

25th May 2012

Jamie Burke
Commission for Energy Regulation
The Exchange
Belgard Square North
Tallaght
Dublin 24

Dear Jamie,

RE: Consultation on the Treatment of Curtailment in Tie Break situations, SEM-12-028

Bord Gáis Energy ("BG Energy") welcomes the opportunity to respond to the Consultation on the Treatment of Curtailment in Tie Break situations ("the Consultation"). The outcome of this consultation will have a huge bearing on the renewable energy industry and the ability to meet renewable energy targets in both Ireland and Northern Ireland. BG Energy strongly believes that the previous decision¹ of the Single Electricity Market Committee ("the SEMC") to apply grandfathering to the allocation of curtailment in tie break situations was flawed and, given the implications of this decision, it is appropriate that it is being reconsidered in a thorough fashion.

This response will firstly discuss the context of this debate. It will then respond to the suggested decision making criteria before responding to the options proposed in the Consultation. Finally, this response outlines and endorses a suggested solution which is a variation of Option 3 (as proposed in the Consultation). This solution has been agreed with other industry participants through IWEA and NIREG and aims to best meet the objectives and requirements of all stakeholders.

1. Context

BG Energy recognises that the SEMC's decision in the matter of curtailment must be aligned with its primary duties as set out in law but it must also sit within the context of the national policy objectives.

Policy makers have taken the view that it is in the long-term interests of customers to reduce dependence on fossil fuels and to promote sustainable energy generation and the use of renewable energy sources. This is the basis on which European and Irish energy policy has been developed and is recognised in the founding legislation of the SEM and in the SEMC's core objectives to: "protect the interests of consumers of electricity in Northern Ireland and Ireland" and "promote the use of energy from renewable sources". In this context and recognising that the solution to curtailment must enhance the long-term interests of the customer, it must also promote renewable energy development and generation.

¹ Treatment of Price Taking Generation in Tie Breaks in Dispatch in the SEM Decision Paper: SEM-11-105



Furthermore, Article 16(2)(b) of the RES Directive² provides that "Member States shall also provide for either priority access or guaranteed access to the grid-system of electricity produced from renewable energy sources;". The aim of this statement is to ensure that renewable energy generators are able to sell and transmit their energy whenever the resource is available (as per recital 60 of the Directive). Currently, the SEMC assumes compliance with the RES Directive is achieved by the provision of priority dispatch through the price-taker provisions of the Trading and Settlement Code (T&SC). However, BG Energy believes that this approach only provides for priority access to the market or compensation arrangements and does not fully give effect to Article 16, which relates to 'priority access to the grid' and the optimisation of renewable resources.

The difficulties that wind generators have accessing the network have recently been reiterated by communications from EirGrid outlining further delays to the rollout of firm access, with the timeline for Gate 2 and 3 yet to be decided and finalised. Recognising that the reason for this delay is to optimise grid delivery, in the context of the Directive and of the island's mandatory renewable targets it is nevertheless inappropriate and unacceptable for investors to bear this enduring and unmanageable risk.

The Consultation acknowledges that the curtailment of wind generation is a power system operation issue that occurs when levels of wind generation penetration exceed levels required for the safe operation of the power system. BG Energy recognises that this Consultation only addresses the allocation of curtailment in the event of a tie-break and that the DS3 programme instigated by the TSOs is a key element of plans to address the system operation issues around facilitating a higher penetration of wind generation on the power system. The success of this programme is at the core of this debate and is critical to minimising levels of curtailment and enabling the flexibility of wind generation and other generators to be maximised. BG Energy therefore urges the SEMC to focus its energies on the objectives of this wider project and its delivery in a timely manner.

2. Decision Making Criteria

Investors rely on a stable investment environment and efficient entry signals when making decisions on whether to proceed with projects. Regulatory certainty is a key element of a stable investment environment and as such the risk of retrospective regulatory actions/decisions can have damaging and long-lasting impacts on the confidence of investors in a market. Indeed recent financial analysis has shown that the risk of retrospective policy and regulatory decisions is increasing the risk premia associated with energy utilities across Europe, which is directly increasing the cost of financing in energy investments³. In this light, the importance of the 'Stable Investment Environment' criteria cannot be over-estimated, especially given the significant levels of investment that are still required to meet our renewable energy targets.

