

The Commission for Regulation of Utilities
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13th August 2018

RE: Greenlink Electricity Interconnector – CRU/18/119

Dear Sir / Madam,

Bord Gáis Energy (**BGE**) welcomes the opportunity to submit its views on how the Cost Benefit Analysis (**CBA**) for the Greenlink Electricity Interconnector should progress.

In general, akin to the timing of the consultation by the Commission for Regulation of Utility's (**CRU's**) on the Assessment Criteria for Electricity Interconnector Applications (**CRU/18/131**)¹, we believe that this Greenlink consultation is timely as it coincides with the very recent policy statement on interconnectors² issued by the Department of Communications, Climate Action and Environment (**DCCAE**). As both a supplier and generator of electricity in Ireland, BGE welcomes the DCCAE's policy statement as it provides for a holistic view to be taken to assessing an interconnector application, i.e. it considers the need to protect energy consumers as well as taking into account other regulatory initiatives and policy objectives.

With the DCCAE's policy statement in mind, BGE's main concern around the assessment criteria for interconnectors is that if it is viewed and assessed as a stand-alone policy in isolation to other regulatory initiatives and investment signals it could overlook, or at worst undermine such initiatives and signals. The electricity grid is a very limited resource with little available capacity, and there are many different technologies seeking to connect pursuant to numerous market policies and mechanisms. For example, the DS3 market has been established to send signals to fast flexible generation such as battery storage and DSUs, the capacity market signals reliable capacity, while the new Renewable Electricity Support Scheme (**RESS**) is being developed to incentivise renewable technologies, all of which are expected to contribute to Ireland's EU energy targets.

BGE believes that the DS3, capacity, and interconnector policies together with the Irish grid connection policy are complementary to the overarching EU and Irish policy on renewables. Interconnector policy should not be prioritised over others. Instead, the policies all need to be considered holistically to maximise our scarce grid capacity resource in pursuing overarching energy objectives, to ensure that these other market signals are not undermined and to ensure that targets and objectives are met at optimum cost to the consumer. We refer the CRU to our response to CRU/18/131 where we outline how a holistic assessment should also help determine the extent to which an interconnector should form part of the optimal mix of infrastructure needed to meet energy targets.

With respect to the Greenlink application itself, we agree that insufficient information has been provided to inform an economic assessment of whether the Greenlink would be in the public interest. In principle,

¹ To which BGE also responded on 10th August 2018

² DCCAE's Policy Statement Electricity Interconnection, July 2018: <https://www.dccae.gov.ie/en-ie/energy/publications/Documents/19/National%20Policy%20Statement%20on%20Electricity%20Interconnection.pdf>

we support the CRU's intention to carry out further analysis to understand the boundaries of the impacts of Greenlink on consumers and other stakeholders. However, we note that the CRU intends on making a minded-to decision on the public interest question by the end of September 2018 and at that point, subject to a positive public interest assessment, the cap and floor regime may be considered for further consultation. BGE has significant concerns about the extent to which a consumer may be required to finance an interconnector and we urge considerable caution in moving towards such a decision. We return to this issue further in our answer to questions 3 and 4 below.

We also note that there are up to 8 interconnector applications in the pipeline for Ireland and we have concerns that if a decision on Greenlink is made by the end of September, that determination would be made without consideration as to whether it is the best choice of interconnector for the Irish system and consumer. Interconnectors capable of financing in whole or in part at least (as is favoured in the DCCAE's policy paper), should be viewed very favourably. We note that the 1999 Electricity Act provides for different methods as to how the CRU may secure the construction of an interconnector, one of which is a competitive tender.³ Ultimately if it is firstly determined that an interconnector is to form part of the optimal mix of infrastructure to meet energy objectives, we believe that consideration needs to be given to the fact that there is scope for potential competition amongst interconnectors and the CRU should consider whether approval of an interconnector on a case-by-case basis sequentially is the optimal approach.

Finally, should the CRU proceed with a CBA for Greenlink we would welcome sight of the minded-to decision before a final decision on whether or not to approve the interconnector is made.

It is with the above concerns in mind that we answer the CRU's consultation questions below. I hope you find the comments and suggestions useful. Please do not hesitate to contact me if you have any questions or queries.

Kind regards,

Brian Larkin
Regulatory Affairs – Commercial
Bord Gáis Energy

{By email}

Q1: Are there any other specific factors that the CRU should consider in assessing the Greenlink CBA?

