the IC's	Cap tariff, unrecovered revenues are lost to BGE
3. Keep Premium but Cap	Capped premium arises	No change	Price of indigenous gas rises by capped amount	Cap tariff, unrecovered revenues are recovered at Exit
4.Remove Premium	No premium	No change	No change as no premium paid	Various possibilities – redefine the system, e.g. double booking obligation, auction with zero reserve price,

6.1 Option 1: Do Nothing

Under Option 1 the CER would do nothing to modify the current tariff structure and allow the ICs tariff to rise as booking on the ICs drop when new supply sources come on stream. In its simplest form any booking moving away from the ICs would result in the IC tariff rising as the revenue is calculated by the required revenues divided by the bookings. In the scenario where more and more gas is sourced from non Moffat entry points the cost of transporting gas through the ICs would rise significantly and in theory at least towards infinity (see table 3.1 above). This in turn would result in increases in gas prices to all customers: residential, industrial & commercial and power stations.

In theory, this upward pressure on wholesale gas prices could be offset by the greater competition offered by these new sources of gas. The CER is not convinced that this would materialise in practice for the reasons set out in Section 3.0 above. It is possible that, in order to win gas contracts with suppliers, the new entrant would price slightly below the IC price but, given the homogenous nature of the product, this would be likely to reduce the overall gas bill to consumers by only a small fraction of the potential increase under the “Do Nothing” option.

It has been argued by some that there is a legitimate expectation the CER should continue with the current arrangements. For the reasons set out in Section 5, the CER does not accept this argument.

In conclusion, the CER continues to rule out Option 1 on the ground that it would give rise to potentially significant upward pressure on gas tariffs, would damage consumer interests as well as Ireland’s competitiveness, and is not justified by any countervailing public policy objective.

6.2 Option 2 : *Strand All or Part of the ICs*

The CER has earlier set out its thinking in some detail on the merits or otherwise of CER seeking to strand some or all of BGE's investments in the two ICs with Moffat now that new sources of gas to Ireland on a significant scale are a clear prospect¹⁸. By "strand" in this context we mean that CER would cease to ask the transmission customer to financially underwrite the investments.

The CER has reflected further on this issue in the light of the response to the Consultation Paper, where many of the respondents supported the view that the ICs should not be stranded and that the associated security of supply benefits can reasonably be seen as accruing to *all* gas shippers and their customers.

Having considered the issue carefully, the CER currently remains of the view that the ICs should not be stranded essentially for the following reasons:

- It is well documented that the construction of the ICs by BGN was mandated and approved by Government prior to CER taking over gas regulation and Government did so primarily on grounds of national energy security of supply. See **Appendix 2** for background correspondence between the CER and the Department of Communications, Energy and Natural Resources (2008) and between BGE and the Department (2001). These indicate that the investments were carried out on the basis of an undertaking that the associated costs would be underwritten by the gas customer and that this underwriting would be upheld by either the Government or the future regulator (CER).

The Government was the *de facto* regulator of the gas network at this period, and any decision taken by it should be honoured. The essence of regulating energy networks is that they involve costly upfront investments which are paid back for over a number of years. In order for such investments to be made, the investor must have confidence that they will be paid back for efficient investments. The whole concept of the Regulatory Asset Base (RAB) was designed to ensure that approved investments would, after being built, be allowed to recoup their efficient costs. For the CER to now turn its back on this undertaking would, at the very least, constitute bad regulation and create major uncertainty.

¹⁸ CER/08/207 Draft conclusions on CAG Transmission Tariffs Harmonisation in Ireland and Northern Ireland – Annex 1 "The CER Position on Regulatory Treatment of IC2 Investment Costs"

- This uncertainty would extend beyond just the consideration of the ICs. In theory it could also affect *all* investments in our gas and electricity networks which were commissioned prior to CER taking over regulation of these sectors. It is difficult to see any objective or compelling reason to differentiate between gas ICs and other parts of our gas/electricity network for the purposes of determining their eligibility for inclusion in the RAB.
- It might be argued that there is limited evidence of an *express and explicit* undertaking by Government to BGE that these investments would be underwritten by the gas customer regardless of any change in circumstances. In the CER's view this argument does not really change the position. The same argument could equally be made in respect of virtually all approved investments in gas and electricity networks either before the CER took over regulation of these sectors or indeed since. These investments have been included in the approved capital expenditure programmes and, their efficient level of expenditure is included in the RAB. The absence of an express letter of undertaking by the Government or CER in respect of individual components of these expenditure programmes does not take from their regulatory status for inclusion in the RAB. They form part of what can be termed the "regulatory compact" with the designated system operator/owner.
- In the specific case of the ICs, there is also the evidence of the Ministerial directives of 1 November 2001 on the design of the transmission tariffs to recoup the investments. It is difficult to reconcile the major importance which has been attached by all the key stakeholders to these directives with an argument that there was no commitment to underwrite the investments in the first place. Put another way, why would the Minister, knowing that Corrib gas was scheduled to come on stream within a short number of years, have issued a 10 year directive on the tariff regime for recovering IC investments the intention was that these costs could be stranded if or when gas sources come on-stream?
- It is inconceivable that a privately owned company would have constructed the ICs at the request of the Government without clear robust undertakings from the Minister that these investments would be underwritten. The apparent absence of such express undertakings in the case of BGE can only be explained by the fact the Minister was also the

owner of the company. In itself, this would not be a reasonable ground for the CER to now strand a part of these investments.

- The rates of investment return allowed to date by the CER in successive PC1 and PC2 revenue reviews have been expressly premised on the assumption of a very low level of risk on approved capital expenditure¹⁹. This is well documented in successive revenue reviews. It explains why this rate of return has been quite low due to the relatively low-risk nature of the investments, and has limited network tariff costs to end-customers. To now strand a sizeable portion of these investments would constitute a major change in that premise. It would at the very least warrant a review of the WACC allowed to date and in future, as the CER is required to allow a rate of return sufficient for the network company to finance its investments. This resulting increased cost of capital would have serious implications for tariffs to end-customers.
- None of the above is to suggest that the CER is in some sense seeking to “endorse” the earlier Government decision to invest in the ICs. This question of whether or not it was the “right” decision *ex post* is not the key issue. The ICs do seem to have delivered substantive security of supply benefits, particularly in light of the major delays in new gas coming on-stream in the last decade. Whether the optimal decision was taken by Government at the time is, as far as the CER is concerned, a largely academic question at this stage which should not affect their regulatory status as far as the CER is concerned.
- None of the above is to constitute an absolute statement that the regulator will never, regardless of circumstances, remove some portion of assets from the RAB. There could for example be a case where an investment has been undertaken without approval, this does not appear to be the case here as the investment was authorised by the Government and consequently undertaken by the network company. The CER would stress that it is not attempting to “protect” the State-owned network company in any way – it is simply implementing the regulatory framework in a manner that it sees as being most conducive to customer interests. It would further emphasise that all network assets and activities will continue to be rigorously analysed to ensure that they are being operated in the most efficient manner possible in the ongoing network price control process.

