

**Bord Gáis Energy response to
French Energy Regulatory Commission (CRE)
Consultation No. 2018-015 of 20 December 2018 on the
investment request relating to the Celtic project, including a
cross-border cost allocation**

Introduction

Bord Gáis Energy (**BGE**) welcomes the opportunity to respond to this CRE Consultation on the investment request relating to the Celtic project, including a cross-border cost allocation (**CBCA**) – “the CRE Consultation”.

BGE is a market participant in both the Irish all-island wholesale Single Electricity Market and Ireland’s retail electricity market. We thus have a considerable interest in the decision on the Celtic interconnector and wish to take this opportunity to emphasise key areas of concern with regard the Celtic interconnector project. We have also made a submission to the parallel consultation by the Irish energy regulator (CRU/18/265), which we attach to this response for your information.

We answer each of the CRE Consultation questions in turn below but, by way of context to our answers, while we recognise that new interconnection between Ireland and either the EU or GB may have a role to play in Ireland’s future energy mix we believe that the business case for any such interconnector project must be well proven before it can proceed. This is particularly when TUOS customers will likely be expected to partially underwrite the investment. The range of NPVs as between the TSOs’ and the regulatory authorities (**RA**s – i.e. the CRE and CRU) raises considerable concerns as to the robustness of the investment business case for Celtic and whether it is in the public interest, as does the CRU’s view that the TSOs have underestimated capex costs by up to 20%. At a basic minimum, particularly where consumers are being asked to contribute to a project’s costs, we believe that alignment between the TSOs’ and RAs views on the NPV is required. Also required is full transparency and justification behind any assumptions that lead to positive NPV results, before the business case can be considered credible to justify a public interest decision.

The TUOS consumer (whether French or Irish) cannot or should not be asked to underwrite an investment for which the business case is, at best, extremely uncertain. When uncertainty of any degree exists there must be adequate protection granted to the consumer under the chosen regulatory approach. We discuss such protection in terms of the regulatory approach further in answers 9-11 below but in essence we submit that a measure of risk must sit with the project investors – an arrangement akin to the cap-and-floor approach applied by Ofgem for example is worthy of consideration in this regard.

The remainder of our response focuses on the questions raised in the consultation. Please do not hesitate to contact us at anytime should you wish to discuss further the concerns and suggestions raised below.

Consultation Questions

1. Do you share the CRE’s analysis on the framing nature of the four scenarios taken into account by the TSOs to analyse the benefits of the Celtic project?

BGE believes that the range of 4 scenarios is all encompassing in that it reflects very optimistic views of the future as well as more realistic views for the future of the European electricity system. However, and as indeed is noted in the TSOs’ investment file (A4.3), the essence of scenario analysis “is to come up with plausible pictures of the future”. In our view, and as noted by the Irish CRU also, the more plausible scenarios are the Sustainable Transition (**ST**) and Vision 1 (**V1**) scenarios. Other scenarios (e.g. DG 2030 and EUCO 2030), while reflective of policy and regulatory ambitions, are in our view overly optimistic. The positive results of DG 2030 and EUCO 2030 are extremely high which, when averaged (as the TSOs do), dilutes the negative results under the more plausible ST and V1 scenarios particularly when Greenlink is assumed to form part of the basecase. We therefore support the CRU’s view that the assessment of the ST and V1 scenarios are sufficient for determining whether the Celtic interconnector is indeed in the public interest or not. These in our view sufficiently frame the future of the European electricity system.

2. Do you share the CRE’s analysis, according to which a capacity of 1000 MW for 2030 between Ireland and Great Britain seems more appropriate for an analysis of the costs and benefits of the project?

Yes – BGE agrees with the CRE’s opinion that the relevant reference network that should be used in Celtic’s CBA should assume that the interconnector capacity between Ireland and Great Britain by 2030 will be 1,000MW rather than 500MW.