The inclusion of the fifth criteria relating to 'Consistency of treatment for constraints and curtailment' is in BG Energy's view flawed and misguided. Constraints and curtailment are distinct issues and should be recognised as such. Constraints are a network specific issue while curtailment

² Directive 2009/28/EC of the European Parliament. Emphasis added.

³ CitiGroup Report 'A Very Hostile Political Environment: Have Governments made the European Utility Sector Un-investable?', September 2011

is a system-wide operational issue. The previous decision on constraints and curtailment stated that "the TSOs should first deal with the constraint and then deal with the curtailment on an all-island basis". This statement acknowledges that operationally the TSOs have already accepted that they would resolve constraints as a priority and curtailment thereafter and as such devise a solution to differentiate them. Furthermore, the SEMC has already decided in its December 2011 decision (SEM-11-105) that constraints will be treated on a different basis in different areas. For these reasons this criteria is not relevant to this consultation and the issue of allocating curtailment and should henceforth be discounted.

3. Response to Options proposed in Consultation

3.1. Option 1 – Grandfathering

BG Energy strongly opposes Option 1 – Grandfathering both in terms of the assertions made in the consultation and in terms of its impact on the market and the future of investments in the SEM. The effect of this option would be to threaten the viability of all non-firm projects to such an extent that it would compromise the achievement of the renewable targets.

Firstly, the SEMC in its consultation recognises that the solution to tie-breaks is ultimately a decision on how to allocate the risk of curtailment as opposed to managing the level of curtailment. In linking this allocation to the **firmness** of a project, grandfathering places what is an unmanageable risk on new investments to the market, which would act as a considerable barrier to entry. This option attempts to protect existing investments that have a firm connection only, while discriminating against existing and new investments with a non-firm connection, despite there being no link between the level of firmness of a project's connection and curtailment.

In its assumptions around grandfathering, the SEMC is of the view that grandfathering will be **cheaper** on the basis of reduced Dispatch Balancing Costs (DBCs). This view is premised on the assumption that DBCs are the only relevant cost or revenue input affecting customers. Analysis undertaken by Redpoint on behalf of IWEA indicates that higher SMP costs outweigh the DBCs saving possible under the grandfathering approach. Furthermore, Redpoint's analysis illustrates that in incentivising firm projects only to meet the targets, the actual DBCs increase two-fold relative to pro-rata treatment. Combined, the customer actually pays more under the grandfathering option to achieve the renewable targets relative to the pro-rata option.

Grandfathering uses the firmness of a project as an indication of a project's readiness to build and therefore its ability to contribute to our short-term targets. This is a misguided assumption and does not provide for the most **efficient entry signals** or the optimal achievement of the 2020 targets. Firmness is not an indication of a project's readiness to build (in terms of securing the relevant planning permission and financial agreements) or generation efficiency (in terms of load factor). The most efficient long-term outcome would be to incentivise the entry of the strongest projects to contribute towards the achievement of the market's targets. This signal is not provided through firmness, which is solely related to a project's proximity to available network capacity and not the strength or ability to proceed of the project. In reality the projects that can provide the most

⁴ SEM-11-105

efficient long-term outcome are those that are viable and willing to build given all the risks they face.

Despite assertions to the contrary, grandfathering **does not** best protect existing investments, many of which are not firm and in fact could lead to certain projects defaulting on their debt obligations given higher levels of curtailment than anticipated when the investment took place and the subsequent impact on the project's business plant. Only existing projects *with firm access* will be compensated for curtailment and hence are not bearing the commercial risk of rising curtailment in the short to medium-term. There is 320MW of operational non-firm and temporary projects as well as a significant volume of non-firm projects in development and close to operation that would be severely impacted by the outcome of this decision. An IWEA study has shown that a grandfathering solution based on firm access would greatly reduce the build-out of Gate 3 projects and therefore those non-firm (and temporary connected) operational and developing projects will bear a larger brunt of future curtailment levels. The majority of non-firm projects have yet to receive a firm connection date from the TSO and the further uncertainty around the build-out of non-firm projects that grandfathering will cause compounds the risk caused by the delay of firm connection dates.

