



**Airtricity Response to
Consultation on Draft Transmission Loss Adjustment Factors
for 2009**

10 October 2008



Draft Transmission Loss Adjustment Factors for 2009

Introduction

Airtricity is pleased to respond to the SEM Committee's consultation on draft transmission loss factors for 2009.

In common with other Generators, we have long been concerned that the underlying philosophy and derivation of TLAFs is an anachronism in the modern world where, as Eirgrid acknowledges, energy industries are changing significantly,

"to counter the declining stocks of fossil fuels and to limit the production of harmful greenhouse gasses¹".

Ireland has moved on from the early steps towards initial market liberalisation and it no longer makes sense to incentivise development of renewable generation in windless population centres, instead of in locations with rich wind resources. To ensure projects are financially viable, it is essential that resource availability drives the location of renewables development, rather than this complex attempt to make the resource fit historic grid development.

Instead of looking backwards and penalising investment in one location as a result of significant loss of load or unrelated generation developments elsewhere, the time has come to recognise the inherent unfairness of current TLAF application. Describing volatile, ex-post loss factor penalties as "locational incentives" does not alter the fact that,

"Capacity has remained largely unchanged in the last 20 years, a period that has seen a growth of 150% in the electricity demand being carried by the system¹".

We call on the Regulatory Authorities to recognise that development of a safe, secure, reliable, economical and efficient transmission system for the island of Ireland has different implications in a world of volatile fossil fuel prices and a policy-driven re-orientation towards sustainable and indigenous energy production.

Opaque methodology

The current TLAF methodology is flawed. In the current consultation and in previous papers, it is made clear that the derivation process is also anything but transparent. Transfers on the Louth-Tandragee line are adjusted to give more realistic flows. Flows on lightly loaded lines are ignored. Modelling uses "a **background** of generation and demand that is **representative** of the month". The results are then, "shifted ... to recover ... losses that are **estimated** to occur".

¹ [GRID 25](#), A Strategy for the Development of Ireland's Electricity Grid for a Sustainable and Competitive Future. 08 October 2008.

Since last year, changes have been made that include generators “**anticipated**” to be connected and others that “**reflect recent experience**”.

In other words subjective scenarios are used to derive a deterministic solution to a stochastic problem. There is no doubt as to the high degree of subjectivity underlying inputs to the modelling, in which context we also note the lack of any mention of the fuel prices that might be considered germane to modelling the “background of generation” underlying the marginal output adjustments. Can the resulting answers be anything other than a spuriously-accurate solution to an approximate model?

The current approach allocates the penalty of historic under-investment across generators. It would be more appropriate to signal the future, by deriving charges based on the type of modern asset system envisaged in Grid 25.

Financial impact

Presentation of the results uses colour coding to highlight the relatively few year-on-year changes where the difference is greater than 2.5%, as though that figure were somehow a threshold of materiality.

The System Operator should recognise that derivation of TLAFs is not merely an interesting exercise in engineering modelling, however cleverly the problem may be approached, or whatever simplifying assumptions may be adopted. TLAF volatility defines revenue receipts and goes straight to the bottom line of generators. It is therefore a material risk to revenue. Unless TLAF stabilisation is introduced, loss factor changes may impact cumulatively or they may waver around a mean value; whatever the case, from the generator’s perspective they are random numbers that worry lenders.

Current relevance of locational signals?

Historically there were relatively few renewable generators seeking access to the grid, so TLAFs may have been effective in incentivising connection applications in areas with good wind resource where new generation was also beneficial to the grid. However market deregulation has totally changed this world. As Eirgrid points out,

“Over the next 15 to 20 years, major changes will take place in Ireland’s electricity needs, in its sources of fuel and in its fleet of power stations. Change will increasingly be driven by issues of energy security, competitiveness, climate change and by the need to move away from imported fuels.”

Gate 3 will connect at least 3,000 MW of new generation; possibly on the sole criterion of connection application date with no regard being taken of locational signals. It is also impossible for any existing generator to know the impact that this new generation will have on its TLAFs.

Any remaining rationale for locational incentives has been eliminated by the new strategic approach to grid development. As Eirgrid points out,

“Many ... locations suitable for renewable energy generation schemes are in areas where ... the network is not capable of carrying the power from these generation sources. It will not be possible to utilise Ireland’s natural resources of renewable energy without the essential upgrades outlined in GRID25”.

A decision is therefore required as to whether renewable generators should be incentivised to avoid applying for connections in weak areas of the grid – until it is reinforced – or if delivery of energy policy would be better served by a forward-looking grid charging regime that delivers cost stability over the project lifetime.

Unfairness

Generation and demand are obviously linked and one of the issues with the current approach to transmission charging is that TLAFs for existing generators can be significantly impacted by the appearance, or disappearance, of load. This is another example of how TLAFs are a flawed locational incentive. By establishing a policy of single jurisdictional loss factors for demand and site-specific loss factors for generation, the Regulatory Authorities unduly discriminate against holders of generation licences compared with holders of supplier licensees.

Following publication of the 2005 high-level TLAF design decision paper,

“the RAs had extensive discussions on the issue with EirGrid and the System Operator for Northern Ireland (SONI), the transmission system operators in the Republic of Ireland and Northern Ireland respectively. This led to a consultation by the RAs and then a decision paper in August 2006 on the treatment of and methodology for transmission losses.”

We regret that the extensive discussions on the issue were conducted only with the System Operators; it would have been more appropriate for all stakeholders to have been equally involved. There are several implementation options for the design decision and those who are financially impacted should have been part of the development process, rather than being allowed only to respond to a token consultation.

Proposal

We believe the RAs should announce a review of charging for transmission access and set up a working group of industry experts to examine the full range of issues involved. These would include;

- issues that transmission charging must address,
- the purpose and value of locational transmission connection incentives in the context of strategic grid development,
- whether modelling is sufficiently robust to deliver nodal charges rather than zonal,

- alternative charging arrangements,
- appropriate modelling methodologies to support different charging arrangements, etc.

Summary

- We challenge the validity of TLAFs derived on the basis of a subjective and deterministic calculation.
- We challenge the pseudo-accuracy of applying TLAFs derived on the basis of subjective inputs to individual nodes rather than zones
- Transmission access charging should be based on a forward-looking, idealised network, rather than on the existing congested one, with the legacy benefits recognised in the new draft EU Directive.
- We call on the RAs to start a meaningful consultation process on all issues surrounding transmission access and charging.