

Mr Mark Needham,
EirGrid
The Oval
Shelbourne Road
Ballsbridge
Dublin 4

RE: Consultation on Preferred Options to be Considered for the Implementation of Locational Signals on the Island of Ireland

Dear Mark,

The review of Transmission Loss Adjustment Factors (TLAFs) and Transmission Use of System (TUoS) charges has been an ongoing process since the establishment of the Single Electricity Market (SEM) project. Bord Gáis Energy (BG Energy) considers that due to the significance of their financial impact on generation units, TLAFs have become the most important of all market parameters, arguably more than should be the case. To this end we welcome this review and will continue to participate fully in the process.

We believe it is in the interests of all concerned to ensure a robust long term solution is put in place in a timely manner.

We have structured this paper in terms of key issues we see with the current consultation paper.

1. Transmission Loss Adjustment Factors

Before giving our views on this topic we would like to reiterate our serious concerns with the existing methodology:

- The losses calculated do not reflect actual losses for several reasons:
 - The generation profiles that the TLAFs are based upon do not reflect the actual running regime of plant on the system, which means actual losses will not be mirrored.

- The methodology itself is based on the losses of the marginal MW of each plant, rather than the average losses. For large plant in particular this can result in a TLAF that does not represent the real losses of that plant.
- The process for calculating the losses is not transparent, with consultation with market participants only carried out at the point results are published, meaning little real debate and challenge is possible.
- The credibility of the results is questionable, as shown by two Cork CCGTs contributing almost 70% of overall system losses in the second half of 2010, despite the fact that overall losses have actually reduced from the 2009 TLAFs, when these plants were not on the system.
- The results are extremely volatile as seen by some wind farms TLAFs dropping 10-15% over a few years.
- They do not provide an investment signal, as wind farms cannot react to them and once conventional generation of any size follows a signal, the TLAF reverses punishing them and rewarding others.

The point of commitment for a sizeable power station development can be 2-3 years prior to the final commissioning date of the plant. Under the current regime, a power station investor is therefore faced with taking investment decisions involving hundreds of millions on the basis of proposed TLAFs at that time. However due to the issues raised above, even before a new plant is commissioned, the TLAF will most likely have moved considerably from the level at which the investment was made. The investor of the new plant invariably achieves a poor TLAF with existing generators being the benefactors of the investment.

The financial impact of the above has been significantly accentuated following the SEM Committee decision in December 2008 to include TLAFs in PQ pairs (i.e. merit order). This has greatly increased the impact of TLAFs on the generation community. The extent of the fluctuations in gross margin on a plant that TLAF has greatly exceeds that required for a locational investment signal.

BG Energy therefore fully supports the implementation of a new TLAF methodology. In fact its implementation is essential to ensure investor confidence remains in the market, particularly in light of both jurisdictions challenging renewable targets and the pending Gate 3 offer process in ROI.

Key Issue 1: Proposed Three Step Approach Timing

The timing proposed by the SO's is extremely protracted, considering that almost a year's review has already taken place on these issues. BG Energy does not accept that a further 2 years is needed to put a new system in place, followed by another 3 years for a third methodology to be implemented. BG Energy recognises that changes will be required to the market rules and underlying systems for the integration of a more robust losses methodology. However two years seems an inordinate amount of time for this process, especially considering a lot of work has been done to date. The cost of changing the rules in a prompt manner will far outweigh the negative financial impact that the current regime is having on many market participants. The current regime is impacting market investors via uncertainty/raising cost of investment, etc

The preferable outcome from this consultation would have been several fleshed out individual proposals with comprehensive supporting analysis (particularly a cost benefit of each) being offered for market participants to consider. However this does not appear to be the case. While we understand this requires significant work, the importance of this issue lent itself to justifying the engagement of whatever support was necessary to do this. We would like to reiterate the importance of the TLAF methodology and its financial impact on market participants, both conventional and renewable generation. The proposed approach does not appear to recognise the gravity of the financial impact the current regime is having on market participants.

Key Issue 2: Scope of Study

While the consultation paper itself unquestionably contains a large deal of content, the narrow scope of the paper means that no credible long term solutions have been offered to market participants to comment upon.

The following items have not been reviewed in the consultation:

- No analysis has been carried out on alternative ways to calculate losses other than the existing Marginal MW method. The paper focuses on ways to adjust nodal losses once they are calculated, but not on the way to calculate them itself. This is recognised as a key next step in the medium term solution. This step appears to BG Energy to be the core of a locational signals consultation.

