



## GUIDELINES ON TRANSMISSION TARIFICATION

### EREG Proposal

2 May 2005

### EXPLANATORY NOTE

#### Background

Article 8(3) of the Regulation on Cross Border Electricity exchanges<sup>1</sup> provides for guidelines to be adopted to “determine appropriate rules leading to a progressive harmonisation of the underlying principles for the setting of charges applied to producers and consumers (load) under national tariff systems, including the reflection of the inter-TSO compensation mechanism in national network charges and the provision of appropriate and efficient locational signals, in accordance with the principles set out in Article 4.”

Article 4 itself discusses the requirements relating to transmission tariffs. In particular, Article 4(2) states that;

Where appropriate, the level of the tariffs applied to producers and/or consumers shall provide locational signals at European level, and take into account the amount of network losses and congestion caused, and investment costs for infrastructure.

Meanwhile Article 4(4) requires that

Providing that appropriate and efficient locational signals are in place, in accordance with paragraph 2, charges for access to networks applied to producers and consumers shall be applied regardless of the countries of destination and, origin, respectively, of the electricity, as specified in the underlying commercial arrangement.

The attached guidelines therefore fulfil these requirements of the Regulation.

#### 1. CURRENT SITUATION POSITION

Transmission tariffs in Member States already reflect most of the requirements of the Regulation in that they are, by and large “entry-exit” tariff systems rather than being distance based. The main component of tariffs is ~~those~~ related to the ~~fixed costs of that~~ are considered fixed in the network short run. These charges for access to network. ~~These~~ may be imposed on generators, called the ‘G’ charge, and those for the load, called the ‘L’ charge. The allocation of these charges in all Member States ~~eases~~ fulfils the

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<sup>1</sup> Regulation 1228/03/EC

criteria that the majority of the charges fall on load rather than generation and in some Member States the 'G' charge is zero.

As well as the fixed costs of the transmission network in the short run, ie capital and operation costs, transmission tariffs ~~also usually often~~ include specific loss charges for losses, congestion and other ancillary services.

Generators and ~~consumer customers~~ may also be required to pay a one-off charge for their initial connection to the grid ~~usually called "connection charge".~~ Charges related to congestion losses, congestion and other ancillary services are also an important feature. These charges are not, however, considered to be part of the G charge for the purpose of these Guidelines of tariffication.

There remain ~~significant~~ differences in the level of transmission charges, and the split between G and L charges between ~~one Member State and another.~~ States. The structures of the tariffs are also different. In case of several transmission grids within one Member State, transmission tariffs could be different within the different transmission system operators.

Finally, charges for traders<sup>2</sup> relating to underlying commercial arrangements have been removed from January 2004 for cross border trading between<sup>3</sup> Member States participating in the ~~revised~~ inter-TSO compensation mechanism. ~~However some border charges remain for those Member States which do not yet participate in this mechanism.~~

## **2. PROPOSALS IN GUIDELINES**

### **i Harmonisation of use of system charges for generators**

To avoid distortions of competition, some harmonisation of the charges for access to networks of the generators ~~connected to the transmission grid, ie, i.e.~~ the 'G' charge is desirable. Harmonisation of G charges, rather than L charges, is considered to be ~~the most more~~ important since the location of output from production facilities and the output from location of them is thought to be more responsive to price signals. This However it should be emphasized that the 'G' charge is not the only charge a generator pays; say connection charges have to be taken into account when making the investment decisions. The Member States<sup>4</sup> have also different practices according to whether a generator is responsible for paying the costs connected to production related network components. It should also be emphasized that the level of network charges is not the only determinant of the decisions to locate plant-s. Other non-network related cost

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<sup>2</sup> *It is necessary to clarify that although the charges applied to traders have been removed there is still the transfer mechanism between the TSOs.*

<sup>3</sup> *It is necessary to specify that the charges have been removed for cross border trading between Member States participating in the mechanism, since for energy coming outside the mechanism the entrance fee is still valid.*

<sup>4</sup> *Both the terms "European State" and "Member States" should be carefully used in the Guidelines, since there are some countries participating in the inter-TSO compensation mechanism to which the Guidelines do not apply. Besides the term "Country" misleads and it should be removed from the text.*

factors, such as fuel transportation costs or availability of cooling water, might be more important.

Tariff structures and charging principles may vary widely from country to country but also within a country depending on voltage level and region. It is therefore proposed that G charges will be harmonised at transmission level and on the basis of the national average level of the G-charges for access to network to generators: “national average G”. Member states will accordingly be able to have variations in charges for their internal regions (“national locational signals”). For each Member State, the average G charge will have to remain within the specified range, which should be transparently and non-discriminatory calculated for each country. Member States will accordingly be able to have variations in charges for their internal regions (“national locational signals”).<sup>4</sup> The possibility of a positive G charge can be important for example e.g. for the financing of the TSO contribution to the inter-TSO compensation fund by the generators, which might be particularly appropriate compensations especially in heavily exporting countries.

Within the Nordel, UK and Irish systems, interconnected by DC submarine cables to UCTE, the main continental system, different ranges for the ‘national average G’ may be applied. ~~It and the ranges will be re-examined in the later and in any case before end 2006 stage.~~

The need for harmonisation of G-charges on other voltage levels and harmonisation of tariff structures should be investigated also in the later stage.

