

# The Single Electricity Market:

## **Transmission Loss Adjustment Factors**

**A Decision Paper** 

AIP-SEM-07-124

26<sup>th</sup> April 2007

## **Table of Contents**

I	Introduction		1
П	Responses to the March Consultation		2
	II.1	Comments Received	2
	II.2	Position of the Regulatory Authorities	3
Ш	Decision		5
APPENDIX A - Submission of TLAFs by EirGrid for ROI			

APPENDIX B - Submission of TLAFs by SONI for NI

#### I INTRODUCTION

In June 2005, the Commission for Energy Regulation ("the CER") and the Northern Ireland Authority for Energy Regulation ("the NIAER"), collectively known as the Regulatory Authorities ("the RAs"), published a decision document<sup>1</sup> (the "SEM High-Level Design Decision document"). This document outlined the design of the Single Electricity Market (the "SEM") for the island of Ireland, and included a decision requiring that transmission losses in the SEM be accounted for using a consistent methodology involving the application of locational loss factors to the outputs of generators.

Following the publication of the document, the RAs had extensive discussions with EirGrid and SONI, as the system operators for the island of Ireland, on the implementation of this policy, leading to the publication of a consultation paper in May 2006<sup>2</sup> and the decision paper in August 2006<sup>3</sup> on the treatment of losses in the SEM. This culminated in the publication in March 2007 of a paper<sup>4</sup> ("the March 2007 consultation") consulting on Transmission Loss Adjustment Factors (TLAFs) to apply from SEM Go-Live, for the months of November and December 2007. This current paper discusses responses received and gives the decision of the RAs in relation to these TLAFs.

<sup>&</sup>lt;sup>1</sup> "The Single Electricity Market (SEM) High Level Design Decision Paper", AEP/SEM/42/05, 10 June 2005.

<sup>&</sup>lt;sup>2</sup> AIP-SEM-58-06.

<sup>&</sup>lt;sup>3</sup> AIP/SEM/112/06.

<sup>&</sup>lt;sup>4</sup> "Draft Transmission Loss Adjustment Factors. A Consultation Paper", AIP-SEM-07-47, 13 March 2007.

#### II RESPONSES TO THE MARCH CONSULTATION

Five responses were received to the March 2007 consultation, of which one was confidential and a second contained some confidential comment. The following discussion refers to the non-confidential comments only.

#### **II.1 Comments Received**

In respect of the draft TLAF values, one respondent commented that the nighttime values for Coolkeeragh were significantly worse than the indicative values in the consultation paper<sup>5</sup> published in May 2006. A second respondent remarked that the TLAFs for a number of distribution-connected generators presently have a TLAF fixed at 1.000 and questioned whether it was appropriate for this to continue under the SEM.

On more general points, one respondent agreed with the decision to apply the TLAF methodology currently employed in the Republic of Ireland (ROI) but was concerned that the published November and December figures lacked improved levels of transparency. A second respondent requested that the 2008 TLAFs be published as soon as possible.

A third respondent commented that the decision not to apply TLAFs for demand had the potential to create an inter-jurisdictional distortion that would result in customers in Northern Ireland (NI) providing a cross-subsidy to customers in ROI. This respondent noted that determining customer demand of NIE Supply by a differencing methodology using the Error Supplier Unit mechanism would overcome this shortcoming by aligning NI demand with the TLAF-adjusted output of NI generators. The respondent noted that the recent decision paper on TUoS charging<sup>6</sup> referred to a change in the Error Supplier Unit algebra, such that the jurisdictional imbalances would not be redistributed to the local PES but noted that, as yet, no change has been put forward. The respondent went on to say that it considered, and had previously argued, that this is analogous to the Generator TUoS redistribution issue, and that the RAs had not disputed this.

<sup>&</sup>lt;sup>5</sup> "Treatment of Transmission Losses. A Consultation Paper", AIP-SEM-58-06, 24 May 2006.

<sup>&</sup>lt;sup>6</sup> "Transmission Use of System Charging. Decision Paper", AIP-SEM-07-50, 15 March 2007.

### II.2 Position of the Regulatory Authorities

On the matter of TLAF values, the May 2006 consultation paper had been explicit in describing the TLAF values published in it as being, not "indicative", but "illustrative". It had been clearly explained that the actual TLAFs would be subject to change, and that, "the assumptions and base data used in the Plexos model will be subject to refinement as a result of further work on the All Island Modelling Project". It is understood that, consistent with this, refinements have been made in the Plexos modelling since the analysis for the May 2006 consultation paper was undertaken. Most relevant to the lower TLAFs for Coolkeeragh is that the interconnector flows from Scotland are higher in more recent modelling as compared to earlier analysis.

The RAs recognise that a number of small distribution-connected generators presently have TLAFs fixed at unity. This results from a decision of the CER, taken at the time of market opening in ROI, concerning parties that had recently entered into power purchase agreements with ESB, and who, in so doing, were understood not to have been aware that their output would potentially be subject to loss factor adjustment. The August 2006 decision paper<sup>7</sup> on the treatment of transmission losses under the SEM stated that the methodology for the calculation of TLAFs currently used in ROI should be applied on an all-island basis for the SEM. The RAs consider that, at least for the three TLAFs published here, this should include retaining unity TLAFs for these generators, should they choose to register under the Trading & Settlement Code (TSC). Whether this arrangement should, in future, be continued or terminated can be considered as part of the calculation of subsequent TLAFs.

On the more general points, the RAs note the continued support for the decision to employ the ROI methodology. As for transparency, the March 2007 consultation stated that options for greater transparency would be pursued for the calculation of subsequent TLAFs. Furthermore it is anticipated that TLAFs for 2008 will be published in Autumn 2007, three months before the period to which the TLAFs will apply, consistent with the timescale that is envisaged on an enduring basis.

The RAs do not agree with the comment regarding inter-jurisdictional distortion. The treatment of demand under the SEM will remain uniform as is the case now. Losses allocated to demand in NI will be reduced under SEM to reflect distribution losses only, rather than distribution and transmission

-

<sup>&</sup>lt;sup>7</sup> "Treatment of Transmission Losses. Decision Paper", AIP-SEM-112-06, 31 August 2006.

losses as at present, although the respective treatments should be expected to be reflected in the corresponding wholesale prices. Accordingly, the arrangements under the SEM cannot be said to be creating a distortion.

Nor do the RAs agree with the comment regarding the allocation of losses to Error Supplier Units. It is incorrect to say that the issue is analogous to the generator TUoS redistribution issue and that the RAs have not disputed this. The TUoS charging decision paper, referred to by the respondent, stated that the RAs regarded the respondent's analysis of the locational loss factor proposals as being incorrect. They explained that the existing algebra in the TSC allocates any losses recovered from NI generators over and above actual losses on the transmission system in NI to the Error Supplier Unit in NI. However, as explained, this is not the same as those losses being "retained in Northern Ireland" and to argue as such is to make the erroneous assumption that supply in Northern Ireland is the same as supply by NIE Energy. The RAs remain of the view that the existing algebra would result in a subsidy to NIE Energy relative to other suppliers in NI, and thus the RAs intend to change the allocation of losses to the Error Supplier Units either as a workaround for Go-Live or as a "Day Two" change.

## III DECISION

Attached in the appendices are the submissions from EirGrid and SONI detailing the TLAFs they have proposed to apply to generators directly connected to the transmission systems that they operate, and to generators directly connected to the associated distribution systems. These are the same submissions that were appended to the March 2007 consultation, and it is the decision of the Regulatory Authorities that these values should apply to the SEM for November and December 2007.