¹⁹ These returns are known generally as the Weighted Average Cost of Capital, or WACC.

- Lastly, this stance by the CER on the regulatory status of the ICs as part of Ireland's underwritten transmission system is compatible with EU Directives. These Directives recognise the natural monopoly nature of transmission systems in both gas and electricity without differentiation.

For the above reasons, the CER is currently against implementing Option 2 though it remains open to hearing final arguments on this matter. As mentioned in the previous consultation paper (CER/11/112), it is an option for the shareholder of the network asset owner to voluntarily forfeit some of the revenues owed for the cost of the interconnectors.

6.3 Option 3 - Keep Premium but Cap

Option 3 is essentially a mechanism whereby the IC tariff would be capped at some level deemed more efficient than its current level by the CER with the remainder of the required revenues being moved to the onshore network. Option 3 as it has been presented to date, assumes that historic costs are utilised in setting the tariff. The July Consultation paper advanced for consideration the suggestion that this option strikes a reasonable balance between the need to contain consumer costs in the short term while providing a signal to encourage indigenous gas production. A number of respondents were in favour of moving to Option 3 as a reasonable and balanced resolution of the issues facing the CER.

On the positive side, Option 3 could be seen as promoting and remunerating a benefit which accrues to all gas customers, namely the greater diversity – and hence security - of supply afforded by securing gas supplies from sources other than Moffat. There is undoubtedly a value to such diversity, albeit a very difficult one to quantify reliably. It is also a value that can change over time and according to circumstances.

But there are also serious drawbacks to Option 3.

It puts further upward pressure on gas tariffs to all consumers of gas by reference to current tariff levels or to tariff levels which would likely prevail if a premium were removed altogether (Option 4). This is due to the retention of some diversity premium for all producers, albeit at a lower level than under the status quo (Option 1). The precise scale of that upward pressure on tariffs would of course, depend on the methodology used to fix the cap on the IC tariff. Several alternatives could be used for this purpose – e.g. freezing the existing IC tariff, a tariff based on only one of the two ICs, or a tariff based on the currently feasible throughput on the two ICs (23mcm/d) as opposed to the theoretically maximum throughput (40 mcm/d).

To illustrate the point:

If, for the sake of argument, the IC tariff were capped at its current 2011 level and the resulting revenue shortfall to BGN from, say, 50% of supplies moving away from the ICs over the coming few years, the CER estimates that end user tariffs could increase by of the order of 1.3%.²⁰ annually for the indefinite future.

²⁰ The ICs must recover €44.4m. If 50% of this is moved to the exit the gas bill in Ireland could rise by €22m on a total bill of €1.707bn. See also footnote 9 for a similar calculation.

More generally, Option 3 is open to criticism on grounds of delivering less than optimal efficiency. This is because the cap would be based essentially on historic, or legacy, considerations which are far from being optimal or efficient. Option 3 is not forward looking or grounded on economic principles. These principles would suggest that, if the price of access to an underwritten asset is to be used to send a signal to the marketplace then it is more appropriate to use the long run marginal cost as the price signal rather historic cost considerations. If there is a shortage of capacity then it is more efficient (in an economic sense) to invest in the cheapest increment of capacity. Thus the incremental cost should be the “price to beat” in the market, rather than any “historic” cost.

On balance, the CER concludes that the disadvantages pertaining to Option 3 – particularly its exclusive reliance on historic costs and the likely resulting upward pressure on gas tariffs – are likely to outweigh the advantages.

6.4 Option 4: ‘Remove Premium’

Option 4, as it has been presented to date, would essentially remove any “premium” or price signalling function from the design of our transmission tariff regime. Taking the rationale behind Option 4 to its logical conclusion, it would amount, effectively, to removing any entry tariff, as such. All transmission network costs would be recovered through a completely postalised regime regardless of the geographic source of the gas purchased by the shipper in the first place.

Such an approach may be the only means of guaranteeing that there is no upward pressure on end user gas tariffs when new sources of gas come onstream (other than stranding IC investments by BGN which has already been ruled out).

However, Option 4 would have significant drawbacks. It would absolve the transmission tariff setting regime from any policy function with regard to the take up of gas from alternative entry points to the gas system. To ignore the transport costs of entering the Irish system completely would be likely to be economically unsound. It could also be difficult to reconcile with the EU Framework as set out in Article 13 of Regulation 715/2009. Even allowing for the reasonable degree of flexibility which the CER considers is permitted to Member States under that Article (see above) the Regulation would still appear to require a basic and meaningful differentiation between the methodology for setting entry and exit tariffs for each gas system within the Union.

In conclusion, the CER does not propose to implement Option 4 as it has been presented to date.

7.0 Proposed Decision on Preferred Solution

The CER sees little way of retaining the current IC transportation cost signalling tariff regime without creating undesirable effects on end-customers. In a sense the dilemmas faced by the authorities in 2001 and analysed in detail at the time in the Brattle Report are now coming to fruition.

Given the significant drawbacks which the CER sees in each of the four options described in the July Consultation Paper, an alternative solution must be found. This solution should be

- economically rational, efficient and sustainable for the foreseeable future
- forward looking rather than historic
- stable and predictable, particularly with regard to potential investors.
- equitable in the allocation of transmission network costs between different categories of users
- compliant with all relevant EU and domestic statutory obligations and
- in line with good regulatory practice elsewhere.

The starting point to any preferred solution should be clarity on what precisely we mean by the terms “transmission system” and “entry” in this context.

