



**TUoS and TLAf charging approach and methodologies:**

**Comments paper on behalf of Coolkeeragh ESB**

**27<sup>th</sup> March 2009.**

# **TUoS and TLAF charging review of options and methodologies for deriving all-island charges: Comments on behalf of Coolkeeragh ESB.**

## **Introduction**

This paper provides Coolkeeragh ESB (CESB) comments and proposals to contribute to the proposed review of transmission factors - TUoS and TLAFs.

CESB welcomes the proposed review of the TLAF and TUoS regimes on the island of Ireland by Eirgrid, SONI and the Regulatory Authorities (RAs) in light of the generally recognised shortcomings of the current arrangements.

CESB welcomes the confirmation that this will be a fundamental review, which will include supplier/demand charging, and will consider all options to arrive at the most appropriate fit for the current electricity arrangements.

However CESB would like to see the RAs rather than the System Operators leading this review, and the scope of the review including a review and re-statement of the high level regulatory principles, and philosophy which applies to the regulation of transmission related costs and charges.

## **Executive Summary:**

Summary of comments on TUOS Arrangements:

- Any arrangements for charging TUoS must provide full transparency, full predictability, minimum volatility, and equity.
- The current arrangements for TUoS charging do not meet these criteria.
- There should be a harmonised all island TUoS charging methodology, selected following a comprehensive consultation process.
- As the overall costs to be recovered arise on a jurisdictional basis there is a strong argument that costs should be recovered on the same basis.
- The status of the development plans by the two System Operators should be reviewed and clarified in the context of the sale of SONI to Eirgrid.
- All transmission use of system costs should be charged to Suppliers.
- If TUoS charges for Generators are retained, then CESB recommends the following:
  - TUoS charges for generators should be “postalised”.
  - A simple methodology should apply.
  - A minimum installed capacity threshold of 5MW should apply.
  - A greater portion of costs should be allocated to capacity payments to ensure minimal volatility.

- The costs should be calculated and allocated on a multi annual basis to enhance predictability and minimise volatility.

#### Summary of comments on TLAF Arrangements:

- CESB agrees that system losses should be accounted for on a harmonised basis within SEM.
- However the current regime for TLAFs is not equitable, and does not provide full transparency, predictability, and minimum volatility.
- There should be a new set of arrangements, selected following a comprehensive consultation process.
- Currently transmission losses are allocated in full to generators, even though they are based on factors which are effectively outside the control of generators. This is inappropriate.
- The current methodology employing marginal loss factors is flawed.
- As the end users ultimately pay for all losses, there is an argument that transmission losses (including TLAFs) should be allocated in full on the demand side, with no charge to generators.
- If transmission losses are to continue to be charged to Generators then a 50:50 split between fixed and variable charges is recommended for SEM.
- There should be appropriate incentives on Transmission System Operators to minimise system losses.

#### Transparency & Predictability:

Transparency & Predictability are vitally important for both TUoS and TLAF calculations, and are largely absent in the current arrangements for both. The models for deriving both should be published in a format which allows participants to replicate the calculations and perform their own scenario modelling and projection of likely future values. At present NI transmission system data is not available at all and Eirgrid transmission system data appears only to be available as text files.

### **Comments on TUoS charging regime:**

#### **Background & Principles:**

The proposal on SEM high level design in June 2005, indicated that generators should pay shallow connection charges and locational Transmission use of system charges.

The Regulators proposed in August 2006 that the existing TUoS charging arrangements in ROI at the time broadly fulfilled their objectives, and would be applied on an all island basis subject to a number of changes. However they indicated that the arrangements would be considered further at a later date.

In 2008, the RAs published a proposed methodology for deriving all-island generator TUoS charges which raised considerable concern among generators, and on this basis the RAs did not proceed with its implementation.

From the perspective of generators, any new arrangements must provide full transparency, full predictability, minimum volatility, and maximum fairness. The current regime for TUoS charging currently does not meet these criteria.

### **Discussion on alternative approaches:**

#### Harmonisation within SEM:

CESB agrees that generator TUoS charging methodologies should ideally be harmonised within SEM. The methodology should be selected via a comprehensive consultation process, to ensure that the criteria of full transparency, total predictability, minimum volatility, and maximum fairness are met. As there are two Transmission System Operators, with separate investment programmes, the overall costs to be recovered arises on a jurisdictional basis, and so there is a strong argument that costs should be recovered on the same basis. However the status of the development plans by the two Transmission System Operators should be reviewed and clarified in the context of the sale of SONI to Eirgrid.