BGE has responded to the CRU's consultation (CRU/18/131) which lays out our detailed views on the specific factors that should be considered in assessing any interconnector's application. Those points are as applicable to the Greenlink interconnector application as to any interconnector and we urge the CRU to read that response in parallel with this response. Our main points can be summarised as follows:

- i. The CRU should have a clear view on its end goal and objectives informed by energy targets. The complementary DS3, capacity, RESS, interconnector and grid connection policies need to be viewed holistically in their role in supporting such objectives with no priority for interconnector policy;

³ Section 16A

- ii. A view on the optimal mix of infrastructure needed to meet the end goal, objectives could then be determined (informed for example by EirGrid’s Tomorrow’s Energy Scenarios) including whether and which interconnector(s) should form part of the optimal mix to meet targets;
- iii. As part of the determination of the optimal infrastructure mix a realistic and justifiable view on the volume of interconnector capacity, not least in terms of costs for the consumer, is required. Analysis shows that only up to one interconnector may be required and as outlined in our answer to Question 4 below we believe that, to ensure that the optimal cross-border interconnection is developed, consideration as to the most cost-effective approach to determining which of the 8 interconnector applications in the pipeline is suitable, is required;
- iv. As outlined further in our answer to Question 2 below, given the current constraints problem we have in Ireland, the potential impact of an interconnector in terms of: a) helping or aggravating locational constraints; b) the extent, time and cost of reinforcements required to accommodate the interconnector; c) the impact of the interconnector on the connection of non-interconnector technologies to the grid required to accommodate market outcomes (DS3, Capacity, RESS); should all be taken into account in determining the costs, benefits of an interconnector in reaching headline energy targets;
- v. As recognised by the DCCAE in its July 2018 policy document on interconnectors, we believe that those interconnectors most capable of financing on a “merchant” basis should be viewed favourably. TUOS funded interconnectors place non-interconnector competitors at a disadvantage – we note in particular that Greenlink expects considerable revenue from ancillary services in future placing other potential investors at an uneven playing field in this space at least. Furthermore, the more an interconnector is funded through TUOS, the more risk they pose to consumers in case of failure of an interconnector to deliver its potential benefits;
- vi. Brexit impacts are higher for Greenlink than a non-GB connected interconnector and the prospects of exit from the internal energy market rules and related impacts on efficiency of flows and costs between the two countries needs to be taken into account in such cases;
- vii. Interconnector reliability is uncertain, as demonstrated by recent EWIC outages and reduced performance (we explain this in our answer to Question 2). This factor for Greenlink as for any other interconnector, needs to be taken into account when assessing it against the DCCAE and other policy criteria outlined in our response to CRU/18/131 consultation.

In addition to the above, and specific to the Greenlink application, with regards the CBA assessment results presented in this consultation paper, there appears to be a large inconsistency when compared against the CBA results provided to Ofgem, in particular the GB consumer welfare. The table below provides a summary of GB consumer welfare values that we have seen in the various Ofgem and CRU papers.

Date	Paper containing GB consumer welfare	Base	Low	High
Mar 2015	Ofgem consultation on IPA of Greenlink	-£240m	-£690m	+£103m
May 2015	Element Power’s response to Ofgem	+£726m	+£133m	+£1226m
Aug 2015	Ofgem’s updated analysis of Greenlink	+£183m	-£285m	+£452m
Jun 2018	Greenlink’s findings submitted to CRU	-€335m	-€433m	+€61m

We would welcome further insight and explanation on these original discrepancies and how the consumer welfare swung in Greenlink’s favour on submission of further information from the proposer.

We also would welcome sight of the results of the CRU’s CBA for Greenlink before a final determination is made as to whether it should progress or not.

In general, to maintain credibility of any CBA reports, any discrepancies showing alternative results should be explained in a clear and transparent way for any interconnector application.

Q2: Are there any other specific factors that the CRU should consider in assessing the Greenlink technical overview report?

In terms of the technical assessment, in addition to the CRU's suggestions, we believe that three further areas fall for assessment under the technical category, as follows:

- i. From a networks operation perspective, grid capacity is already a scarce resource which can have a negative impact on both the extent of market entry and growth of competition within the market. The impact of the Greenlink connection on Irish system connections required to accommodate DS3/ RESS/ capacity market outcomes should be taken into account as a priority. Furthermore, where grid reinforcements are necessary for a new interconnector application, we believe the costs of these should be considered in the CBA. Finally, given the level of constraint issues that already exist in the Irish system at present, which BGE strongly believes should be resolved as a matter of urgency, we request that the impact that the Greenlink interconnector has on the level of constraints should be a key criterion in assessing its CBA.
- ii. The expected usage of the Greenlink should be stress tested in order to account for unplanned, extreme outages, as has been seen over the past number of years in existing Irish interconnectors. For example, based on SEMO data, EWIC had zero flow for 30% in H1 2017 and 26% zero flow in H1 2018. This would have a seriously negative effect on consumers, as although they continue paying for the interconnector, it is unable to provide any market or renewables benefits during such times.
- iii. Finally, given the political implications that Brexit may cause between Ireland and the UK, the CRU should consider if any of the technical criteria will be undermined. For example, costs of numerous procurement and build-phase processes may rise due to unexpected tariffs.