By any reasonable, objective standard, the Irish gas transmission system includes both the onshore assets and the offshore assets (i.e. the ICs to GB). All of these assets are collectively included in the regulated asset base (RAB) for the purpose of determining recoverable revenues and use of system tariffs every year. The fact that some system assets are onshore and others offshore or even located in another jurisdiction should not, and does not, affect whether or not they are deemed to be part of our system²¹. The ICs are clearly an essential part of the Irish transmission system on the grounds of:

²¹ To take an example from a neighbouring jurisdiction: the South North Pipeline whose construction was approved by the N.I. Regulator and whose investment costs are underwritten by gas customers in N.I. is clearly part of the N.I. gas system even though a large section is located in the Republic. This is confirmed in the European Commission letter of [24/06/2010] to the UK authorities on compliance with Regulation 1775/2003/EC.

- Historical evidence (they were constructed to be part of our system and it is very hard to imagine what our “system” would look like in their absence)
- The definition of “transmission” in Regulation 715/2009/EC.

Following on from this, it is also reasonable to see the point of gas “entry” to our system being located at Moffat in Scotland rather than at Gormanstown or Loughshinny where the offshore and onshore sections of our system meet. On this basis, the cost of entry for a shipper who wishes to transport gas to customers across the ICs should be based by reference to cost considerations at Moffat. Similarly, the costs of entry facing shippers who wish to source their gas at other locations – be it Inch, Corrib or indeed any new entry point – should be based on cost considerations where these sources actually meet the Irish gas system, as defined by the RAB. This would imply developing a framework which specifies entry costs at each location to the gas system. This would provide efficient investment signals for entry, protect the end-customer, and be in accord with the EU Framework. The CER proposes to implement such a system.

One possible means of determining costs at these locations would be to base them on the estimated short run marginal cost (SRMC) of investing to meet an increment of demand at each of these entry points. This approach has been suggested by the ESRI in their submission on the July consultation Paper. The SRMC would consist of the costs of moving one unit of gas through the Moffat entry point, ignoring all unavoidable or sunk costs. It is likely that this would be a very low tariff mostly determined by compressor fuel costs.

There is debate in economic circles about the desirability of sending price signals consisting only of such short run costs to consumers and to alternative service providers²². In practical terms it might be considered appropriate to alert consumers to potential increased capacity costs from increased consumption/demand, especially if the next increment in capacity is expected to have a large effect on average unit costs. While the SRMC approach has certain attractions in economic theory, the CER is doubtful whether it would be appropriate for a sector such as gas which can be very capital intensive and where there is a premium on reasonably stable and long term signals for new investments.

²² For example : Utility Tariff Setting for Economic Efficiency and Financial Sustainability —A Review :
http://www.adb.org/Documents/ERD/Technical_Notes/TN024.pdf

In the CER's current view, the LRMC may be a better basis for determining entry costs to the Irish system. There are clear benefits to this approach of basing transmission entry tariffs on estimated LRMCs at the point of entry and differentiating between entry points. It is logical, it is based on the actual cost considerations at the actual physical entry points to the system, it is forward looking, and it is clearly in keeping with both the letter and the spirit of Regulation 715/2009. It should avoid unnecessary and inefficient upward pressure on tariffs from new sources of gas coming on-stream. Having said that it might well give rise to some upward pressure on tariffs. This is because it would recognise and reward investors in new sources of gas to the extent that these sources can be shown to be more economic – i.e. have a lower LRMC – than sourcing gas from Moffat. On the assumption that Moffat would continue to be the marginal source of gas supply to Ireland and therefore set the wholesale market clearing price, these investors would be free to price their gas up to, or very near to, that price and see this reflected in their profit margins. The exact level of any such increase in overall tariffs would depend upon the methodology implemented, but the CER envisages that any increase would be limited and certainly smaller than if no change to the system was made.

The choice between SRMC and LRMC is a difficult one. The former would be likely to lead to marginally lower gas costs to the end-customer which is a considerable positive in its favour. However, the latter would be likely to provide more effective and stable signals for new investment which could benefit security and diversity of supply, and is essentially the methodology used in the GB system. In deciding between these the CER is mindful of the EU Framework, which stresses the importance of providing clear entry signals. As such, CER is currently proposing to use the LRMC methodology, but will consider any further arguments regarding alternatives, including SRMC pending a final decision.

Whichever entry signal is chosen, the precise details of the methodology for calculating the marginal cost will need to be worked out and this will be the subject of a separate consultation exercise. The CER appreciates that regulatory practice and economic thinking on LRMC can differ significantly. At this stage, however, the CER's thinking is that the approach should be based on a reasonably long time period – say 20 years - and is more likely to be based on the Long Run Average Incremental Cost (LRAIC) methodology to calculating the LRMC. One of the particular attractions of the LRAIC methodology is that it is designed to ensure tariff stability.

LRAIC has been defined as “discounting all incremental costs which will be incurred in the future to provide for estimated additional demand over a specific period, and dividing that by the discounted value of the incremental output over the period²³”

In essence LRAIC looks out over a reasonable time horizon and estimates the increments in capacity that may be needed over this entire time period. Thus there may be a number of increments over the period with differing costs and differing incremental volumes. LRAIC averages (and discounts) these capacity increments and costs over the longer period to get the average incremental cost over the period. This should lead to stable and predictable price signals over the long run.

An alternative methodology, Long Run Incremental Cost (LRIC), examines the cost of only the very next increment in capacity needed to meet demand. Thus, the LRIC will be constant until a new investment takes place and will necessarily be adjusted thereafter. This could lead to some variation in the price signal over time. Given the long term nature of gas infrastructure investments, the CER is of the view that price signals should be focussed on the longer term and therefore considers LRAIC to be more appropriate than LRIC. However it should be stressed that this merely represents CER’s initial thinking on the matter.

Clearly the level of the LRMC entry tariff will depend on the final methodology chosen. The CER considers however that it would be appropriate to give an indication of the range suggested by current high level estimates of LRMC.

In 2008, the BGN response (CER/08/263d) to the “Conclusion on High Level Transmission Tariff Structure in Ireland and Northern Ireland”, presented a value of €107pd MWh as their estimate for the LRMC in 2008.

Following a request from CER, BGN recently updated this high level model using the LRAIC methodology. The resulting entry tariff was in a range of €100 to €160/peak day MWh, depending on the inputs to the process²⁴. This compares to the current 2011/12 tariff of €189.884/peak day MWh calculated under the

²³ Mann et al (1980) source their definition of AIC from Saunders, R.J. and J.J Warford, *Village Water Supply: Economics and Policy in the Developing World*, John Hopkins University Press, Baltimore, Md., 1976.

