Single Electricity Market Committee

All-island Transmission Use of System Charging & Loss Factors

Response Paper

SEM-09-001
16th January 2009

Contents

1 Introduction

1.1 Background

Following the consultation, 'Transmission Use of System Charging: Methodology for All-Island Generation Tariffs, June 2008', the Regulatory Authorities (RAs) decided not to proceed with the all-island harmonisation of generator Transmission Use of System (TUoS) charges for the tariff year 1st October 2008 to 30th September 2009. This was as a result of the volume and nature of the concerns raised by market participants in response to this June consultation and of residual uncertainties over the impact, year-on-year tariff volatility and robustness of certain aspects of the proposed methodology.

The purpose of this document is to summarise the responses to the consultation paper. In addition it outlines the proposed way forward to develop and implement harmonised generator TUoS charging for subsequent tariff years. This will also involve a review of the other main locational transmission charging regime for generators, Transmission Loss Adjustment Factors (TLAFs).

1.2 Previous Documents

The desire for harmonised, all-island, locational generator TUoS charging was stated in the high level design of the Single Electricity Market (SEM), which went live on 1st November 2007. This has been refined through a series of consultation and decision papers.

- AIP-SEM-42-05: June 2005, High Level Design - Stated that generators will pay locational TUoS charges in the SEM;
- AIP-SEM-72-06: July 2006 – Consultation stated that the methodology used by EirGrid broadly fulfilled the requirements of the high level design, but proposed further work;
- AIP-SEM-07-50: March 2007 – Decision paper confirmed the proposals in the July 2006 paper;
- AIP-SEM-07-262: June 2007 – Consultation on more detailed aspects of the methodology;
- AIP-SEM-07-433: July 2007 – Decision paper, while making a number of detailed decisions, the paper acknowledged that the suggested approach remains a work-in-progress;
- SEM-07-16: December 2007 – Update to Industry showed that the tariffs are significantly influenced by the network costings and the choice of scenarios. Accordingly the SEM Committee[1] considered it was appropriate to undertake further investigation and defer the harmonisation of generator TUoS;

[1] The SEM Committee is established in Ireland and Northern Ireland by virtue of section 8A of the Electricity Regulation Act 1999 and Article 6 (1) of the Electricity (Single Wholesale Market) (Northern Ireland) Order 2007 respectively. The SEM

- SEM-08-067: June 2008 – Consultation paper on the inputs (network costs, scenarios and volatility mitigation measures) to the proposed methodology; and,
- SEM-08-087: August 2008 – Information note was published stating that due to the number and nature of the responses to the June 2008 consultation, the RAs decided not to proceed with the harmonisation of generator TUoS charges for the year 2008/09 and that options for subsequent tariff years would be examined.

1.3 Responses to June 2008 Consultation

Responses were received from 18 parties to the June 2008 consultation paper: "Transmission Use of System Charging: Methodology for All-Island Generation Tariffs". These were:

- AES
- Airtricity
- Beam Wind
- BGE
- EirGrid
- ESBI
- IWEA
- MNG
- NIE
- NIEE Supply
- NIEE PPB
- RES
- SWS
- Tynagh
- Viridian P&E
- Premier Power Limited
- NOW Ireland
- Synergen

All full responses, which were not indicated as confidential, are published with this document. The following is a summary of the key points raised in the responses:

- An independent check on network costs is required;
- All-island locational tariffs have the potential to support efficient development of the co-ordinated electricity system on the island of Ireland;
- It is not possible to respond to long term signals that are very volatile. Year-on-year tariff volatility was an issue of key concern among respondents;

Committee is a Committee of both CER and NIAUR (together the Regulatory Authorities) that, on behalf of the Regulatory Authorities, takes any decision as to the exercise of a relevant function of CER or NIAUR in relation to an SEM matter.

- At a time of extraordinary economic, environmental and energy security challenges, it is incumbent on RAs to adopt policies that are in long-term public good and create greater market certainty;
- The SEM Committee should initiate a detailed strategic review of locational investment signals and no changes should be made until a consistent framework is developed;
- Locational tariffs may have relevance if network development is driven only by connection applications. With EirGrid's new network development strategy the use of localised TUoS charging is negated;
- The strongest locational signals are planning permission, gate connection process and source of fuel (gas pipelines and wind) therefore generator TUoS will not provide the desired entry signals;
- The methodology does not incentivise connection in places where no reinforcement is required;
- The methodology is not transparent or replicable;
- The methodology is skewed by legacy transmission assets and thus could reinforce position of incumbent generators;
- The choice of scenarios was not justified or credible;
- The power flows in each scenario are not visible so generators could not comment on the dispatch assumptions made by the system operators or identify the cause of their high tariffs;
- Moyle Interconnector Users are not paying for network use, while causing investment;
- The concept of "satisfactory tariffs" undermined the methodology, as the criteria used to apply subjective adjustments and to determine "satisfactory tariffs" were unclear;
- The need for capping shows that methodology is unworkable;
- The cross border transfer mechanism is not transparent; and,
- The interaction with other charging systems - TLAFs and connection charging - is unclear.