As a holder of a significant proportion of those projects, BG Energy can affirm to the SEMC that grandfathering would be detrimental to these projects and as such would not best protect existing investments. Viable projects will be stopped in their tracks with a subsequent significant loss of investment. Grandfathering is a short-term signal which penalises healthy non-firm projects. Also, grandfathering does not protect firm projects from curtailment in the medium or long-term, as when temporary and non-firm projects become firm, curtailment will be shared by all. In short, grandfathering is only a short-term solution and as such is not an appropriate solution and is more so a barrier to entry for new projects. Please refer to the attached confidential appendix for detailed information to further support this position.

3.2. Option 2 – Pro Rata

BG Energy believes that the pro rata allocation of curtailment across all wind generation is the most equitable and appropriate approach. This approach recognises that curtailment is a system-wide operational issue, which is caused by the inability of the power system to accept all wind generation at all times.

The RAs' concern with respect to an uncapped pro-rata solution is premised on an assumption that there will be infinite and unfettered investment in wind projects. This premise ignores the other key inputs into a project's investment decision such as planning permission, availability of financial support and other financing agreements. Also, any concerns that the pro rata allocation of curtailment would lead to higher levels of curtailment over the long-term for existing firm wind generators are misplaced. **Existing firm generators will face the same levels of curtailment in the medium-long term under options 1 and 2, as the network is built out and temporary and non-firm generators become firm.** As such, pro-rata will not impact firm projects seeking finance relative to grandfathering. Notwithstanding that, BG Energy is open to alleviating any perceived risks in the market particularly in light of the significant investment that is needed over the coming years.

3.3. Option 3 – Temporary Pro Rata

Although BG Energy recognises the intent of this proposal in terms of addressing the risk of "uncapped pro-rata", BG Energy is not in favour of Option 3 as it is proposed in the Consultation. The proposal applies pro rata levels of curtailment to firm and non-firm wind generators only until the renewable target is met. After this time, curtailment levels for non-firm wind generators will revert to grandfathering and as such result in an unknown increase in curtailment levels. Investments in non-firm projects could not proceed under these conditions. In the longer-term, this option would have precisely the same effect as grandfathering under Option 1 and as such does not address the 'stability' concerns of investors.

BG Energy has worked extensively with industry participants to develop an agreed solution that delivers the SEMC objectives of protecting customers while also promoting the achievement of renewable energy targets.

The industry agreed option is similar in principle to Option 3 as proposed in the Consultation but contains further provisions to address the issue of stability for investors. At a high level, the structure of the proposal is as follows:

- a. There should be a tranche of projects required to deliver the MW required to meet the 2020 targets in each jurisdiction independently which would be curtailed for the operational lifetime of the project on a pro-rata basis. These projects would be protected from higher curtailment that would result from further connections.
- b. Any projects connected and exporting power by 1 January 2018 or at a later date in either jurisdiction if targets have not being met, will be in this first tranche
- c. This tranche could in principle grow in size, but in a controlled fashion as curtailment mitigation measures are established, such that higher curtailment levels are not applied to this tranche than would otherwise have been expected.
- d. The treatment of projects post the achievement of the 2020 targets will need to be defined at a later date in consultation with industry.
- e. Projects being developed explicitly for export should not add to the curtailment of projects that contribute to 2020 targets.

The primary benefit of this option is that it does not prevent wind from connecting prior to becoming firm, as is the case with grandfathering and it provides an entry signal for advanced and efficient projects to contribute towards the 2020 targets. It also provides a level of certainty around the levels of curtailment for these projects and in so doing provides a more stable investment environment, thereby increasing the likelihood of sufficient wind being developed to meet the 2020 renewable targets.

Furthermore, while this Consultation is concerned with the allocation of curtailment among wind generators, this proposal facilitates the role of mitigation measures in reducing the overall level of curtailment (e.g. grid development) and allows for further development in this area. As such, this solution provides an economic signal for the TSOs to minimise curtailment with the timely delivery of appropriate mitigation measures through the DS3 Programme that will enable the SNSP level to be raised.

Finally, this proposal most fairly allocates the risk of curtailment across the market and its respective stakeholders. That is, irrespective of the varying views on the linkage of firm access to curtailment, it would be inappropriate at this stage to place the risk wholly on non-firm generators when there is such uncertainty around the delivery of firm access.