²⁴ The range depends on whether or not compressor fuel costs are included in the LRMC price signal and also on assumptions regarding the pressures prevailing at Moffat.

existing methodology. It must be acknowledged that the current IC tariff is low by historical standards because of re-profiling carried out on allowable revenues. Looking back over the period 2002/03 to 2011/12, the average IC tariff was at €278/peak day MWh (in nominal terms).

Please note the CER does not in any way present the range of figures as representing the LRMC for Moffat Entry. Pending a final decision on this matter, the CER propose to carry out a full modelling exercise to determine appropriate LRMCs for each entry point for implementation in October 2014. This, of course, will be done in consultation with industry.

7.1 Overall Conclusion

The CER has concluded that the most efficient, reasonable and sustainable methodology for determining transmission network tariffs in the future when new sources of gas supply come on stream is as follows:

- The historical differentiation between onshore and offshore tariffs will cease and the ICs will be deemed to be as much a part of “the transmission system” as other transmission assets included in the RAB.
- The “entry points” to the system for tariff setting purposes will be located where the assets transporting the gas from source actually join up with the transmission system assets comprising the RAB. Specifically the entry point for gas from GB will be deemed to be Moffat.
- In accordance with emerging EU network code rules, entry tariffs will be determined by auctions of capacity at each entry point with a reserve price set by the regulated entry tariff. The CER has considered the different options for calculating such tariffs and is currently of the view that the tariff should be calculated on the basis of the estimated LRMC cost of transporting gas at each entry point.
- The overall entry/exit system will be similar to the current GB system. The total revenue required by the system will be split 50/50 between entry and exit. Where entry capacity auctions under-recover this 50%

of revenues, common charging will be applied at all entry points to meet the total required revenue for entry.

- Implementing the GB system in Ireland could retain elements of a diversity premium where cheaper entry points could receive an infra-marginal rent when selling gas at IBP. Clearly this would depend on how the LRMC was set, differentials between LRMC's at entry points could lead to a premium arising.

Whatever system is chosen it is anticipated that the system will be implemented in October 2014. Exact mechanisms for how this will work will be explained in papers following this in 2012.

Finally, the planned changes to the IC tariff structure will ensure that the position of the Isle of Man is not unduly affected.

8.0 Next Steps

Responses are requested from interested parties on the matters raised in this Proposed Decision Paper. Comments should be submitted by 5.00pm on the 16th March 2012.

These should be submitted to:
Stuart Coleman,
Commission for Energy Regulation,
The Exchange, Belgard Square North, Tallaght, Dublin 24
Tel: + 353 1 4000 800
Fax: + 353 1 4000 850
Email: scoleman@cer.ie

The CER intends to publish all submissions received.

Should respondents wish to have part of their responses remain unpublished they should include the confidential parts only in a separate Annex.

The CER will hold a Public Forum on Thursday 1st March in Dublin to discuss the issue contained in this paper. Details regarding time and venue will be published in the coming days. The CER invites all interested parties to attend this event. As a further input to this forum the CER invites attendees to give a short presentation if they so wish, though it reserves the right to impose time limits, if required, to ensure the Forum can be concluded in an appropriate timeframe.

Parties wishing to attend and or make a short presentation should register interest with Stuart Coleman (scoleman@cer.ie) at the CER.

Appendix 1

The CER received 17 submissions in response to the July consultation paper CER11/112. The responses themselves are summarised in Section 4 above. Responses were received from the following organisations/individuals:

- Ballylongford Enterprise Association
- Bord Gáis Energy
- Bord Gáis Networks
- Economic and Social Research Institute
- Endesa Ireland
- ESB Energy International
- Irish Offshore Operators Association
- Manx Electricity Authority
- National Electricity Association Ireland
- NIE Energy
- Paul Hunt
- Safety Before LNG
- Shell E&P Ireland
- Statoil
- Shannon LNG
- Tarbert Development Association
- Vermillion Energy

Non confidential responses are published in conjunction with this proposed decision paper.

Appendix 2

An Roinn Fiontar Poiblí,
Sráid Chliara,
Baile Átha Cliath 2.



Department of Public Enterprise,
Clare Street,
Dublin 2.

18th July 2001.

Mr. Bertie Barry,
Secretary,
Bord Gais Eireann,
Gasworks Road,
Co. Cork.

Dear Bertie,

I refer to previous correspondence concerning the capital expenditure connected with the provision of gas transmission pipelines.

I am to convey the approval of the Minister, given with the consent of the Minister for Finance, under section 8(7) of the Gas Act 1976, as amended, for capital expenditure of £240.5 million for construction of a gas pipeline interconnector between Moffat in Scotland and Gormanston in Ireland, including connection to the Bord Gais network at Ballough and for compression and other facilities on the pipeline. This approval is subject to the conditions as stated below: -

- I. full compliance with established competitive tender procedures,
- II. regular monitoring of the physical progress and the related financial investments of the project,
- III. the provision of monthly variance analysis reports,
- IV. the notification to this Department of significant deviations in the estimated project cost, and
- V. full compliance with all aspects of the Government approval, dated the 27th February 2001, (S29801).

Yours sincerely,

Michael Goodwin,
Gas (Corporate) Division.



OFFICE OF THE MINISTER OF STATE
Oifig an Aire Stáil
DEPARTMENT OF PUBLIC ENTERPRISE
An Roinn Fiontar Poiblí
25 CLARE STREET, DUBLIN 2.
25 Sráid Chliara, Baile Átha Cliath 2

Tel: (01) 670 7444 Fax: (01) 604 1320 <http://www.irg.gov.ie/tec>

2nd April, 2001

Dr. M. N. Conlon,
Chairman,
Bord Gais Eireann,
P.O.Box 51,
Gas Works Road,
Cork.

Dear Chairman,

I refer to BGE's proposal to construct a second Interconnector between Scotland and Ireland.

I am writing to inform you that this proposal has been considered by the Government. The Government has decided that the Board should commence this project immediately in order to ensure continuity of gas supplies in Winter 2002/2003, on the basis that ownership of the project will be subject to private sector participation, at a level to be determined, organised in a transparent public process and on the basis of an acknowledgement by BGE that it will make any necessary divestiture of ownership required by the outcome of such a process.

The Government's decision that the project should commence is subject to the need to apply for a consent for the proposed pipeline under the Gas Act, 1976 to 2000. That application will be dealt with as quickly as possible. The procedures involving third parties must be followed in dealing with any application for consent for a pipeline and also the environmental impact assessment regime must be respected.