BGE has discussed this issue in some detail in our response to the CRU’s consultation on Celtic, particularly in the context of the chosen base case modelled by the TSOs. Firstly, in light of the CRU’s 2018 decision (CRU/18/216) that determined the Greenlink interconnector “...application passes the public interest test”, it is unintuitive that the Greenlink interconnector is being modelled as a sensitivity rather than being considered a fundamental part of the base case scenario. Disregarding this decision in the CBA analysis notwithstanding any views on BREXIT the TSOs’ may have is not prudent in our view considering the CRU has already decided that being in the public interest it may also be open to

being underwritten by the Irish energy customer. Ideally, as there are demonstrably high diminishing returns beyond one additional interconnector given the impacts on Celtic benefits the analysis shows that Greenlink would have,¹ on the Irish side it is in fact more appropriate in our view for the CRU to assess both of these interconnectors together and determine which delivers the greater benefit for Irish consumers in particular. Otherwise a substantial financial risk to Irish TUOS customers exists.

On the basis that Greenlink forms part of the basecase, the TSOs' responses to the CRU specific queries covered in their CBA Appendix should be updated. Such updates will likely see relevant changes in terms of load-weighted average market prices in Ireland and the HHI calculation with and without the Celtic interconnector which results will be relevant for both regulators.

3. Do you share the CRE's analysis regarding the methodology proposed by the TSOs to assess the project value in terms of security of supply?

In the context of the information put forward by the CRE in this section (and the TSOs' analysis), and CRE's view that certain aspects of the analysis do not necessarily follow a strict application of this methodology, BGE believes that there is a material case for the approach taken by the TSOs to calculating, and indeed including, security of supply benefits for the Celtic project to be revised.

With regard to security of supply, we note the adequacy (resilience) indicator in the CBA seeks to evaluate the benefits in terms of improving the capacity of the electricity system to meet demand including in times of scarcity. The TSOs have simulated the impact Celtic would have on the capacity of the electricity grid to supply the entire power demand at all times and given numerous uncertainties. Their use of their experimental methodology does have gaps which lends supports to the RAs' view that the security of supply benefits of Celtic is at best limited. Of significant note here is CRE's point that at times when load may be lost, corresponds with restrictions on the main transmission network, hence import constraints may in fact limit the Security of Supply (**SOS**) benefits from an interconnector. In fact the CRE note that national congestion could limit the capacity of new interconnection to serve regions where the balance between supply and demand is difficult to meet. Given the scale of congestion on the Irish network currently we believe insufficient regard has been given to the consequential impact of such in terms of accommodating imports from any new interconnector.

The weight of influence the SOS results have in swaying the NPV results in the TSOs' modelling is very high.² Indeed for the ST scenario SOS benefits as high as €42m/year are suggested. Furthermore the CRU took a different approach to modelling security of supply from that of the TSOs, (for V1 only) and the limited SOS benefits from adding Celtic are viewed as minimal by CRU (€6m NPV) for Ireland with no SOS benefits at all for France. Additionally, the TSOs' approach to for example calculating SOS benefits by in effect substituting mainly peaker generation (needed especially in times of scarcity) capacity in the two interconnected markets is unrealistic in our view not least given the various policies that are currently in force and being implemented in Ireland to incentivise such capacity types.³

We thus urge the RAs to ensure that revision of the TSOs' approach to assumed monetary benefits of SOS⁴ is undertaken before any decision is taken on the public interest status of Celtic.

4. Do you think that other costs or benefits should be included in the cost-benefit analysis? If so, which ones?

Yes there are other costs and benefits that need to be considered in the CBA. BGE in particular does not agree with the TSOs' decision or rationale to exclude the **costs of reinforcement of the network**. The focus of the analysis should consider all related costs and benefits as well as physical reinforcements. For example, the costs of the additional constrained running of generation that is implied by the TSOs if Celtic comes online needs to be considered. Constrained running is having a significant impact on generation procurement in the Dublin constraint area at present. This can have major consequential impacts on consumer costs (noting TUoS costs increased in Ireland by circa. 23% on the back of the Locational Reserve Service Agreement in Dublin last year) and on competition in the wholesale (and retail) markets.

¹ BGE notes that the same holds true for Greenlink. In CRU/18/216 the CRU calculate Greenlink has a positive NPV of €539m without Celtic, dropping to €125m if Celtic were to proceed. The analysis by the project developers, Element Power, gives these figures as €704m and €391m respectively.