#### Generator v Supplier/Demand TUoS contribution:

Generator TUoS costs are ultimately allocated to end customers, therefore CESB considers that all transmission use of system costs should be charged to Suppliers. Charging TUoS to generators is an unnecessary and potentially non-transparent step in transferring these costs to customers. At a minimum if TUoS charges for Generators are retained, then the apportionment of costs to Suppliers should be no less than 75%.

#### Locational v postalised charges:

CESB considers that TUoS charging does not provide a significant locational signal to new generation and furthermore:

- TUoS charging has no effect on existing generators;
- New generators will be influenced by availability of suitable sites, electricity connections, access to fuel sources, or for wind generators the local wind conditions;
- The “Grid 25” initiative indicates an increasingly centrally planned approach to connection of new generation.

In the absence of a strong demonstrated business case for locational signals as part of Generator TUoS charges, then these charges should be “postalised”.

#### Minimum level for Generator TUoS:

There are increasing volumes of wind and small scale generation connected to the network. If TUoS charges are to continue to be applied to generators (as opposed to charged in full to Suppliers as suggested above) then generators should be included in the TUoS charging regime based on an appropriate minimum capacity threshold. CESB proposes a minimum installed capacity threshold of 5MW, as this reflects the threshold between Large Wind and Small Wind under the REFIT regime for wind generators in ROI.

#### Transparency & Predictability:

CESB considers that TUoS charges should be allocated using a simple and transparent methodology, with an appropriate split across capacity and volume charging, but with a greater portion of costs allocated to capacity payments to ensure minimal volatility.

The costs should be calculated and allocated on a longer term basis than annually, e.g. on a minimum of a 3 year basis or aligned with the network revenue review periods.

It is extremely important that the model for deriving the costs should be published in a format which allows participants to replicate the calculations and perform their own scenario modelling and projection of likely future costs.

## **Comments on TLAF charging regime:**

### **Background & Principles:**

The proposal on SEM high level design in June 2005, indicated that transmission losses would be allocated to generators in the market with a view to minimising losses via the dispatch process, correctly allocating losses in the settlement process, and providing locational signals for new generation entry and exit.

The RAs proposed in August 2006 that the existing methodology for the calculation of TLAFs in ROI would be applied on an all island basis subject to a number of changes. It was indicated that this was done for simplicity and ease of implementation, and to maximise the reuse of existing systems and procedures. The existing methodology in ROI employed static rather than dynamic loss factors.

The RAs indicated that the arrangements would be considered further at a later date. The RAs have subsequently published TLAFs for all nodes in SEM in advance for each year.

CESB believes that the current regime for TLAFs is not equitable and does not meet the criteria of providing full transparency, full predictability, and minimum volatility. CESB also believes that the current regime does not aid the development of effective competition.

### **Discussion on issues and alternative approaches:**

#### Overall approach:

CESB agrees that system losses should be accounted for on a harmonised basis within SEM. However the current regime for TLAFs is not equitable and does not meet the criteria of maximum transparency, maximum predictability, and minimum volatility. There should be a new set of arrangements for SEM, selected following a comprehensive consultation process.

Lack of equity in current approach:

The overall level of losses is driven by the relative location of generators and centres of demand and also by the configuration of the transmission network, and the operation, maintenance and development of the network by the system operators. However at present, transmission losses are allocated in full to generators, even though they are based on factors which are effectively outside the control of generators. This is inappropriate.

Choice of methodology:

The current methodology involves annual calculation of marginal loss factors based on marginal power flows which are then applied to all generation volumes, not just marginal volumes. It does not measure actual losses for each generator – it is a static approach based on assumed dispatch scenarios. This approach is flawed.

Allocation of costs:

As the end user ultimately pay all such charges there is an argument that the cost of all losses should be allocated on the demand side.

If part of the cost of transmission losses continues to be allocated to Generators, then the methodology chosen should recognise that such losses arise on both a fixed and variable basis. This could be done by allocation of the losses on a partially fixed (postalised) basis and a partially variable basis. The proposed arrangement for BETTA is a 50:50 split and this approach is recommended for SEM.

Predictability and location signal for generators:

A potential investor would need to model TLAFs over the lifetime of the investment, how ever this is not possible at present, and so the current TLAF regime provides poor locational signals.

Incentive to reduce losses:

There should be appropriate incentives on TSOs to minimise system losses. This does not appear to be the case at present. Alternative arrangements to provide appropriate incentives for system operators should be considered by the RAs, e.g. allocation of part of the cost of losses to TSOs, or a TSO revenue mechanism to include incentives and penalties.

Transparency:

To maximise transparency the model for deriving TLAFs should be published in a format which allows participants to replicate the calculations and perform their own scenario modelling and projection of likely future values. At present NI transmission system data is not available at all, and Eirgrid transmission system data appears only to be available as text files which would have to be re-typed into a system modelling package, requiring considerable effort and giving rise to significant potential for error.

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