I would appreciate a reply at your earliest convenience acknowledging the terms of the Government's decision as outlined above.

Yours sincerely,

Joe Jacob, T.D.,
Minister for State.

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An Roinn Fiontar Poiblí,
44 Sráid Chill Dara,
Baile Átha Cliath 2.



Department of Public Enterprise,
44 Kildare Street,
Dublin 2.

21st December, 2001

Mr. B.J. Barry
Secretary
Bord Gáis Éireann
P.O. Box 51
Gasworks Road
Cork

Re: Gas Act, 1976, as amended, Section 8(7) Consent for a Second Scotland/Ireland
Natural Gas Interconnector Pipeline

Dear Mr. Barry,

I am directed by Mr. Joe Jacob, T.D., Minister of State at the Department of Public Enterprise to refer to your letter of 22nd January 2001 concerning the proposed construction of a second natural gas interconnector pipeline between Beattock in Scotland and Ballough in Ireland.

In line with Section 8(7) of the Gas Act, 1976, as amended, I am to convey the consent of the Minister of State to the construction of the pipeline. This consent is given with the concurrence of the Minister for Finance. The Minister for Arts, Heritage and the Islands (Dúchas) has also been consulted. Dúchas has no objection to the proposal subject to Bord Gáis Éireann liaising with the National Parks and Wildlife Division regional office during the construction of the pipeline. Dúchas also require that the following measures be implemented prior to construction;

- A deep penetrating (all metals) metal detection survey is required along the pipeline route. This should begin at the high water mark and should be conducted out to approximately KP.25 or out to a depth of 40m. However if the pipe is not being buried from the 15m depth mark outwards this area will not have to be surveyed;

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Telephone: (01) 670 7444 Lo-Call 1890 443311 Direct Dial: (01) 604 Fax: (01) 677 3169 <http://www.dpe.ie>

- Dúchas must be informed of the details of the methodology of the pipe laying as soon as they are available;
- In tandem with the metal detection survey a further side scan sonar survey to Dúchas's satisfaction is required;
- Pending the results of the metal detection survey and side scan survey further archaeological mitigation may be required. This may include dive surveys or archaeological testing and/or excavation. Dúchas will advise on these matters;
- The dump zones in which the dredged material will be deposited will be subject to an archaeological assessment. This should take the form of side scan sonar surveys. Details of the location of the dump zones must be forwarded to Dúchas;
- All surveys are to be carried out by suitably qualified archaeologists licensed under the National Monuments Acts 1930-1994;
- It is likely that archaeological monitoring will be required for all dredging operations. Dúchas will advise BGE on this matter.

All relevant Statutory Bodies were consulted in connection with this project. Under Section 50 of the Arterial Drainage Act, 1946, the consent of the Commissioners of Public Works is required for the construction, alteration or reconstructing of any bridge or culvert over any watercourse. All applications for consent should be made to the Engineering Service, Office of Public Works, 51 St. Stephen's Green, Dublin 2

Additional conditions of consent include: -

- adherence to the terms and conditions stipulated in the attached "CONSENT AND CONDITIONS FOR THE CONSTRUCTION AND OPERATION OF THE SECOND INTERCONNECTOR GAS PIPELINE";
- that necessary planning provisions are in place prior to construction;
- adherence to the recommendations, where appropriate, of the Task Force Report on Dumping of Radioactive Material in the Maritime Area, (December 1999);
- that construction of the 50km stretch of pipeline from Cluden to Brighthouse Bay does not commence prior to the submission to the Minister of Detailed Engineering;

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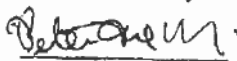
GAS REGULATORY DIVISION

PAGE 05

- the construction of the pipeline shall be in accordance with:
 - Council Directive 85/337/EEC as implemented by the European Communities (Environmental Impact Assessment) Regulations (S.I. 349 of 1989)
 - Council Directive 97/11/EC on the assessment of the effects of certain public and private projects on the environment (S.I. 51 of 1990)
 - Council Directive 85/337/EEC as implemented by the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1994 (S.I. 84 of 1994)
 - Council Directive 85/337/EEC as implemented by the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1996 (S.I. 101 of 1996)
 - The European Communities (Environmental Assessment) (Amendment) Regulations, 1998 (S.I. 351 of 1998), and
 - Council Directive 97/11/EC as implemented by the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1999 (S.I. No. 93 of 1999).

This consent is to construct but not to operate the pipeline. On completion of the certification of fitness process as outlined in Article 8 of the attached document, "CONSENT AND CONDITIONS FOR THE CONSTRUCTION AND OPERATION OF THE SECOND INTERCONNECTOR GAS PIPELINE", separate conditions relating to the operation of the pipeline will issue.

Yours sincerely,



Peter O'Neill
Gas (Regulatory) Division

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Government Opts For Second Gas Interconnector With Scotland

Gas Network to be extended to the North West

The Minister for Public Enterprise, Mary O'Rourke TD, and Mr. Joe Jacob, TD, Minister of State at the Department, today announced that Bord Gáis Éireann is to proceed with its proposal for a second natural gas interconnector from Scotland to Dublin. In a significant development the Ministers said the project would be funded through Bord Gáis and private sector investment. The Ministers also announced the Government's approval to extend the gas network to the North West and the drafting of legislation to give the Commission for Electricity Regulation responsibility for gas matters.

Second Interconnector

"Recent demand forecasts by the ESRI show that gas demand in Ireland is growing faster than had been anticipated and that Ireland will need additional gas supplies by Winter 2002. An independent assessment of the engineering status of various proposals concluded that the Bord Gáis proposal for a second interconnector from Scotland is the only project capable of delivering gas to the Irish market in time to meet the expected demand in Winter 2002," Minister Jacob said.

Minister Jacob added: "The Government is determined to safeguard Ireland's attractiveness as an investment location and the ability to maintain the growth of the economy. This requires that we have a secure and continuous energy supply. Anything that might jeopardise this could have negative consequences for economic growth and employment."

Minister Jacob said that the alternative to a new supply pipe for Winter 2002 would be for Bord Gáis to restrict the supply of gas through demand management measures. "I do not consider that this would be in Ireland's best interests," Minister Jacob said, "a secure and reliable gas supply is a key element for the growing needs for the economy, and in particular to facilitate further new electricity generation".

