

**RESPONSE BY BORD GÁIS ENERGY
TO**

**PUBLIC CONSULTATION ON DRAFT
NATIONAL POLICY ON ELECTRICITY
INTERCONNECTION IN IRELAND**

2ND MARCH 2018

Bord Gáis Energy's (**BGE**) recognizes the benefits of liquidity, flexibility and diversity that the interconnectors on the island of Ireland have brought to the energy market. However, we also recognize the additional costs, risks and conflicts that they have given rise to in the form of reserves, reinforcements and long-term outages. We therefore welcome this engagement as an opportunity to ensure that any future interconnection for Ireland properly considers the breath of costs, benefits, risks and opportunities for the Irish energy market and the Irish energy consumer. BGE's principle objective in responding to this consultation is to ensure that the process by which interconnection in Ireland is developed is done so in a manner that accounts for the **whole system costs** and is assessed against a number of **sensitivities** to ensure the business case is robust against inevitable market changes and compatible with other low carbon projects. We are also eager to ensure that the policy considers the **appropriate ownership and operational structures** for the interconnection assets to deliver fair and competitive market outcomes. We also believe that the policy should consider the funding and recovery structure for the asset such that the 'public good' aspect of the asset, i.e. those benefits that will not be compensated for through market prices, does not overburden the electricity customer.

In proposing the policy as laid out in the Consultation Paper, it essentially assumes that interconnection in Ireland will not be built on a merchant basis. This ties in with analysis conducted by the ESRI in 2008 which highlighted that a large proportion of the benefits relating to Interconnection stem from the liquidity, security of supply and diversity of supply benefits that they bring to markets – none of which are benefits that can be monetized through congestion rents by private investors. To that end, in all practical terms, it is likely that interconnection investment will only occur under TSO led and customer backed conditions. That being said, investment in such a significant capital investment plan should be the subject of a robust cost benefit analysis which considers a variety of sensitivities. In reviewing the business case for the East West Interconnector we note that a significant portion of the benefits of the project derived from lower prices in GB (they were lower by some 40% at the time and that differential was predicted to remain even with the expected increase in demand). No sensitivity was conducted at the time to assess the change in business case where that differential was reduced significantly – which we now know it has. The business case also estimated benefits relating to security of supply and reserve without due consideration of the risk of outages, which for a largely sub-sea piece of infrastructure are generally longer and more complicated than other forms of electricity generation.

BGE understands the difficulty in developing a business case but believes that strong business cases, with robust and realistic sensitivities are key to the credibility of projects in showing how robust a project is against what will be inevitable market changes.

BGE answers the specific consultation questions below.

1. What, if any, additional weighting should the CRU apply to security of supply considerations in its decision-making process?
2. What, if any, additional weighting should the CRU apply to diversity of supply considerations in its decision-making process?

BGE has taken questions 1 and 2 together. Recognizing that 'security of supply' and 'diversity of supply' are largely 'public good' benefits, they can be difficult to quantify and are perhaps best assessed through thorough sensitivity analysis. Sensitivity analysis capturing security and diversity of supply should look to counterfactual scenarios taking account of market and system costs under: a

business as usual scenario; the loss of the largest unit on either side of the interconnector, and alternative investments to achieve the same level of diversity & security.

Calculating these alternative costs will give an indication of the actual flexibility and value for money the interconnector will provide. In our view, additional weightings without a comparison to alternatives would be meaningless and potentially misleading if they are to be applied.

3. Should the CRU take EU interconnection targets into account in its evaluation? If so, how?

4. What impact does EU Policy and the EU's Clean Energy Package for all Europeans have on electricity interconnection to Ireland? Are there any other EU/national legislation or policy objectives that should be considered?

There is no question but that Ireland is a fully subscribed member to Europe's Energy Union, including the policies and legislative packages that relate to it. Ireland is actively further integrating its energy market to comply with the European Target Model and to facilitate greater levels of flexible generation and demand, to ultimately enhance competition and drive price efficiencies in the long run for the Irish energy customer. That is, Irish energy policy is intertwined with European energy policy in; driving competition; facilitating renewable and flexible generation investment, and accessing cheaper prices from larger more liquid markets. Interconnection is one potential avenue of achieving these goals.

To that end, when conducting a cost benefit analysis' for any interconnector project and in modelling the system, market and policy implications of a project in terms of costs, benefits, risks and opportunities (as set out in BGE's answer to question 6 below), European Policy will be intrinsically captured in the overall project assessment.

However, that is not to say that projects should be developed purely to achieve a singular policy goal at the expense of all other market and/or policy objectives. If in a robust cost benefit analysis of an interconnection project (accounting for policy, market and system impacts, as well as sensitivities) the overall benefits do not outweigh the overall costs, then the development of the project would not be consistent with European energy policy. To that end, we do not believe that an interconnection project should be progressed simply to meet European level targets as the target for interconnection has in itself wider policy goals and we should look at alternative, more cost-effective ways, of achieving those goals if they cannot be achieved through interconnection.