## **ii European locational signals**

Under the Regulation, all Member States will be required to participate in the inter-TSO compensation mechanism and to implement market based congestion management methods for interconnection capacities<sup>5</sup>. This will lead to a large increase in the impact of locational signals, especially short-term locational signals, at European level relating to the siting of generation and consumption.

Given the limited capacity of interconnection between different Member States, ~~those the~~ countries with a general surplus of capacity over load will generally be low price areas due to e.g. lower production costs or insufficient interconnection capacities. Those with a deficit will be higher priced regions. With market based allocation of interconnection capacities, this price difference will be made explicit. Any new generation in surplus regions will therefore face either a low price for energy in their ~~home~~ domestic market or a high allocation charge for interconnection capacity to sell in higher prices countries. This will provide a clear locational signal. Similarly, compulsory participation in the

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<sup>5</sup> *We would appreciate as TSOs that the flexibility left to each Member State to decide on the introduction of regional or “national locational signals” leading to internal variations not limited by the specified range of the ‘average G’ was kept explicitly in the draft guidelines as it was the case in the 2004 project.*

<sup>6</sup> *The use of the term interconnector may give grounds to think that congestion management methods could be applied to single lines and then discussions may arise since the fact is that congestion management methods can only be applied to the overall interconnection capacity resulting from all lines linking two countries.*

inter TSO compensation mechanism will ensure that Member States which host cross border flows are suitably compensated for providing this service.

~~Consequently, at~~Charges applied to generators<sup>6</sup>covering costs of losses and other ancillary services can give short-term locational signals and application of these charges is important for achieving an efficient operation of the network. The need for eventual harmonisation in connection to these charges should be investigated in detail in the future.

At this stage it is not considered appropriate, in the sense of Article 4(2), to introduce through the harmonisation of G and L charges, locational signals at the European level. The main reason for this is the uncertainty how efficient and accurate these signals can be since there are so many other costs to consider when making an investment decisions, and to what extent giving such signals through the G/L-charge can distort short term signals. However, the situation needs to be closely monitored and the details for harmonised long term locational signals will be considered in the later stage.

~~Given the existence of sufficient locational signals, all other charges related to cross border exchanges must be removed, in accordance with Article 4(4).~~

## ANNEX: DRAFT GUIDELINES

### 1 Harmonisation

- 1.1. ~~The values of the ‘annual national average G’ is an arithmetic average of all the hourly tariffs of the year, including off peak and peak tariffs, and the different seasonal variation. When the tariff includes a ‘capacity’ fee, the ‘annual national average G’ has to be calculated for a generator assuming that it is injecting electricity during 5000 hours per year at its declared power capacity. A weighted average, based on generation, will be included in the ‘annual national average G’ in case of variations in charges within the internal regions (“national locational signals”). The value of the ‘annual national average G’ is annual total transmission tariff charges<sup>7</sup> paid by all generators divided by the total measured energy injected annually by them<sup>8</sup> to the network. Annual average G shall~~

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<sup>7</sup> The proposed sentence is more precise and allows a better understanding of the text.

<sup>8</sup> The term “charge” is more appropriate than “fee”.

<sup>9</sup> ETSO considers that all generators, not only those connected to the transmission network, should be affected by the Guidelines - we propose that charges paid by all generators as well as amount of energy produced by them should be taken into account when calculating average national G. This would lead to creating a “level playing field” for all generators and avoiding discrimination among generators connected to different voltage levels.

exclude any charges paid by generators for physical assets required for the generators connection to the system (or the upgrade of the connection) as well as any charges paid by the generators relating related to ancillary services to the TSOs role in balancing the transmission system or any specific network loss charges paid by generators

- 1.2. The value of the ‘annual national average G’ ~~relating to capital and operation costs~~ must be within a range of 0 to 0.5 €/MWh, with the exception of the cases in 1.3 to 1.5 below.
- 1.3. The value of the ‘annual national average G’ within the Nordel system ~~(Finland, Norway, Sweden and Denmark)~~ will be at maximum 0.85 €/MWh. shall be within the range of 0.25 to 0.7 €/MWh.
- 1.4. The value of the ‘annual national average G’ within the GB system will be at maximum ~~[actual average G in GB]~~ 2.5 €/MWh
- 1.5. The value of the ‘annual national average G’ within the Republic of Ireland and within Northern Ireland will be at maximum ~~[actual average G in Ir]~~ 2.5 €/MWh ~~other charges relating, for example, to initial connection to the network, losses, and other ancillary services need not be harmonized~~

## **2 Removal of international supply ~~contract~~ transaction based charges**

With the exception of charges resulting from market based congestion management methods, charges for access to networks applied to producers and consumers shall be applied regardless of the countries of destination and, origin, respectively, of the electricity, as specified in the underlying supply arrangement. This includes all import, export and transit fees.

## **3 Reporting**

National regulators will ~~submit report to the Commission the details of how the TSOs the charging structures will comply with the Guidelines of their TSOs to the Commission by on 3028 November February 2006 and on the occasion of any amendments to the tariff structure relevant to these guidelines.~~ National Regulators shall provide the value of the annual national average G to the Commission by the end of July 2007. Afterwards only amendments to the charging structures and G-values shall be submitted to the Commission yearly by the end of July.

## **4 Communication**

Each year, before the end of October, the European Commission will prepare a public report on G values in Members States that shall contain the information supplied yearly by regulators. A first report will be published by 28 May 2006 detailing the charging structures reported by regulators before 28 February 2006”