² E.g. We note that CRU's assessment for V1 with Celtic only (i.e. no Greenlink being built) was negative whereas it is positive in the TSO's modelling, which positivity is largely driven by the security of supply benefits calculated but the TSOs. As well as some positive producer surpluses. See section 5.2.1 CRU analysis

³ Ireland's capacity remuneration mechanism and DS3 programme

⁴ Including for example their approach in STEP 2 of the SOS calculations to replacing peaker plans and adding Celtic instead with the effect of substituting generation capacity in the two markets

We need to be clear that a consumer-backed project of any degree does not lead to similar impacts arising in any part of the network. Consequential increased imperfection charges on consumers that comes with constrained running of units, must also be taken into account in the public interest decision. .

We thus seek more information on the extent of consideration given to assessing reinforcement needs and the costs thereof. We also believe that the potential consequential impacts (e.g. more/ less constrained running for units) for existing investments on the Irish network should also be made explicit and included, before the RAs move towards a final decision on this.

BGE disagrees with the decision to also exclude the potential increase in costs related to becoming the **Largest Single Infeed (LSI)** if Celtic is built. The TSOs appear to believe that a large onset of offshore wind will help alleviate or share the costs in increased LSI related costs and also assume that offshore wind projects would be well in excess of 500MW for which no evidence is put forward. We note however that, unlike Greenlink which has received a positive decision with respect to its progression and possible funding (yet has been excluded from the TSOs' base case), current and potential offshore wind farm investors are not satisfied that the legal and regulatory regime in Ireland is currently adequate to incentivise offshore investments and that a detailed design for the DCCAE's proposed 2018 Renewable Energy Support Scheme (**RESS**) is not yet complete. The offshore wind development assumptions are therefore in our view overly optimistic.

We thus suggest that the exclusion of this cost is re-considered for inclusion and that the CRU satisfy themselves as to the disparity between the TSOs' and CRE figures (which appears to be driven by a view of the sharing of the costs with wind). Any decision on the next steps for Celtic should include review of these figures and a more realistic view on the contribution of offshore wind to alleviate the cost of the LSI risk.

Given the level of redacted figures and lack of modelling underpinning the figures presented, we would also ask the RAs to review and revert on the realism of the **congestion rent figures** suggested by the TSOs. These are a major benefit driver in the investment case and it is therefore important that given the optimistic view on other benefits, these rent figures are suitably justified.

Furthermore, regardless of the level of interconnector capacity that Ireland develops it will still **need on-island reserve** provision which the consumer will also have to pay for. With increasing interconnection, an impact on the level of dispatchable generation on the system will materialise which in turn will drive increasing levels of constraint costs. This does not bode well for consumers in terms of imperfection charges and this should be taken into account in determining the public interest.

Finally we recognise a disjoint in the **length of the business case** as between RTE and EirGrid and suggest that alignment (at 25 years) should apply. This is the life span applied for example by Ofgem in determining regulatory treatment for investors and would also better help determine a realistic view of the potential impact on TUOS customers. We are also limited in the extent of comment we can provide on the **risk factors presented in A1.3** of the Investment Request File given they are redacted entirely. We are entirely reliant on regulatory oversight for these and would welcome an understanding of the RAs' view of how material the risks are in terms of their impact(s) and the likelihood of them driving higher costs and/ or any further uncertainty they raise for the Celtic project.

5. Do you think that the sensitivity analyses performed by the TSOs cover all relevant sources of uncertainty with respect to the project value? If not, which of them do you consider missing or lacking credibility?

BGE believes that the assumptions and related results regarding: the addition of 500MW of interconnection between Ireland and GB, hard BREXIT, security of supply and wind power generation capacities need re-consideration and should be revised before a decision on the public interest, or not, of the Celtic interconnector is made.