Minister Jacob said that the project presented an opportunity for private sector investment and that he proposed to make approval of investment by Bord Gáis in the project subject to such private participation, organised through a transparent public process. "The most important issue is to get this project underway to ensure that sufficient gas capacity is available in Winter 2002," the Minister said, "I will be considering all the options for private sector participation in the coming months".

Extension of Gas Network to the North West

The Government has decided, in principle, to extend the gas network to the North West. Minister Jacob said: "Bord Gáis has a statutory obligation to extend the gas network to new areas of supply on a commercial basis. The Government has recognised that funding will be required for the extension of the gas network to the North West." The Ministers said that this would follow the planned extension by Bord Gáis of the onshore network from Dublin to Galway and Limerick and from Mayo to Galway which will involve some £200 million investment in the Border, Midlands and West Region over the next two years. "This proposal will extend and improve the energy infrastructure in the North West," said Minister Jacob. "Given that Government funding will be a requirement, the project will most likely be carried forward through an open competitive process. Detailed proposals for this project will be developed as quickly as possible".

Independent Regulation of Gas Sector

The Ministers said that the Government had approved the drafting of a Bill which would give the Commission for Electricity Regulation (CER) responsibility for gas matters. "I regard this as a natural development for the energy sector as a whole," said Minister Jacob. "As we complete our transition to fully liberalised electricity and gas markets, it is appropriate that the CER should have responsibility for regulating both areas. I intend that the CER will have the ability to take account of effects which electricity developments have on the gas market and vice versa", said the Minister, who added that he was confident that the legislation could be in place before the Summer.

Minister Jacob also said that he intended to provide for further opening of the gas market in the legislation. "I am planning to reduce the threshold for eligible customers from 25 million standard cubic metres per annum to 2 million standard cubic metres. Gas consumers of this scale will be entitled to third party access on the network."

Extension of Gas Network to Northern Ireland

The Ministers also announced that Bord Gáis and Questar, a US gas pipeline company, are having discussions with the Department of Enterprise, Trade and Investment in Northern Ireland on the development of an all-Ireland gas network. In this context the parties have made an initial submission to the Department in Belfast in relation to the construction of pipelines between Dublin and Craigavon and on to Belfast and from Belfast to Derry.

Minister O'Rourke reaffirmed her commitment to the concept of an all-Ireland energy market. "Both myself and my Northern counterpart, Sir Reg Empey, recently launched a North/South energy study. I have been in close contact with Minister Empey aimed at facilitating the development of an all-Ireland energy market" the Minister said.

Gas Transmission Tariffs

On the question of gas transmission tariffs, Minister Jacob said that, following consideration of the report prepared by The Brattle Group and the extensive round of public consultations his Department had undertaken, he considered postalisation of on-shore tariffs to be a desirable and necessary policy objective. He intended that on-shore tariffs would be based on this principle with separate entry tariffs, in line with the recommendations of the Brattle Report. "Subject to finalising some legal and technical issues, I will be issuing tariff directives on this basis to Bord Gáis shortly".

The Minister also referred to the proposal by The Brattle Group that efficient implementation of this tariff structure would require some form of transparent intervention mechanism such as the geographic equalisation levy proposed by Brattle. Any such proposal would require primary legislation and independent operation.

"In the course of the consultation process on tariffs I received a number of submissions on the recommended levy. I propose to ask the Commission for Electricity Regulation, when empowered to deal with gas matters, to advise on the least-cost mechanism to ensure efficient implementation of the tariff structure. I also intend to charge the Commission with implementation of the eventual regime" Minister Jacob said.

Ends 27 February, 2001



An Roinn Cumarsáide,
Fuinneadh agus Acmhainní Nádartha,
Baile Átha Cliath 2.

Department of Communications,
Energy and Natural Resources,
Dublin 2.

October 2008

Mr Denis Cagney
Director of Gas
Commission for Energy Regulation
The Exchange
Belgard Square North
Tallaght
Dublin 24

Dear Denis,

Regulatory Treatment of IC2 Investment Costs

I refer to your letter of 3 October 2008 requesting the views of this Department on the possibility of stranding IC2 as an option for mitigating the tariff implications of declining usage of the Ireland-Scotland gas interconnector in the future.

The Department notes the intention of the CER to publish, at an early date, a follow-up CAG tariff consultation paper. The Department has reviewed documentation provided by the CER on this issue, consulted with BGE and Gaslink, and also noted the range of mechanisms mooted in the CAG Consultation Paper on *Transmission Tariff Methodology and Regulation in Ireland and Northern Ireland*.

The future operation of the interconnectors needs to be the subject of ongoing intensive discussions between all the parties involved, i.e. the Regulator, the Department, the Northern Ireland authorities, BGE and Gaslink and possibly the UK authorities, to ensure that the optimum solution for all is reached.

The Department believes that there are other options to the 'stranding' of the interconnectors that could be considered as options for mitigating the effect of their declining utilisation on tariffs. The primary critical reason for the construction of IC2 was security of supply. By providing this security since its construction in 2002, IC2 has been an important aspect in decisions to develop the electricity generation portfolio in Ireland. In addition, it has provided security of supply for the NI market through its connection with the South-North Pipeline. When the Corrib, and possibly other diverse supplies come on stream, the Ireland-Scotland interconnector will continue to play a crucial security of supply role in the event of unanticipated disruptions in supplies.

It would appear to be unreasonable to expect BGE to bear the cost of an asset that is a

long-term benefit to the gas market in particular and to Ireland in general. If BGÉ were a private company and were told that it could no longer obtain a reasonable rate of return on its asset, it would shut down the pipeline immediately to save any additional maintenance costs, with consequent long-term implications for security of supply. BGÉ, as a State-owned company, might not be permitted to do this but would most likely be expected to maintain the pipeline as a security of supply asset for use once indigenous supplies of gas deplete again. Such a requirement would impact on BGÉ competitiveness.

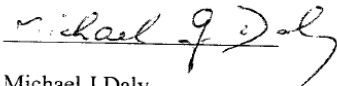
Furthermore, the loss of revenues that would occur from the 'stranding' of the asset would impact on BGÉ's ability to develop and maintain the natural gas network, which it is statutorily obliged to do.

It is clear from the papers issued by the CER that there is a range of regulatory mechanisms available to the Regulator that would not put BGE in the position of having to forego revenue, would not impact on BGE's investment plans and would not have implications for BGE's dividend payments to the Exchequer while at the same time supporting real competition in the market.