- No cost benefit analysis has been given on the different options. It is not clear that the cost of implementing any of the proposals outweigh the clear benefits of a uniform TLAF. While efficient dispatch is treated as the key objective in judging the options, no supporting analysis has been carried out to demonstrate this conclusion. For example, a question might be ‘does the saving in efficient dispatch cost outweigh the increase in the cost of equity that market participants have seen in response to a locational losses system?’. BG Energy is aware that IWEA have sought a cost benefit analysis of applying locational signals versus a simple uniform system and would support this request. We would also point out that according to ETSO, only 5 countries in Europe (GB, Greece, Norway, Romania, Sweden) have actually implemented locational pricing. Considering Ireland’s size, the value of such a system must be questioned, particularly considering the impending move towards larger regional markets. It certainly indicates that a locational signal TLAF methodology is not a pre-requisite of a competitive electricity market.
- The fact that losses on the system can be split into both fixed and variable does not seem to have been considered. BG Energy has made this point before, as have other market participants. Should a locational losses system be put in place, their costs should be recovered on a locational and uniform basis. Failing to recognise and provide for this differentiation means that certain generators are over-paying for the overall cost of losses, over which they have no direct control. Fixed losses (which are suggested to account for 30%-50% of overall losses) should be charged on a uniform basis.
- The SEM high level design appears to be used as an argument against uniform TLAF. However it is up to the RAs to consider whether this is indeed an obstacle. Uniform TLAFs should be given equal consideration by the SOs regardless of the present rules.
- The medium and long term proposals provide no recommendation on how locational losses, once calculated, should be apportioned between participants. This is essential to allow market participants to give a view on a long term solution.

- The paper does not carry out an impact analysis of different proposals on market participants. While this is not necessarily the SO's responsibility, some simple examples showing the impact on a generations plant revenues may demonstrate whether a proposed solution is really workable or not.

Key Issue 3: Focus on TSO perspective

The proposals in the paper link a possible incentivisation scheme on the SOs being put in place to meters being placed on the transmission system. BG Energy would contend that whatever long term methodology is put in place, the SO's should be willing to face financial exposure (and gain) to this methodology, as will all of the generation participants. By not doing so and linking SO incentivistaion to meters might suggest the SOs are not confident in the preceding methodology. To install market confidence in the SOs proposals, an SO incentivisation scheme must be part of the solution.

Other Key issues

BG Energy would also make the following comments on the TLAF proposals:

- The majority of generation investments over the next 10 year horizon will be wind generation. There is significant ambiguity around the relevance of a locational signal to wind investments. In fact Grid 25 is designed to deliver a grid infrastructure to wind farms. The only way a TLAF mechanism can impact wind generation is obstructing them through the current unfavourable system. In terms of a signal to conventional generation, the current application queue is almost entirely smaller (typically open cycle units) which will not impact the grid to any large degree. The cost of a shallow connection and the time required to achieve firm access provide more than an adequate locational signal for these plants.
- BG Energy agrees with the high-level principle of removing TLAFs from the market schedule as suggested by the SOs in the splitting option in the paper.
- The installation of meters is considered as part of the long term proposal. It is critical that a cost benefit analysis is carried out on this proposal as the cost of installing many meters is likely to be significant when set against the benefits it would bring. This is particularly applicable for a country of the size of Ireland.

These may be meaningless asset investments which would increase TUoS charges further and consequently tariffs to the end user.

In light of the above comments BG Energy has formed the following views:

1. The Regulatory Authorities should take control of the process and the next consultation should be timely, comprehensive and costed. The programme should include cost benefit analysis – bottom up work and any case for locational signal should show quantifiable value. BG Energy believes the long term solution should be uniform TLAFs unless it is proven that the losses calculated under a prescribed calculation can be proven to provide real locational investment signals and minimise the costs to dispatching the system. This has not been done to date. However we are open to considering alternatives if they are fleshed out in detail and accompanied by a cost benefit analysis.
2. A detailed programme should be established for a final long-term TLAF methodology to be put in place by October 2011, which gives almost two years for its implementation.
3. Only one final solution should be put in place in October 2011, with no further amendments being scheduled or made.
4. The long term solution should contain SO incentivisation to minimise losses as the SO has significant influence on the level of losses.
5. A short-term solution as a bridge to the final solution is required and should be put in place as soon as possible but no later than July 2010. This should be uniform TLAFs unless it can be proven that the alternative compression proposal provides TLAFS that offer credible investment signals and minimises dispatch costs (i.e. reflect actual losses). In the event that these requirements are satisfied and compression is put in place, there are some straightforward adjustments that must be made to improve it:
 - Iteration;
 - Greater engagement on assumptions and methodology;

- Multiplicative scaling of MLFs to TLAfs to ensure cost-reflectivity.
6. The final solution should be as straightforward as possible. The current methodology is extremely difficult to understand and as it cannot be replicated by market participants on a dynamic long term basis and as such is of little use as an investment signal.