As mentioned at the outset above, we believe it is a mistake for the TSOs to not include **Greenlink in the basecase** for the Celtic interconnector. The level of diminishing returns for either interconnector is high if both are assumed to proceed and given the CRU's 2018 decision on Greenlink being in the public interest, we believe it is most prudent that for transparency in possible TUOS impacts and credibility purposes, Greenlink included in the base case. We realise, but given consumer risks we would support, that this would require a re-run of the analysis presented by the TSOs. BGE has also addressed its view on the overly optimistic nature of the assumptions behind the **build out of offshore wind** in the timescale in question. As outlined in answer 4 above, while offshore wind ambitions exist in Ireland as does strong interest from offshore wind developers in Ireland, the scale and timing assumed for valuing the benefits of Celtic for offshore wind in particular should be revised in light of existing obstacles (e.g. licensing, detailed auction design,

technology caps in auctions) yet to be overcome. The assumption on wind given the uncertainties noted here compared to the assumption on Greenlink forming part of the basecase is unintuitive given that Greenlink actually already has public more defined regulatory support and can thus be considered a more solid assumption.

When one assumes Greenlink to form part of the base case, as the CRU suggests, one can deduce quite a material impact of the **BREXIT sensitivity**. The results of the BREXIT sensitivity on NPVs for ST and V1 scenarios with Greenlink included, are stark:

NPV €m	ST Greenlink	V1 Greenlink	ST + Greenlink + Brexit	Average across three scenarios	Average excluding Brexit Scenario
Ireland	157	-140	264	93.7	7.5
France	-134	196	257	106.3	31

Figure 1: NPV for selected scenarios
Data source: Table 14 (CRU identification of beneficiaries and cost bearers) in CRU/18/265

Considerable weight is clearly attached to the impact a hard BREXIT would have for Celtic. Given the diversity in NPV ranges in Figure 1 above, and the state of political play of the BREXIT situation, we suggest that further careful consideration is given to the weight of influence given to the BREXIT sensitivity in informing any decision on the progression of the Celtic interconnector.

In BGE's view, the numbers presented above for a hard BREXIT are unduly positive considering where political negotiations are at and the timing of this Consultation and a hard BREXIT may not have as material an impact on interconnector flows⁵ as the CRU/ TSO analysis suggests. We therefore suggest consideration is given to the fact that the "hard BREXIT" sensitivity (i) should only be included once there is some greater certainty on the direction of BREXIT; (ii) at the time of the project commissioning, the UK exit will likely be at least 6 years past BREXIT, by which time (if you consider public UK intentions to mitigate friction in trading as much as possible) we would expect that a relatively frictionless trade between Ireland and GB should exist; (iii) as time goes on, over the project's lifespan, trading concerns are also likely to reduce much further.

The BREXIT situation should be better understood by the time a decision on Celtic is made. Re-consideration of BREXIT assumptions will likely be required at that time. A hard BREXIT may call for higher weighting but if a "soft" BREXIT lands, then the sensitivity may need to be removed altogether. As evidenced in the CBAs themselves this would greatly reduce the value in the business case for Celtic. This would in turn support the case for placing heavier investor risk on the project investors such that the consumer is not put at risk of uncertain costs of an interconnector, the NPVs for which are at best uncertain. We return to this critical consumer protection point below.

Please see answer 3 above for our views on the **security of supply** cost assumptions. In summary, the SOS benefits noted are overly optimistic not least given the lack of credibility in the TSOs' methodology used to value these benefits. It needs revision.⁶

6. Do you think that the security of supply benefits in as estimated by the TSOs should be taken into account in the cost allocation decision? If so, then how?

We refer the CRE to our answers to questions 3 and 5 above where we have conveyed our views on the over-optimistic assumptions on the calculated benefits of SOS (for both Ireland and France) if Celtic is to proceed. Until such time as

⁵ E.g. political statements: House of Parliament, *Overseas Electricity Interconnection – POST NOTE 569* - states "there are no tariffs on electricity under WTO rules"). <https://researchbriefings.parliament.uk/ResearchBriefing/Summary/POST-PN-0569> Published February 2018 and Utility Week - "How will Brexit affect the funding and Operation of UK interconnectors?" - observe that "Furthermore revenues, and of course consumer prices, might be expected to be impacted by any imposition of tariffs on cross-border flows. New tariffs are perhaps unlikely, not least because tariffs are set at zero for electricity imports under WTO rules (and 0.7 per cent for gas, which is not applied by the EU), but other forms of non-tariff restrictions on cross-border trading are a possibility". This suggests a hard Brexit may not be that hard on a material impact on interconnector transfers. <https://utilityweek.co.uk/how-will-brexit-affect-the-funding-and-operation-of-uk-interconnectors/>, Published 21/11/2017