A proposal to deal with the issue, put to the Department by BGÉ last week, which I understand has also been presented to the CER, is worthy of consideration as it may meet the needs of all stakeholders.

However, as stated above, there needs to be intensive engagement and discussion between all the stakeholders on this issue to ensure an appropriate long-term outcome.

Yours sincerely



Michael J Daly
Principal
Electricity and Gas Regulation

Appendix 3

CER/08/207: CAG - Draft Conclusions on Transmission Tariff Harmonisation in Ireland and Northern Ireland.

CER Position on Regulatory Treatment of IC2 Investment Costs (Appendix 1)

Introduction

The CER sets out below its position on the case for “stranding” IC2 investments costs, as mooted as a possible option in the joint CER/NIAUR CAG Consultation Paper on Transmission Tariff Methodology of 27 June 2008. This issue arises in view of the prospective decline in gas throughput as Corrib, and potentially Shannon LNG in due course, comes on stream. By “stranding” in this particular context we mean, in broad terms, that IC2 would no longer be underpinned financially by the network tariff regime and that BGN would in future only be remunerated to the extent that IC2 is actually used.

Background

Ireland has two subsea interconnectors connecting the Irish market to Scotland. The first interconnector (IC1) was built in the 1990s while the second (IC2) was commissioned in 2003. The two pipelines connect to a single pipeline at Brighthouse Bay in Scotland. In addition the Scotland to Northern Ireland Pipeline was built in the late 1990s which connects to the BGN interconnectors at Twynholm in Scotland and lands in Northern Ireland at Ballylumford.

At present around 92.5% of the gas used in Ireland is transported across the interconnectors (ICs). The tariffs on the ICs are calculated by taking the BGN allowable annual capital revenues and dividing by the projected flow for the year; this gives a capacity and commodity tariff¹¹. These allowable revenues are set by the CER as part of the general multiannual transmission tariff revenue reviews carried out by CER (to date covering 2003-2007 and 2007-2012). These reviews have not differentiated between the interconnectors and the onshore system for the purpose of determining the regulatory *status* of the asset base (the “RAB”) or the weighted average cost of capital (WACC) to be allowed on this RAB. In other words, the ICs were treated as no different to the onshore system for the purpose of determining aggregate allowable revenues. [The fact that tariffs are subsequently set on a separate entry/exit is a different question].

The arrival of new indigenous and diverse gas sources in the future is expected to result in a lower utilisation of the ICs. The first impact is expected in late 2009 with the arrival of the Corrib field. Under current regulatory practices, once IC utilisation decreases the per-unit tariff would increase as the allowed revenues remain the same, but will be divided by a smaller flow volume.

This was recognised as an issue previously in the last CER BGN Price Control in 2007. Since then, it has been suggested by some market participants that the CER should no longer require the general transmission customer to effectively underwrite IC2. Either the original investment was a bad decision, the argument runs, or BGN should in any event have to live with the risk of it becoming stranded at some stage in the future just in the same way as, say, offshore gas developers have to live with the risks associated with their investments in gas production facilities.

The CER has considered this issue by reference primarily to two considerations:

- the background facts
- the regulatory principles arising

The Background Facts

The CER has corresponded with the Department of Communications, Energy and Natural Resources on the background to the original 2001 Government decision to invest in IC2 which, of course, predated the extension of the CER's regulatory remit to the gas sector¹². The CER has also carried out its own research on the matter. A copy of a DECNR letter to the CER of 12th August 2008 is appended to this memorandum.

From this correspondence and our research the following essential facts emerge:

- The decision to invest in IC2 was made with the approval of the Government of 20 February 2001
- The background information and the lead up to the decision to construct was documented in the Gas 2025 Project Close Out Report and Review (available on the DCENR website)
- The decision and the Government approval were expressly grounded on security of gas supply considerations, and short term security of supply in particular
- The conditions attaching to the Government decisions have either been met or have been overtaken by events
- The decision to invest was made following quite extensive research and input by a number of advisory bodies and (e.g. ESRI, Forfas)
- The discovery of the Corrib field was known at the time, though there was a uncertainty over its size, extraction rate and likely timing of coming on shore
- One firm of advisors to the then Minister did carry out a risk analysis, or “what if” study of the project. It acknowledged the risk of stranded asset and advised that any major capital investment in IC2 be “delayed pending clarification of the position concerning the Enterprise gas discovery”. To our knowledge, however, it did not go so far as to recommend *against* the project.

The decision to invest in IC2 predated the current Directive 2003/54/EC which, among other things, introduced the concept of a “designated TSO” with the corollary responsibilities of operating and developing etc. a transmission system in a Member State or part thereof. The then prevailing EU rules were set out in Directive 98/30/EC which mainly confined itself to setting out certain duties (non-discrimination etc.) on the part of “gas undertakings” such as storage or network operators, or suppliers etc. The 1998 Directive did not really go into *positive* duties of individual “designated” operators etc. It is worth noting here in passing that the EU regime on market liberalisation does not differ between gas and electricity in terms of recognising the natural monopoly characteristics of system operation and the right and duty of Member States to “designate one or more transmission system operators...” in their territory.

For practical purposes, however, it is reasonable to see BGN’s 2001 decision to invest in IC2 as that of a *de facto* TSO. There was no other entity in existence at the time with either the capacity or the statutory remit to plan for how to meet Ireland’s future gas requirements. BGE was acting within its domestic statutory remit. It was charged by the Gas Act, 1976 “to develop and maintain a system for the supply of natural gas being a system which is both economical and efficient”. In Ministerial Order, S.I. 283/1987, it was granted the express power “to supply, transmit, distribute and sell gas within a given area”.

In summary, the CER has inherited a Government approved decision for the *de facto* Irish gas TSO to invest in IC2 on the express grounds of national security of gas supply.

Regulatory Principles

As a general principle, an economic regulator should not allow major regulated infrastructural investments that have received prior approval to be subsequently stranded unless there are very special circumstances or compelling reasons for doing so. Apart from any question of fairness, this creates considerable uncertainty and sends a bad message to potential investors. The fact that the investment in the present case was approved, or even mandated, by Government on the grounds of security of supply would add further to the case that the CER

should be wary of stranding IC2 simply on the grounds that its contribution to national security of supply will now become less significant by virtue of Corrib coming on stream.

