



## **Single Electricity Market**

# All-Island Generator Transmission Use of System (TUOS) charging

**Draft Decision** 

7 June 2012

SEM-12-039





### **Cover Note and Background**

Development of harmonised arrangements for transmission use of system charging was an objective of the Regulatory Authorities since the outset of the SEM. This was originally outlined in the SEM High Level Design (AIP-SEM-42-05);

"generators should pay a locational charge as part of their TUoS – i.e. they should pay more to contribute to the cost of the deep reinforcement which their shallow connection has caused"

Following a review of locational signals in the SEM, a project was initiated in January 2009 (SEM-09-001) by the TSOs to address concerns raised by participants. This project was subsequently split into 2, all-island generator Transmission Use of System (TUoS) (SEM-10-081) and all-island Transmission Loss Adjustment Factors (TLAFs) (SEM-10-066).

The GTUoS decision paper, published in December 2010, outlined a "dynamic" forward looking locational signal model of tariffing. It was proposed that charges would be broken into a locational element and a postalised element.

Following SEM-10-081 the TSOs were instructed to consult and develop the methodology, before submitting a set of tariffs for approval. A series of papers were released for consultation (SEM-11-036, SEM-11-037, SEM-11-018) before a tariff set was submitted to the SEM Committee.

Following a special SEM Committee the first set of all-island tariffs were approved on the 12<sup>th</sup> September 2011. In its decision it was proposed that there would be further tweaks to the methodology for the next tariff year and that this work would be carried out by the TSOs on instruction from the Regulatory Authorities.

In the GTUoS decision paper the SEMC decided that further work on examining possible refinements/ improvements to the G-TUoS tariff methodology should be carried out. This included an examination of the following elements;

- Different use of distributed slack bus for 1MW function.
- An alternative approach for plants that do not appear in any of the four scenarios (i.e an addition or refinement of the scenarios used)
- As opposed to only using the year Y+5, the methodology should be adapted to produce tariffs for intermediate years between Y and Y+5.
- Consideration of adapting the methodology to include lines built before year Y in cost recovery (i.e assets built up to 7 years before year Y). By including historic assets the potential of a free rider situation is avoided.





### **GTUoS Document Submission**

As requested by the RAs tariffs based on two methodologies were developed and submitted by the TSOs in May 2012. An accompanying paper detailing modifications to the 2011/12 methodology was also submitted along with three sets of tariffs. An outline of the tariffs is shown below.

- 1. Set one is based on the current methodology that was used in the 2011/12 tariff year.
- 2a. Set 2a is based on the new methodology tariff including new rule set following a review of SEMC requested items.
- 2b. Set 2b is based on the new methodology tariff including old rule set following a review of SEMC requested items.

Set 2a and 2b each contained a change in the amended methodology. The modified rule set used in 2a was adjusted for generators that were out of merit in two of the scenarios. In the summer Minimum demand scenario with 80% wind and Summer Peak with 80% Wind a generator not dispatched did not receive a tariff as the likely-hood that it would be dispatched on is very low. Therefore these generators would receive the average of their maximum tariff in each of the Winter Peak 0% wind and Summer Peak 0% wind scenarios as their tariff. In Set 2b all 4 scenarios are used (with the 1 MW dispatch function used for generators not dispatched in all scenarios) and the Maximum tariff across the 4 scenarios averaged out to calculate each generator tariff.

A more detailed description of the tariff rule sets (1, 2a and 2b) are outlined in the accompanying TSO document.

#### Next Steps and RA's Proposed Decision

Following a presentation of the tariffs by the TSOs and subsequent discussion, the SEM Committee (SEMC) has made a minded to decision to accept tariff set 2b, the new methodology tariff including old rule set. The new methodology was favoured as the incorporation of intermediate years and wider cost base for historical assets is expected to provide a more stable methodology that gives fairer allocation of costs. As tariff set 2b averages across 4 scenarios rather than only 2 scenarios (as per set 2a) it was felt that it was more likely to give a more accurate tariff reading. Set 2b also didn't contain the same level of extreme ranges in its tariff results that were found in set 2a.

The RAs invite responses on the above tariffs and the methodology used in determining each tariff set. Responses will be reviewed and considered by the RAs, before a final recommendation is put to the SEMC on all-island Generator TUoS.





Responses to the accompanying paper should be submitted to Brian Mulhern (<u>Brian.Mulhern@uregni.gov.uk</u>) in the Utility Regulator and Jamie Burke (<u>iburke@cer.ie</u>) in CER by 5pm Thursday 12th July 2012.

Unless marked confidential, all responses will be published by placing them on the AIP website at the following address <u>http://www.allislandproject.org/</u>.

Respondents may request that their response is kept confidential. The RAs shall respect this request, subject to any obligations to disclose information. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality.

It is anticipated that a final decision on the matters outlined above will be published after the July SEMC.