⁶ We note also that the TSOs' approach to valuing SOS is not in line with the ENTSO-E CBA 2.0 methodology which they should ideally be aligned with

the TSOs re-assess their approach to valuing SOS and reevaluate the assumed benefits attributed to Celtic due to SOS it is difficult to say with certainty if SOS should play any role in the cost allocation decision. Given however the RAs' initial views that SOS benefits are likely minimal or nil, it would appear that the value would have no role to play in any CBCA decision.

7. Do you share CRE's analysis according to which the project is primarily justified by European energy policy, and thus requires a subsidy in light also of the risks and uncertainties associated with the project, which the French and Irish users should not bear alone?

In the posing of this question, BGE believes that the CRE raises an extremely pertinent point particularly from the perspective of the extent of exposure the TUOS customer (in France and Ireland) would face were the project to proceed on the basis of the uncertain results outlined in the CBA. CRE suggests, and BGE would tend to agree, that based on the existing analysis on a quantitative basis the figures cannot allow the RAs to conclude that the project is in the public interest. As CRE states, the main premise therefore for arguing the public interest might lie in qualitative arguments, specifically, the European solidarity point.

BGE agrees with the CRE's view on the level of uncertainty and possible conclusions that can be deduced from what has been provided by the TSOs (and in the respective RAs' analyses). Given for example the range in NPVs for the Celtic project across the realistic ST and V1 scenarios; the RAs' view that the TSOs have actually under-estimated the CAPEX by up to 20% (on top of an upper uncertainty range of 15%); the lack of including Greenlink in the basecase; the over-optimistic assumptions and value (in terms of benefits) proposed for security of supply as well as other shortcomings outlined in more detail in answers 3 and 4 above, BGE does not believe that the case for Celtic being in the public interest has been made at all. Indeed we note that the CRU is also of the view that the range of uncertainty is stark when one takes a view on the disparities between the TSOs' CBA and the CRU's CBA:

