

Submission to the Commission for Energy Regulation

Pricing of Gas Infrastructure in Ireland

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Gas supplies are of crucial importance to Ireland because gas plays a central role in electricity generation. Because of this, any interruption to supply could have very serious consequences. Of the gas used in Ireland, currently nearly all of it comes through the interconnectors with the UK. There are three under-sea pipelines but only one onshore pipeline carrying all the gas for the island of Ireland. Clearly any problem with the one onshore pipeline in Britain would be very serious for Ireland. Experience elsewhere suggests that such problems can generally be repaired relatively rapidly onshore. Nonetheless there remain concerns about dependence on this single piece of infrastructure.

Whatever about the security of the onshore pipe, any break in an offshore pipe would take much longer to fix. After the first undersea interconnector was built in 1993, a second interconnector was completed in 2002 in order to fulfil both the obligations imposed by the EU Regulation on Security of Gas Supply and also to protect Ireland against any risk of service disruptions through a fault in the existing undersea pipeline. The second interconnector replicates the maximum capacity of the first interconnector (measured as 17 mcm/d) and provides an additional capacity of 6 mcm/d to take into account the rise in the gas demand expected since the beginning of 2000s.

As a result of the building of the second pipeline there is greatly enhanced security, not just for those who source their gas from GB directly through the pipelines, but also for all users of gas from whatever source and all users of electricity. With the building of the North-South pipeline the benefits of security of supply were further enhanced for consumers both North and South.

This still left a vulnerability to damage to the single onshore pipeline in GB. However, with the advent of Corrib, Ireland will have two alternative sources of supply of gas for the coming decade. While Corrib will never be able to supply all of Ireland's needs it is likely to be able to meet the needs of the electricity sector until at least 2020. Thus Ireland's vulnerability to a possible very low probability event (damage to the onshore pipeline in GB which would take more than a week to repair) will have been eliminated for the current decade. There is, as a result, no reason for consumers to pay for an additional premium for security of supply reasons over the next few years.

As the supply for the Corrib field begins to run down towards the end of the decade it will then be appropriate to consider how security of supply for consumers can best be ensured after 2020 at minimum cost.

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.

Under these circumstances the correct approach for the CER is treat the gas interconnectors as part of the gas transmission network and recover the capital costs via an increase in the use of system charge levied on all gas consumed by the owners – the consumers of Ireland. The appropriate charge for use of the interconnectors is the short run marginal cost of using those interconnectors. This would include the cost of pumping the gas through the interconnectors until it reaches the onshore transmission system as well as any wear and tear resulting from the use of the infrastructure. It should not include payment for the capital cost of the interconnectors. Obviously where other suppliers deliver gas directly to the onshore transmission system (Corrib) they would not have to pay for the cost of pumping gas through the interconnectors.

As set out in the CER consultation Paper CER/11/002, the current tariff is calibrated to give to the interconnector owner a final revenue of 50 million/€, which permits the full recovery of the costs of the pipelines over a reasonable period. Currently this revenue is collected through a charge per unit of gas passing through the pipeline as well as a fixed capacity charge.

As new sources of gas come on stream, the imports from GB will fall. Under the current arrangements, as the imports fall the price per unit transported through the pipeline will rise (calculated as the agreed revenue divided by the quantity of gas imported through the pipes). This is because the cost of the pipeline is fixed based on historical expenditure. As more and more gas is sourced from other sources (e.g. LNG and Corrib) the transport cost per unit of gas will also rise under this arrangement. In the limit, if all the gas is sourced from non GB sources (i.e. other than through the interconnectors) the price per unit transported will rise towards infinity. Because of the regulatory guarantee on the pipelines if no gas flows the revenue would, in any event, have to be found elsewhere.

A numerical example illustrates the effects of the linkage between imports and transmission costs. In 2010, the value of the gas imports from the UK was 1,134,700 euro thousands.¹ As the regulator has fixed the interconnector revenues to €50,000 thousands, the transmission costs can be calculated to be equal to the 4.41% of the total revenue.

If Corrib gas had been available the gas imports from GB would have been reduced. For simplicity of analysis let us suppose that the value of the imports were reduced by 20%. Given that the revenues are always fixed to €50,000 thousands, the transmission costs would then have had to rise to 5.51%. In turn this would have added around 1% to the price for domestic consumers.

This approach to pricing has two major defects.

First, the availability of gas transmission infrastructure is there to ensure that gas (and electricity) users have a safe and secure supply of gas on the island. These security benefits of the infrastructure accrue to all gas users. With the onshore infrastructure a common use of system charge is deemed appropriate as all users benefit from its existence. This argues strongly for treating the gas interconnectors as part of the gas transmission network and charging for it in the same way as we charge for the existing transmission system.

¹ The data were taken from the CSO website.

Second, the price of gas in Ireland is set on the market as the GB price plus the cost of transmission. Under existing arrangements, as domestic supply rises, the cost of transmission per unit of gas imported through the pipelines will also rise. In the limit, once supply from domestic sources equals demand, the price of transmission would be infinite. In turn, this would imply that the price of gas for consumers would rise as more and more gas is sourced from domestic sources. The domestic price would never become “infinite”. However, it would continue to rise until there was a major choking off of domestic demand to bring domestic demand into line with domestic supply. A further limit on the price would be that the owner of the pipeline, while unable to cover its costs might act strategically to trade in gas itself garnering some revenue.

Meanwhile the regulator would have to ensure that the stranded costs were serviced in some other manner. It would clearly be unacceptable to push these stranded costs onto the taxpayer. To the extent that they would have to be covered by the consumer this argues for treating the interconnectors as part of the regulated asset base and charging a common charge to all users of that transmission infrastructure.

As highlighted above it seems quite counterintuitive that the price should rise as new gas sources are discovered. In order to avoid this, the regulator should either choose to charge all Irish consumers for the interconnection capacity which secures the gas supply or reduce the investor’s revenue (BGE).

We do not recommend undertaking the latter measure, as leaving the investors without the repayment of the fixed costs will strongly discourage any further investment in the sector and send a very bad signal to financial markets at the current juncture.

Then, the best way to deal with the problem would be to make all the Irish consumers pay for the interconnection capacity that will insure the security of supply, in order to offset the rise in the transmission costs and then in the final gas prices.

In the light of this analysis we would strongly recommend treating the gas interconnectors as part of the essential gas infrastructure on the island and recovering their capital costs through the use of system charge 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 the price facing domestic consumers would be invariant as to the quantity of gas sourced domestically.