

Irish Wind Energy Association  
Sycamore House  
Millennium Park  
Osberstown  
Naas  
Co. Kildare

31<sup>st</sup> March 2009

Mark Needham  
EirGrid  
160 Shelbourne Road  
Ballsbridge  
Dublin 4

**By email to: [mark.needham@eirgrid.com](mailto:mark.needham@eirgrid.com)**

**Re Transmission Loss Adjustment Factors**

Dear Mark,

The Irish Wind Energy Association (IWEA) welcomes the review of the All island Transmission Use of System Charging and Loss Factor locational signals in SEM and appreciates the opportunity to comment.

As indicated in all previous consultations on this matter, the volatility and lack of transparency of the current methodology of the All-Island Transmission Use of System Tariffs and Losses are a matter of serious concern to IWEA members.

In particular, the current methodology of transmission charging contains a volatile and arbitrary set of tariffs that seem to unduly discriminate against wind generators. It is unclear how these signals are in any way linked to the objective of the efficient development of the energy infrastructure on the island.

With the industry on the cusp of a significant investment period over the next ten years, there is substantial benefit to be gleaned from having a joined up approach to planning and development.

The current methodology is a large step away from this type of strategic development approach and as such imposes additional costs on consumers, by increasing risk to developers, without delivering any apparent benefit to transmission development.

Generators have experienced unexpected changes of 10-15% in TLAFs in recent years. Changes of this magnitude have the potential to eliminate the financial viability of many projects and may lead to bankruptcy. The risk of these swings is now being priced into the financial assessments of all projects and this is significantly increasing the overall costs of all generation development on the island. The volatility of the mechanism acts as an uncontrollable risk rather than a locational signal in generation

investment decisions. It is also worth noting that the signal is not in any way linked to transmission investment plans.

IWEA recognise the need for efficient development and utilisation of the transmission network. Consideration of long term effective and strategic development is key to delivering a 21st century energy system in an efficient manner. It is estimated that there will be over €16bn invested in renewable generation projects and several hundred million in transmission over the next decade. A strategic approach to development has the potential to greatly increase the pace and efficiency of delivery of this infrastructure.

However, the application of highly volatile “signals” that do not properly link into more general strategic development significantly damages efficient investment signals.

Indeed, in the current gate processing system, locational investment signals seem now essentially irrelevant. For Gate 3, the system operator have essentially selected projects to offer connections based on date order. It seems perverse having decided the locations where wind should be developed through a central planning process to expose the constructed projects to highly volatile “signals” that have no effect other than increasing the cost of development on the island. Participants are not reasonably in a position to respond to these signals.

Historically the TLAF system has been so broken that developers have ignored it, and even if the locational signal aspect was fixed (by making it less volatile and more predictable), all the wind farms that are going to be developed for the next 10-15 years have already chosen a location, and been assigned a grid queue position, either in Gate 3 or post Gate 3. From our discussions with developers, none of the developers took TLAF values into account when selecting particular sites over others.

The current methodology is too complex and EirGrid are the really the only party that can complete studies and projections, therefore the methodology lacks transparency and predictability.

In reviewing the current methodology it is important to note also in particular that the marginal loss signal is too volatile, and indeed should be removed. Generators that reduce losses may in fact be penalised. Currently there is a danger is that if you listen to a signal, you could be punished by causing a reverse flow which cannot be predicted, and we believe that the signal has not performed it's intended function since the start of the wind industry in Ireland.

TLAFs for existing generators can be significantly impacted by the appearance & disappearance of load which leads to huge lack of predictability in the system

Losses are an inevitable consequence of running an electricity system, as for example are ancillary services, which are not attributed on the basis by which they are incurred. You could just as easily argue that the load is in the “wrong” place.

They can also be impacted by the actions of the TSO and other generators. It is not clear if there is any monitoring of actual transmission losses and the “basis upon which that they are incurred”. If this were to be the case the increased losses caused by delays in network reinforcement should also be considered.

There is a case for retaining the TLAF signal for price making plant to gain a better dispatch, but there would need to be much more granular and uncorrected loss data available to ensure this was applied fairly. The cost of creating this level of detail should be compared with the benefit of a slightly improved dispatch. It is important to note that the current mechanism is adding significantly to the cost of

generation development in Ireland. This is completely out of proportion to the potential benefit of the signal. The IWEA recommends that the current review includes a cost benefit study of TLAFS that could show:

**Benefits:**

- Reduction of losses by an average of xMW per hour.

**Costs:**

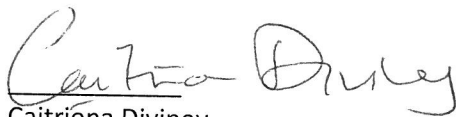
- Time required by EirGrid to calculate, publish, check input to settlement and deal with queries on TLAFS?
- Time required by industry to analyse model, forecast, explain to investors.
- Increase in the risk factor applied to all projects that their TLAf might decrease.

It is difficult to see how this could lead to an overall benefit even if the method fully achieved its objectives.

This study does need to deliver a framework that promotes the efficient development of generation and transmission on the island. There is an excellent window of opportunity ahead of the forthcoming flood of investment to deliver significant benefits for all users and consumers of the energy system on the island through such a review.

It no longer makes sense to incentivise development of renewable generation in windless population centres instead of in locations with rich wind resources. IWEA call for the removal of these non-value added location transmission connection incentives in context of strategic grid development.

Yours sincerely,



Caitriona Diviney

COO, Irish Wind Energy Association