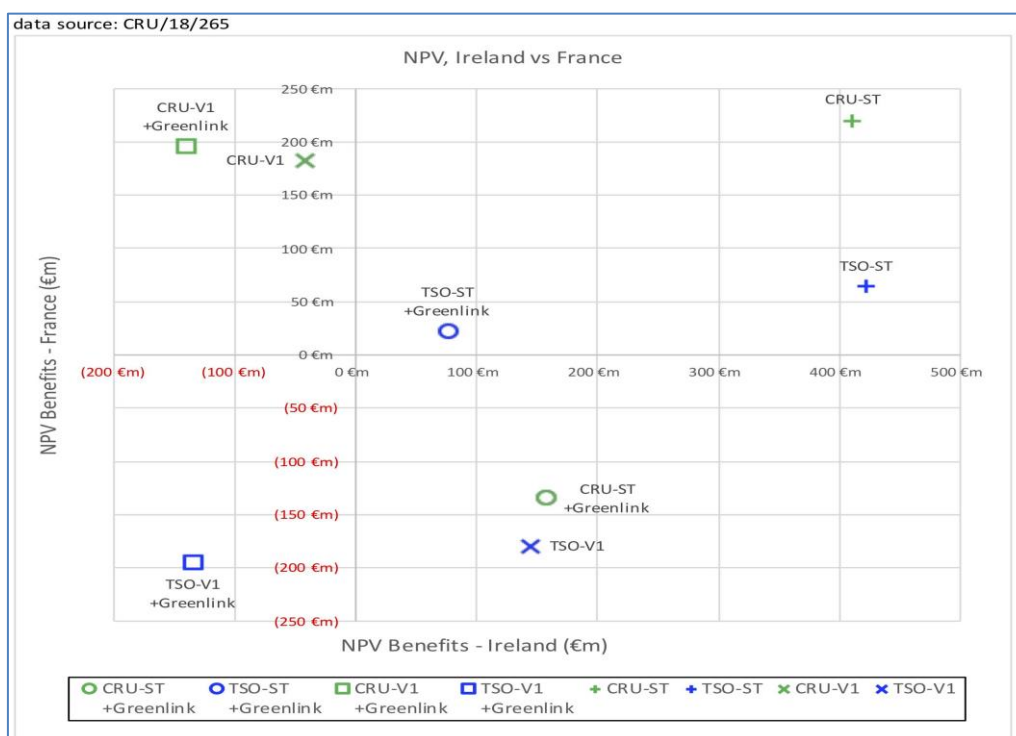


Figure 2: NPV Quadrants
(Irish NPV represented on horizontal line; French NPV represented on vertical line)

This range of NPV uncertainty, coupled with the CRE's assertions that, in any scenario if Greenlink is also built, the NPV for France is negative across the board bolsters their overall conclusion that quantitatively it is not possible to conclude with certainty the public interest of the Celtic interconnector.⁷

⁷ Table 10 in the CRE's consultation on the Celtic interconnector ([CRE-2018-015](#))

From a qualitative perspective, CRE explains the European solidarity argument as seeing the construction of an electricity cable connecting Ireland physically to the continental power grid, allowing Ireland to remain in the internal energy market “no matter the practical consequences of BREXIT.” As the consequences of BREXIT are as yet uncertain, and as we do not know to what extent for example EU interconnector targets (15% by 2030) will apply to Ireland should GB exit occur it is premature to decide the case for Celtic purely based on the need to remain interconnected with Europe. Until further insight on the likely longer-term agreement on trading on the interconnectors between Ireland and GB is clarified, we believe even the qualitative case for European solidarity is quite weak. Please see our views above in answer 5 again on our view that the BREXIT sensitivity is overly-pessimistic, which lends support to how much weaker the European solidarity argument could be. In particular, we believe it remiss to assume that friction-less trading with GB will not be possible even in the case of a hard BREXIT. Thus benefits from connections from Ireland to GB should not be entirely discounted.

We strongly support CRE’s view that given the uncertainties in NPV and CAPEX amongst other shortcomings in analyses presented, the Celtic interconnector requires a significant subsidy – clarity on why the TSOs only seek 50% as opposed to the possible 75% subsidy is required in this regard. We also agree that the French and Irish users of the electricity transmission systems should not bear costs above such subsidies, alone. This points to the need for more risk to be put back onto the investors such that their investment decision is aligned with that of the interests of the general TUoS customer. A cost/ risk sharing mechanism, such as a cap and floor regime, could achieve such an objective. We discuss this issue in more detail in our answers 9-11 below.

8. Do you share CRE’s analysis on the criteria to which the approval of the investment request should be conditioned in order to preserve the interest of the users of the transmission system?

In principle, to respect and protect the interests of any TUOS customer we support the conditioning of the approval of the Celtic project to the enforcement of conditions ensuring a satisfactory level of expected net benefits not only in France but in Ireland also. We note the CRE’s suggestion that this will consist, for France, in guaranteeing at a minimum that the NPV at the perimeter of France is non-negative on average for the scenarios considered.

In terms of the CAPEX, BGE believes that the CRU’s contention that the TSOs’ have underestimated the CAPEX by up to 20% should be taken into consideration when assessing the public interest and NPV. BGE analysis confirms that such a CAPEX understatement would mean that the NPV for Ireland and France in any ST or V1 scenario (both with and without Greenlink) is negative for all scenarios when CAPEX is increased by 20%. In fact, an underestimate of CAPEX of only 13.3% would show a negative NPV for France and Ireland combined for all of the four scenarios (i.e. ST and V1 both with and without Greenlink). BGE therefore suggests that the TSOs’ central CAPEX figure is recalculated to reflect their mistake. The TSOs should also update the tables in A10.2 of the Investment File Request to show the impact of transmission tariffs from these higher CAPEX figures and this should form the basis for decisions moving forward.