2. Transmission Use Of System Charges

BG Energy is broadly supportive of the SOs suggestion to introduce a two-part TUoS tariff as a means of introducing a locational signal under a shallow connection regime. A cost-reflective methodology that incorporates locational signals and charges has an important role in incentivising the optimal siting of generation on the system. However, it is essential that the overall level of locational signals is appropriate for and consistent with the overall policies and objectives on the island within and outside the SEM.

From a modelling perspective, BG Energy has previously highlighted its concerns and reservations with the dynamic modelling proposals of the SOs. The unavoidable lack of transparency in the process inhibits the ability of generators to reasonably understand and forecast future changes to the charges. More significantly however, as a process it favours incumbent generators who will essentially benefit from the 'free usage' of the existing system. This is particularly irrational where an incumbent generator is located in an isolated region yet will be permitted to 'free-ride' on existing assets. This discriminates against new generators who will be at a competitive disadvantage and may actually act as a barrier to entry for renewable projects who for obvious natural resource reasons do not have a range of choices in their location. Despite the assertions of the SOs at their workshop, providing this 'free-ride' also fails to provide a retirement signal for old, inefficient generators.

Furthermore, the objectives of grid investments are far more wide ranging than solely to meet the export capabilities of a generator. The Grid 25 Report provides that the Grid "will remain a vital channel for essential supplies, delivered reliably, for sustainable and renewable energy and for open competition within the sector". This recognises the role of grid investments in achieving the overarching security of supply,

renewable and competition policies within the market. The dynamic modelling proposed by the SOs could hamper the achievement of these policies and particularly penalise the connection of new wind and other renewable projects.

Dynamic modelling also introduces an element of subjectivity into the process of calculating annual TUoS charges in terms of forecasting what assets will be built in the future, where and who will be using them. This will add considerable complexity to the annual process for all parties without delivering corresponding benefits.

For these reasons, BG Energy is strongly of the view that a static approach should be applied when modelling the SEM network as part of the TUoS charging process. Dynamic modelling will be punitive on new entrants with wind generation facing high TUoS charges.

Also accentuating the discriminatory issues of the dynamic modelling proposal the suggested 60:40 locational to uniform split of the TUoS charge would be punitive and indeed would fail to recognise the contribution of new generation to the security of energy supplies on the system. This split would again be overly penal for generators who in reality do not have practical choices in their location. Furthermore, the split could act as a barrier to entry and arguably discriminate against new connecting generators (who would be disadvantaged relative to incumbent generators who benefited from postage stamp TUoS charges in the initial years of their operation). This barrier will have the greatest impact on the renewable industry and again could jeopardise the achievement of the ambitious renewable targets in the Republic of Ireland and Northern Ireland.

To avoid this conflict while also providing the desired locational signal, BG Energy suggests a 20:80 locational and uniform split respectively.

3. Summary

BG Energy is disappointed that the consultation which has effectively been ongoing since before the establishment of the SEM has not provided more robust solutions to the calculation and application of locational signals. It does not appear from the current consultation paper that the SOs have conducted sufficient development and analysis on the different options presented in the paper but in particular in relation to TLAfs.

Specifically in relation to the calculation of TLAFs and allocation of their costs, BG Energy calls for the immediate uniforming of TLAFs across the island. In proposing this interim solution BG Energy is not suggesting that the roll-out of a long-term solution should be delayed. On the contrary, the SOs should work towards the design and implementation of a long-term solution for October 2010 but at the very latest 2011. This is a plausible timeframe if the correct resources are allocated appropriately as was demonstrated in the roll-out of the SEM in 2007. On saying that, a long-term solution should not be implemented until it can be clearly demonstrated that it will deliver benefits to the market over and above that of uniform TLAFs.

The SOs preferred option to implement a two-part TUoS charge seems reasonable, however the suggested modelling and tariff split would be inconsistent with wider renewable policies and will be punitive for new generators particularly renewable generators who are intrinsic in Ireland meeting its renewable targets. Dynamic modelling also introduces a level of subjectivity and complexity which has not been demonstrated to deliver wider benefits to the market. BG Energy therefore advises that a static approach to modelling be applied and that the locational-uniform split in tariffs be reallocated to a 20:80 split respectively. This would still provide a locational signal as per the SEM high-level design but would not do so at the expense of achieving wider energy and competition policies.

{by e-mail}