There is also an issue of consistency in regulatory treatment of IC2 arising here. CER has to date treated BGE as a *de facto* monopoly operator in the two multiannual price controls to date - akin to ESB Networks as networks asset owner in the electricity sector. This is reflected in the allowed cost of capital (WACC) and, in particular, in the setting of the risk premia. The WACC assumed there was little or no regulatory risk of the assets (onshore or ICs) being stranded. Were it now to emerge that, contrary to this assumption, there is the clear prospect of unused IC capacity now being stranded by the regulator, then at the very least there would be an onus on CER to revisit the earlier WACC calculations and retrospectively "correct" them upwards, with obvious tariff repercussions for end customers.

Even if CER were to base its regulatory treatment of IC2 on the benefit of hindsight - which it is not proposing to do - it is by no means clear that this would strengthen the case for stranding IC2. IC2 has been in use now for a number of years and provides a number of key benefits to both gas and electricity customers in Ireland. One of the reasons why the building of IC2 was criticised by some was the fact that Corrib was due to arrive and the second IC would not be needed. At the time of the decision Corrib was expected to be operational from 2003. The latest projected operational date for Corrib is now late 2009 - some six years later than expected. During this time the capacity provided by IC2 has allowed the gas industry to develop without constraint. On the electricity generation side, there have been a number of substantial sized gas fired power stations commissioned since IC2 was built. There are currently two 400MW CCGT plants in construction and several other gas fuelled generation projects either under active development or at an advanced planning stage. It is hard to see that all these projects would be where they are today without IC2.

In passing, these security of supply benefits from IC2 are not confined to customers in the Republic of Ireland. Customers in Northern Ireland also benefit. Their security of gas supply is enhanced by the recently completed South North pipeline which, in turn, could not have been contemplated without IC2.

Lastly, regarding a possible argument that underwriting IC2 would discriminate unfairly against offshore gas developers or Shannon LNG, it is important to bear in mind that BGN was not, and still is not, a gas producer. It is a network operator and it was in that *de facto* capacity that it invested in IC2. This differentiates the IC2 project from, say, the Corrib or Shannon LNG projects. The IC2 project is relying exclusively on a regulated tariff revenue stream to remunerate the investment. Corrib/Shannon LNG are commercial ventures whose remuneration

will depend on gas sales alone. Moreover, as TSO, BGN has a statutory duty to develop the gas transmission system to cater for future demand, which the developers of the other projects do not.

All of this is not to suggest that a gas developer such as Corrib is in any way “responsible” for the prospective reduced IC2 utilisation. It is not. The Corrib project is very welcome. There should be no question, for example, of discriminating against customers who offtake gas from Corrib (or Shannon LNG) as opposed to the ICs or attempting to discourage them from doing so through the network tariff regime. These tariff design questions are being considered separately under the Common Arrangements for Gas (CAG) consultation exercise being conducted jointly by CER and NIAUR.

Conclusion

For the reasons set out above, the CER does not see stranding IC2 investments costs as an acceptable means of mitigating any tariff implications of expected reduced IC2 throughput in the coming years, whatever those implications may turn out to be. Any mitigation measures taken must, however, be efficient, fair and proportionate. This issue is being addressed within the CAG forum.

Re: Construction Decision IC2

Dear Denis,

I have carried out a trawl through the files that relate to the Government approval for the construction of a second Scotland-Ireland subsea interconnector. In the following paragraphs, I set out the basis for the decision for IC2 which was made at the Government meeting of 20th February 2001.

- (a) The Government approved, in principle, the construction of a second Scotland-Ireland subsea interconnector to proceed immediately in order to ensure continuity of gas supply in Winter 2002/2003, on the basis that the pipeline will be commenced by Bord Gáis Éireann (BGE), and that ownership of the project will be subject to private sector participation at a level yet to be determined, in a transparent public process;
- (b) The Government agreed that the approval, at (a) will be subject to-
 - proceeding directly to liberalisation of the market for gas supply
 - fulfilling statutory requirements
 - Department of Finance approval for BGE's capital expenditure and
 - examination of the necessity for non-exchequer funding to reflect the security of supply value of the interconnector
- (c) The Government approved, in principle, the construction of spur pipelines to the North, North West and North East;
- (d) The Government agreed that, subject to the agreement of the Attorney General, gas transmission tariffs will be based on the principle of postalised (geographically uniform) tariffs for gas transmission on-shore and that there should be separate tariffs for supply/import pipelines; and

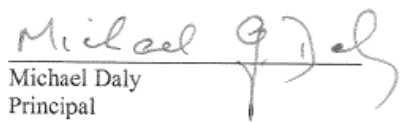
- (e) The Government agreed that the question of the efficient application of postalised tariffs to all gas consumers should be considered by the interdepartmental group chaired by the Secretary General to the Government, which had examined the interconnector proposals.

As you will be aware the proposal to involve private sector participation did not proceed as preliminary studies indicated that the proposal was not feasible.

As mentioned to you there is also the Agreement between the Government of Scotland and the United Kingdom of Great Britain and Northern Ireland relating to the transmission of Natural Gas by a second pipeline between Ireland and United Kingdom of Great Britain and Northern Ireland and through a connection to the Isle of Man. A few of the Articles of the Agreement also impact on the determination of interconnector charges for the provision of this facility.

Please feel free to contact me should you require any further clarification or elaboration.

Yours sincerely,


Michael Daly
Principal
Electricity and Gas Regulation Division

Appendix 4

Customer of 365 MWh annual consumption and a load factor of 1.3			Current Tarrif Moffat Shipper	Possible Increased Tariff if 50% of shippers move Moffat Shipper
IC required revenue 11/12	€m		44.4	44.4
Capacity revenue	90%	€m	39.96	39.96
Commodity revenue	10%	€m	4.44	4.44
Capacity booking	GWh peak day		210.46	50% 105.23
Commodity flows	GWh		54,164.78	50% 27,082.39
Capacity Charge	€ per peak day MWh		0.190	0.380
	Load Factor		1.3	1.3
	Total in €		0.247	0.494
Commodity Charge	€ per MWh		0.082	0.164
	Consumption		365	365
	Total in €		29.920	59.840
Total Cost for 365MWh annual consumption			30.167	60.333
Total Cost in € per MWh			0.083	0.165
1 Therm in kWh	29.3071			
Total in cents per MWh			8.265	16.530
Total in cents per kWh			0.008	0.017
Total in cents per Therm			0.24	0.48