In short, BGE urges the CRU to give serious consideration to such a principle for protection of the Irish TUOS customer also. We also believe that assessing only ST and V1 scenarios that include Greenlink in the basecase as well as discounting of SOS benefits is prudent from a consumer protection perspective. We cannot support progression of a decision that a project is in the public interest when NPVs and CAPEX deviations all point to a negative NPV for the Celtic project across realistic scenarios even with or without the Greenlink project. Qualitative arguments are insufficient to ground a case for an investment of this size when the consumer is being put at risk. There is possibly a case however for the European solidarity argument to be used as part of the justification for a 75% Connecting Europe Facility (CEF) grant.⁸

9. Do you agree with CRE’s analysis according to which the network users in each country should bear a share of the investment costs in line with the distribution of the expected benefits of the project?

10. Do you agree with the CRE’s analysis according to which the investment expenditure by RTE should be capped in order to ensure that the expected project NPV is non-negative for France?

⁸ As under the CEF rules the interconnector may be funded with a 75%, rather than a 50%, grant if it: (i) is innovative, (ii) has regional security of supply benefits; (iii) would strengthen European solidarity. We don’t see any reason why the Celtic would be considered innovative and the RAs’ have already critiqued the security of supply benefits deeming them to be limited at best.

11. Do you think that other risk factors should be taken into account to determine the maximum expenditure level that would be borne by RTE?

BGE takes these questions together. Based on the analysis presented BGE lacks confidence in any argument that the Celtic interconnector is in the public interest, or in its economic case across a range of likely scenarios and sensitivities.

From a consumer certainty and cost exposure perspective we are extremely concerned at the wide gaps between the TSOs' and respective RAs' views on the NPVs for Celtic as illustrated in Figure 2 above. We are furthermore concerned by the lack of inclusion of Greenlink in the basecase and by the evident impact the progression of Greenlink, for which a CRU decision in the public interest has already been made, has on Celtic's business case. Between this response and our response to the CRU's parallel consultation, BGE has also pointed to several overly optimistic assumptions made by the TSOs in their CBA.

The key shortcomings, and BGE's proposed next steps for these described in more detail in the body of our response, can be summarised as follows:

- i. The RAs' view on the up to 20% underestimation in CAPEX by the TSOs needs to be explained and further evidenced. The risk to the TUOS consumer could be greatly higher than that conveyed in figures in the TSOs' CBA particularly when one also takes into account the uncertainty range which is in addition to this underestimation. We demonstrate that if a 20% increase is required, it would result in a negative NPV across the ST and V1 scenarios both with and without Greenlink. The public interest nature of the Celtic investment thus falls away when assessed quantitatively. The correct level of CAPEX should be taken into account in a re-assessment of the NPV of the project across modelled scenarios. A purely qualitative argument such as EU solidarity in favour of the public interest is not acceptable when the consumer is being asked to underwrite such a large and uncertain investment;
- ii. The TSOs' base case needs to: include Greenlink due to the existing CRU's decision in favour of its public interest; apply more reasonable assumptions around offshore wind, and; reevaluate the value attributed to the security of supply benefits assumed for Celtic;
- iii. The rationale for excluding the costs of network reinforcement is insufficient. TSO commentary implies there will be much more constrained running of on-island units with Celtic coming in and these need to be transparent for investors but also for consumers from the perspective that they should not be asked to back a project that could result in constraint issues (and consequences) akin to those being seen in the Dublin area currently. Furthermore the likely related increase in imperfections charges for consumers should also be taken into account in the CBA decision;
- iv. BGE supports the CRU's scepticism about the exclusion of the cost of the single largest in feed reserve with Celtic coming online. This should be considered for inclusion particularly when more reasonable assumptions around offshore wind are also taken into account;
- v. The BREXIT sensitivity is in our view too pessimistic if one takes positive public political positions into account and whether friction in trading is a realistic outcome that will last beyond the short term;
- vi. Related to BREXIT, if a hard BREXIT did materialise, it could cast doubt on whether Ireland would be viewed as an "island" under EU legislation and on the binding nature of the 15% EU interconnector target for 2030;
- vii. The fact that Irish consumers are already underwriting EWIC, and the negative cost impact the addition of another interconnector to the Irish system will have on EWIC's business case have not been factored in;
- viii. It should also be borne in mind that regardless of the level of interconnection built there will still be need for on-island reserve which will have to be paid for, again by consumers;
- ix. BGE has also expressed views on the need for more clarity on: congestion rent figures given they are a driver of high benefits as well as into the redacted risk factors presented in A1.3 of the TSOs analysis and whether they place more uncertainty on the Celtic business case; the need for the TSOs to explain the assumption of only obtaining 50% CEF funding rather than seeking 75% which approach is not optimal for consumers, and; the need for both TSOs to align the asset life to 25 years.