3.4. Option 4 - Pro Rata with Generators taking the risk

Option 4 proposes to apply pro rata allocation of curtailment among wind generators and also to remove compensation for curtailment for all wind generators. This option is wholly unacceptable. BG Energy questions the inclusion of this option in the Consultation, as it signifies a redesign of a fundamental feature of the SEM and requires a modification to the Trading and Settlement Code in order for the option to be implemented.

The proposed change to remove compensation for all wind generators in a curtailment event would amount to the application of **retrospective regulation**. Existing wind generators have already secured finance and the existing support mechanisms for wind have been designed under the assumption that the High Level Design principles of the SEM will not be changed. A retrospective change to remove compensation would have significant and detrimental impacts on existing projects, the credibility of the market and will ultimately impede any future investment in the market.

Furthermore, this option contravenes the **spirit of the RES Directive** which provides that; "In certain circumstances it is not possible fully to ensure transmission and distribution of electricity produced from renewable energy sources without affecting the reliability or safety of the grid system. In such circumstances it may be appropriate for financial compensation to be given to those producers." Although this provision does not explicitly state that renewable generators should be compensated for curtailment, its intent provides for the optimisation of the grid to deliver the full benefits of renewable generation and that curtailment does not act as a barrier to entry for renewable generation.

By excluding wind generators from receiving market compensation for foregone revenues in a curtailment event, this option **discriminates against wind** generators relative to other generators in the SEM who would not be subject to this onerous condition. Modifying the Trading and Settlement Code to reflect this change would be contrary to the High Level Design principles of the SEM which recognises that generators with a firm connection are entitled to market compensation. This would be a significant change to the High Level Design of the SEM and would again create significant regulatory uncertainty in the market.

Finally, if compensation for curtailment is removed, the **economic signal** to minimise curtailment through the introduction of mitigation measures is also removed. DS3 marks the TSO's programme to deliver measures that will mitigate curtailment. The impact of curtailment on consumers can be measured through the level of DBCs which acts as an incentive for the TSOs to deliver this programme in a timely fashion. Curtailment is a power system operation issue that is also minimised by the flexibility provided by other generators and the cost of curtailment demonstrates the value of this flexibility to the system.

In summary, BG Energy would like to reiterate our firm opposition to Option 4. We believe that this option contravenes the High Level Design principles of the SEM, discriminates against wind generation and would be damaging for regulatory certainty and investor confidence if introduced. Also, given that curtailment is a power system operation issue over which wind generators have no control, it is inappropriate to levy the full cost of this risk on wind generators and investors. To be clear, it is BG Energy's view that the implementation of Option 4 would have such a detrimental impact on the market and the ability of investors in the market to obtain financing that it would essentially prevent the achievement of the renewable targets and increase the costs for all future investments in the SEM.

4. Conclusions

Recognising the SEMC's primacy of the customer in its decisions, this must be put in context of the respective national policies to achieve 40% renewable penetration by 2020. The attainment of this target is ultimately in the long-term interests of customers in terms of the key pillars of security of supply, sustainability and affordability.

With this in mind, BG Energy, in conjunction with its IWEA colleagues, endorses a solution to the allocation of curtailment on a pro-rata basis but which is capped, in the medium-term, at the level of generation needed to meet the renewables targets in both jurisdictions. This proposal, as outlined in section 3.3 above, is in BG Energy's view optimal in the medium-term on the basis that:

- ☑ It provides an efficient entry signal for investors and for the development of the most efficient generation projects to contribute to the renewable targets;
- ☑ It best protects the interests and viability of the wide-ranging investments that have already been made, both currently firm and non-firm projects;
- ☑ It will ensure the achievement of the renewable 2020 targets;
- ☑ It will provide certainty to the market, which will instil confidence and provide an environment for sustainable investment; and
- ☑ It most fairly allocates the risk of curtailment across the market.

In conclusion, BG Energy believes the interests of customers are best served by the continued promotion of renewable energy in the SEM which will, over the long-term, reduce energy prices and dependence on fossil fuels. Customers will not benefit from the effective stalling of the wind industry in Ireland which, in BG Energy's opinion, would be caused by the implementation of either Options 1 or 4.

Please do not hesitate to contact me should you wish to discuss any of the issues raised in further detail.

Yours sincerely,

Ciarán O'Brien Regulatory Affairs – Commercial Bord Gáis Energy

{By email}