Q3: Are there other specific factors that the CRU should consider in selecting the appropriate regulatory approach?

As outlined in our introduction, BGE has significant reservations about moving to a decision on the public interest which would trigger the start of considering a cap-and-floor regime, as early as September 2018. As also outlined in our introduction and considered further in answer 4 below, we believe consideration should be given to the appropriate approach used to determine which, if any, of the planned Ireland-connecting interconnectors would be optimal for the Irish system and consumers.

We note also that the CRU believes if the decision moves towards consideration of a cap-and-floor regime that unless similar terms as those adopted by Ofgem are applied, the interconnector may have perverse operational incentives. We welcome however the fact that the CRU would if the time came, consult further on the appropriate regulatory regime. In any event, we believe that the CRU should reserve the right to determine regulatory structures that work best from an Irish consumer perspective without being unduly constrained by external regulatory decisions.

The opportunity for the Greenlink interconnector to recover its costs through the Transmission Use of System (TUoS) tariffs is something that should be considered extremely carefully by the CRU. This guaranteed revenue stream would also provide them with a major market advantage compared to other investors that have to finance on a 'merchant' basis. While we recognise that the DCCAE wishes to increase the level of interconnectivity in Ireland subject to a CBA, the policy for interconnectors should encourage interconnector developers to bear revenue risk themselves rather than relying wholly on TUoS tariffs to recover their costs. A merchant based financial structure for interconnectors in turn would provide a more level playing field for all types of units in the markets (DS3, RESS, capacity). The extent

to which an interconnector is capable of financing on a merchant basis should be viewed very favourably.

However, with a view to protecting consumers, should there be a need for the interconnector to recover some costs through the TUoS tariff, the CRU should set out a clear set of KPIs to ensure any interconnector is operated as efficiently as possible.

Q4: Is there any additional information the CRU should consider when determining whether the Greenlink interconnector is in the public interest or not?

In addition to our main concern of ensuring the appropriate mix of infrastructure to meet the end goal is determined, the holistic assessment of the Greenlink interconnector must also recognise that there are up to 7 other interconnector proposals for the Irish system according to EirGrid's most recent Generation Capacity Statement. We understand that one of these (the Celtic Interconnector) is expected to submit an application to the CRU imminently. In this context, while there are potential benefits of an interconnector to the Irish system, it should also be recognised that (particularly given the small size of the Irish system), there is a very high probability of diminishing returns beyond one interconnector. The CRU's analysis needs to not only be clear on the benefits that the Greenlink interconnector could bring but should in our view consider the best approach to use to determine what the optimal interconnector project is, to best realise identified interconnector benefits as part of the wider optimal mix of infrastructure.

Related to the above point, the DCCAE state in their policy statement for interconnectors that the CRU should consider potential alternatives to electricity interconnection such as storage. This supports our point about the need to consider what mix of technologies is the most efficient solution for meeting national and EU policy objectives in a manner that does not undermine existing Irish regulatory initiatives. From that perspective, the most efficient solution for meeting national and EU targets may be delivered by alternative technology solutions which may or may not include an interconnector(s). As mentioned above, there are numerous policies including DS3, capacity and RESS which provide signals to invest in a diverse mix of technologies to meet Ireland's energy requirements. In assessing the various options to determine the optimal outcome for the Irish system a suitable approach may be to conduct a least worst regrets scenario assessment on a range of possible scenarios, such as those identified by EirGrid in their Tomorrow's Energy Scenarios paper. This should go some way towards informing the volume of interconnection realistically required for Ireland.

If an interconnector is determined as a necessary part of the infrastructure mix, in terms of determining which interconnector is optimal, the decision in our view must be heavily informed by the costs to the consumer. These costs need to consider the prospects of the interconnector not only progressing but succeeding operationally and commercially. In the event that the consumer may have to partially underwrite its costs, the prospects of a chosen interconnector facilitating delivery of the identified benefits need to be convincing - failure of an interconnector investment would come at a high cost to the consumer. Consideration may in our view have to be given to determining whether a more competitive approach to interconnector procurement would best protect the interests of consumers and investors alike, as discussed in our cover letter introduction above.