Overall, this leads us to the conclusion that the public interest of the Celtic interconnector is not proven.

We suggest to the RAs that the public interest decision on Celtic should therefore not be determined without the further assessment and clarity we outline as necessary. The range of deviation between the TSOs and RAs in fact calls for a single, realistic assessment of the CBA which includes the most realistic costs, benefits, assumptions, scenarios and impacts. The overall assessment should be agreed across all relevant TSOs and RAs - otherwise the decision of the public interest nature of Celtic is at best inconclusive.

This lack of confidence in the business case based off the figures presented and the range of uncertainty in how exposed the Irish TUOS customer might be, in our view, underscores the need for serious consideration to be given to the extent

of consumer protection required should some underwriting by the consumer still be decided upon.⁹ At the very least, bearing in mind that the CRU will not decide on the optimal mix or optimal interconnector to be pursued in the interest of the consumer, we believe that the interconnector promoters must necessarily take on more of the risk. We need a solution that minimises the risk exposure of the TUOS customer and aligns the incentives of the TSO with the customer by placing a relevant proportion of the risk with the investor. This can be addressed in the choice of regulatory approach.

In this regard, we note the CRE's proposed sharing of costs being based on each market's share of benefits, and proposed capping (in €m) of costs that should be recovered by French TUOS customers. We commend the principle of capping customers' exposure, particularly in light of how much more the customer exposure to higher tariffs could be (especially on the Irish side).¹⁰

Overall there is clear rationale to move away from the WACCXRAB regulatory approach proposed by the TSOs as the method of funding this project. Indeed we understand the principle of CRE's approach to protecting the consumer by sharing the costs on the basis of the respective (asymmetric) distributed expected gross benefits of Celtic and of capping the investment expenditure approved for recovery from TUOS customers (which in CRE's instance is viewed as necessary to maintain a non-negative NPV for grid users). We urge the CRU to adopt a similar 'capping' (in terms of the maximum payable contribution towards the costs in €m, as opposed to contribution as a percentage of the costs). Otherwise the project promoters will have less of an incentive to manage the uncertainties which are likely to manifest even more as time progresses.

With regard to the proposed cap for France actually being set €160m, at this point in time; while we support a monetary cap we believe it may be more prudent to consider what the value of that cap is once the TSOs have addressed the shortcomings of their CBA and once non-negative NPVs for both markets can be deduced based on realistic scenarios (i.e. ST and V1 both with and without Greenlink as well as exclusion of security of supply benefits and revision of CAPEX figures as well as the other shortcomings noted above).

Finally, if the quantitative evidence determines a positive public interest, in moving away from the WACCXRAB to a cost-sharing (risk-sharing) approach, we suggest that an approach akin to that of Ofgem's cap-and-floor approach is worthy of consideration. Please see our answer to Question 4 in our response to the CRU's parallel consultation on this approach.

⁹ In terms of the extent of this uncertainty, take for example the CBCA and CEF arrangements. Taking CRE's proposed contribution of a maximum of €160m, and taking the TSOs' assumed 50% funds from the EU, this leaves €305m to be recovered from Irish consumers. What is of most concern is the CAPEX 20% underestimate as well as the upper range of uncertainty of ~15% in the TSOs' estimates. Costs on consumers could therefore rapidly expand beyond what the current CBAs suggest

¹⁰ See footnote 9. Also as mentioned in our answer to question 8, we believe that the European solidarity point is best used as a basis for arguing the case for a 75% CEF grant. However given that there are 3 bases for CEF funding and Celtic appears to have little weight for arguing it meets the other two bases (innovation or regional security of supply benefits), the amount of CEF funding the Celtic project can rely on such that TUOS customers are not overly exposed, is also, at best, uncertain. Hence the need for stringent consumer protection