5. Are there any gaps in the policy backdrop outlined in this paper?

In considering the evaluative approach to the Interconnection projects, the Consultation does not consider the ownership and operational structures required to ensure that the development and operation of an Interconnector does not undermine the principles of fair, transparent and competitive trading markets.

BGE has had reservations in the past in how certain market parameters, such as Transmission Loss Adjustment Factors (TLAFs) and Capacity De-Rating Factors, have been calculated by the Transmission System Operator (TSO) for an asset sitting within its own balance sheet. BGE is acutely aware of the detailed unbundling provisions that have been facilitated by the Department of Communications, Climate Action and Environments' ('DCCAIE' or "the Department") in the past to support competitive

markets and we believe a similar level of unbundling is required in the case of interconnectors to ensure they are seen to be operated on an equal platform to other forms of generation and demand in the market.

6. Are there any gaps in the evidence base outlined in this paper?

BGE welcomes the proposal to provide an evidence based approach to the evaluation of interconnector projects in Ireland. From the Consultation however, it is unclear how this will be properly structured, administered and reviewed. From a structural point of view, BGE proposes that a clear template is provided whereby a party seeking to develop an interconnection asset, to be underwritten by the energy customer, provides:

- A full **cost overview** of the project with details relating to the rationale for the size, technical parameters and location of the project
- An **impact assessment** broken down into: 1) Policy Impacts; 2) Market Impacts and 3) System Impacts. These should consider the contribution of the project to Ireland's policy objectives as set out by the relevant Departments and Regulatory Authorities' from time to time. Under 'Policy Impacts' it should consider the areas of security, diversity, EU targets and competition. With 'Market Impact's it should consider the impact on wholesale prices and customer prices but also the impact on the market revenues of other assets, including other existing interconnectors (already being underwritten by the Irish electricity customer). Under 'System Impacts' it should also consider the reinforcement costs, reserve costs and losses. To the extent that the asset connecting to the system has negative implications for existing assets on the system, this must be considered strongly and alleviated to ensure parties are not unduly negatively impacted by the project¹.
- As outlined above, as part of the evidence base, **sensitivity analysis** should also be conducted to firstly test the robustness of the impact assessment against market changes (both locally, in the connecting market and in markets connected to the connecting market) and secondly to test the project against alternative investment options.

In terms of funding the asset, BGE suggests that any project submitting project approval to the CRU should also set out funding and recovery options, detailing its preferred option(s) and why they believe it is in the best interest of the customer².

7. Is there anything else we need to consider as we set about finalising a national policy statement on electricity interconnection?

As noted in the introduction, BGE does not believe that the cost benefit analysis and the resulting investment in EWIC was undertaken with considered assessments. As we look to connect more interconnectors to the Irish system there will be greater trade-offs between the costs and benefits of

¹ Given the outage risks of sub-sea interconnectors, Ireland cannot simply rely on an interconnector for its security of supply. In the event of an interconnector outage, which can and has been prolonged in the past, Ireland will need to ensure that there is existing on-island generation available to meet demand and therefore it is critical that this support cost is taken into account when considering an interconnector project.

² Typically the costs of interconnectors are recovered through 3 revenue sources; transmission charges, congestion rents and transaction costs. In developing an Interconnector project, the TSO should seek and be incentivised to recover as much as possible through the commercial revenue streams (i.e. congestion rent and transaction charges) to minimise the risk on the general electricity customer. Recognising that this puts more of its revenue at risk, there must be a balance between the risk taken on by the project and the risk placed on the electricity customer.

interconnection and who they are distributed to. Specifically, an ESRI Working Paper examining the welfare and competition effects of interconnection noted that the net benefits for the marginal interconnector investment reduces significantly beyond 500MW of interconnection³. It is therefore critically important that Ireland looks to not simply invest in more interconnection but in **the right amount** of interconnection to meet our system, market and widest policy needs.

Finally, we must ensure that large-scale projects aimed at significantly reducing Ireland's carbon footprint are coordinated strategically to deliver the best value for the Irish energy customer. Specifically, any TSO developed IC being underwritten by the electricity customer must also consider the implications of the IC project on other low carbon or carbon reduction projects that are being developed in the years up to and after the IC project is scheduled e.g. the carbon capture and storage project being considered in the Cork area close to where the Celtic Interconnector is proposing to connect to the Irish system. That is, they must consider how the technical attributes and the landing point for the IC project may impact the viability of these other projects and Ireland's progress in meeting its significant decarbonization targets as a whole.

³ ESRI Working Paper No.232, "Welfare and competition effects of electricity interconnection between Ireland and Great Britain". In this Working Paper, the ESRI look at the optimal level of interconnection for investors, for Irish consumers, for Irish producers, for GB consumers and GB producers.