1.4 Regulatory Authorities Position

The RAs are committed to the all-island harmonisation of generator TUoS and have decided on a high level review of the appropriateness of using generator TUoS as a locational signal within the SEM. This workstream, as outlined below, will take on board the above concerns raised in response to the June 2008 consultation as well as the objectives and issues set out in the next section. It will also involve a review of TUoS for demand customers (which are currently determined separately in each jurisdictional) and the other main locational transmission charging system for generators - TLAFs.

2 Proposed Workstream

2.1 Objectives of the Harmonised Generator TUoS Tariffs

Based on a review of best practice in use of system charging, the harmonised generator TUoS tariffs and TLAFs need to take into account seven principles. These are that the proposed methodology should be:

1. Non-discriminatory;
    - being an infrastructure too costly to duplicate, competitors must have the right to access it on a non-discriminatory basis
    - under similar circumstances individuals must be treated identically and under different circumstances individuals may be treated differently
    - non-discrimination allows the SO to set different prices according to the costs users impose
2. Transparent;
    - As required by EU law.
    - The RA's have a duty to promote competition in generation.
3. Cover the cost of providing the service;
    - Achieved in SEM by the RAs setting the total revenue to be recovered via the tariffs
4. Cost reflective;
    - The user must pay for the cost the network incurs by serving it. (Note: this is difficult to apply in power networks due to basic power flow laws, as electricity flows are relative to the resistances between lines and can result in loop-flows)
5. Consistent with the shallow connection policy;
    - If transmission costs are underestimated, it will result in facilitating the entry of inefficient producers
6. Encourages efficient use of the network and efficient investments in infrastructure;
    - If price differentials for transmission are too low, generation will connect too far from demand centres
    - Need to avoid congestion
7. The charges should be predictable to allow generators to select the most appropriate locations for investment over the lifetime of the project.

2.2 Issues to be resolved as part of the workstream

Among the issues to be resolved are:

- The methodology needs to allow for greater medium to long term predictability of generator charges and to limit year-on-year tariff volatility;
- Revenues, including infra-marginal rent, are obtained by generators from the unconstrained schedule. However, the transmission network on the island (funded in part via Generator TUoS charges) does not have the optimum level of capacity and constrains the actual use that generators make of it. This results in a contradiction

between the actual use of the network and the source of the revenue used by generators to pay for it. The workstream will clarify which of these is most appropriate to be used to determine any dispatch scenarios which may used to calculate the network charging for generators;

- It is a requirement of the SEM for all generators >10 MW to make their power available to customers anywhere on the island. Therefore payment of generator TUoS charges for the full output of a station is compulsory and the only way to avoid it is to stop generating. Is there a way that generators can adapt themselves to react to this exit signal without withdrawing the entire unit?
- The current network topology has a number of constraints within it that have resulted in the System Operators establishing Transmission Constraint Groups. In addition, it is important to maintain the security of the system in all areas of the island. It is essential that the locational signal does not compromise the security of supply in each of these constrained regions, while they remain constrained. The RAs will review the proposed tariffs in the context of the 7 year generation adequacy statements to ensure that the signal does not disincentivise generation being built in and/or remaining in service in all of the necessary locations.

2.3 Interaction with ETSO Inter-TSO Compensation Scheme

European Regulation 1228/2003, which took effect from 1st July 2004, requires that Transmission System Operators (TSOs) are compensated for hosting cross-border flows of electricity by those TSOs in the regions where the flows originate and where they terminate. EirGrid and SONI joined the voluntary ETSO European Inter-TSO Compensation scheme on 1st January 2008.

There is a small overlap between the network fees claimed via the ETSO Inter-TSO compensation scheme and the network charged for in TUoS. The interaction between the two charging systems will be examined as part of the workstream and a recommendation regarding the recovery of the costs associated with ETSO will be made.

2.4 Next Steps

The System Operators will now commence a joint review of the options and methodologies for deriving harmonised all-island generator charges - TUoS and TLAFs - in order to put in place an enduring framework appropriate to the all island transmission networks. This review will also include a consideration of demand TUoS charges. It will take into account the objectives and issues discussed above including, amongst other things, the issues of appropriate costing of the networks and the mitigation of year-on-year tariff volatility and/or unpredictability. The System Operators will engage early with industry as part of this review, and will develop a paper for the RAs covering the proposed pros and cons of each overall option for TUoS/TLAFs, an indication of the impact on generator tariff levels, and a preferred

approach with the possible associated go-live date. This will then be publically consulted on, with a policy decision by the RAs issued thereafter. The detailed charges themselves would also be consulted and decided on by the RAs following the policy decision.

With a view to developing the precise scope and timeline for this review process, the System Operators, in conjunction with the RAs, will arrange a public workshop to be held with interested parties from industry. This public workshop will be held over the next month. Details of this workshop will be released by the System Operators shortly and interested parties are encouraged to attend.