

**2<sup>nd</sup> FORUM OF EUROPEAN ELECTRICITY REGULATION**  
**FLORENCE**  
**OCTOBER 8<sup>th</sup> AND 9<sup>th</sup>, 1998**

**Introduction and Background**

The 2<sup>nd</sup> Forum of European Electricity Regulation was set up and organised jointly by DG XVII of the European Commission and the Austrian Presidency, in co-operation with the European University Institute.

The objective of the Forum is to provide an informal EU level framework for discussion of issues and exchange of experiences concerning the establishment of a competitive internal market for electricity within the framework of the EU Electricity Directive (96/92/EC).

The directive sets out the general framework and principles for the introduction of competition in the industry, but, in line with the principle of subsidiarity, leaves national authorities free to define much of the technical and practical details of implementation. However, DG XVII emphasised the importance of providing a framework for managing co-operation and co-ordination between the authorities of Member States in this relatively uncharted area, and that this is a key priority. While a formal structure for official meetings between national authorities is already established in Brussels, this Forum in Florence provides an essential complement by establishing a platform for more informal discussion and the open exchange of experience. It also allows for broader participation, first of all the Regulators, then the Transmission System Operators (TSO), representatives from international organisations, industry and consumers.

The Forum was chaired by Professor Ehlermann and it took place at the European University Institute in Florence. Participants included chairmen and senior representatives of national regulators and/or ministries responsible for electricity regulation, the Head of Cabinet of Commissioner Papoutsis, Mr. Antonakopoulos, a Member of the European Parliament, Mr. Van Velzen, the Director for Energy Policy at DG XVII of the European Commission, Mr. Ristori, European Commission officials from DG XVII, chairpersons and/or senior representatives of the entities carrying out the activities of Transmission System Operators (TSO), a representative of the International Energy Agency, Energ-8 and the Chairpersons of the Energy Consultative Committee, Eurelectric, IFIEC and UCPT. EU Member States were represented as well as Norway. The main areas addressed by the forum covered transmission pricing, unbundling and non-discrimination, regulation of the Transmission System Operators, treatment of ancillary services and stranded costs.

## **Session I: Transmission Pricing**

The objective of this session was twofold. Firstly to identify the different types of transmission pricing systems which are developing in the Member States, in order to evaluate their relative advantages or disadvantages, the objectives that can be pursued and possible corrections to introduce. Secondly to monitor the conditions under which cross-border electricity trade between Member States can take place.

Two speakers, Mr. Shuttleworth from the Consultant firm NERA (National Energy Research Associates), and Mr. Vasconcelos, the President of the Portuguese Regulation Authority (ERSE), outlined the main issues and problems arising when dealing with electricity transmission pricing and cross-border trade. A large discussion followed.

### National transmission pricing

As regard transmission pricing it appears clear that a number of pre-conditions exist which need to be examined by Member States in deciding how to progress in this way.

In particular; a line should be clearly drawn to define the limits between the two main activities of the network, transmission and distribution, for the application of a tariff for each activity. This process, however, is not neutral, and Mr. Ranci (Italian Regulator) pointed out that in the consultation paper on unbundling he issued in April the transmission system has not only been limited to the very-high voltage network, but includes high-voltage, national dispatching and connected rights, thus enlarging the concept of transmission and giving more eligible clients access to the transmission system directly.

Another element which should be dealt with before moving to tariffs is the range of services which should be included in the transmission tariffs, in order to correctly allocate the respective costs. In fact, as Mr. Vasconcelos underlined, managing the transmission system implies carrying out a large number of functions, technical (managing flows, operating the network...) and commercial (settling transactions, managing imbalances...). It is important therefore to establish a clear distinction between these functions (and their associated costs): a) operation/maintenance and development of the network: b) technical co-ordination of the system: c) commercial co-ordination (if not separated from the TSO, like Spain).

On the pricing system, there was consensus between the participants that, whatever system is selected within the Member States, this should be cost-reflective. However, as Mr. Shuttleworth pointed out in his presentation, transmission tariffs cannot put aside the importance of taking into consideration the economic value of transmission, which strongly depends from the location of generating capacities compared to demand. Problems would arise in particular when the value of transmission cannot permit the transaction to take place profitably: this explains why transmission prices are sometimes uneconomic.

As regard tariffication methodology, a majority of Member States seem oriented towards postage-stamp systems, non distance-related. However, postage-stamp raises some problems, because it does not give any signal to the location of new generating capacities. For this reason some Member States have based themselves on a postage-stamp method associated to some location elements. Many participants have underlined another major problem with postage stamp methods: pancaking, which is the problem of cumulative tariffs when crossing

different transmission areas. This requires careful consideration, in particular in the framework of cross-border trade. However, while distance-related systems could be regarded favourably because of the strong location signal they give for investments in generation, they do not take into account the value of transmission and could at the end represent an obstacle to trade. Mr. Shuttleworth mentioned a third method applied also in some areas in UK which can represent sometimes a good compromise: between the other two: the so-called "entry-exit" system, where different tariffs apply in different areas of the network (postage-stamp + location elements).

In any case, a tariffs system should reach a balance between three objectives:

a) low prices; b) transparency (predictability for system users); c) policy objectives.

#### Cross-border transmission pricing

The main issue is the need for the rapid development of mechanisms and tariffication systems that will enable the single market to become a reality.

At present, such mechanisms and systems do not exist. As a matter of fact, up to now, cross - border transactions were limited to technical exchanges (stand-by and emergency exchanges over short distance) among the owners of the high-voltage grid (grouped in UCPTE and NORDEL). As recalled by Mr. Vasconcelos, the old rules established by UCPTE do not cover commercial electricity exchanges through liberalised markets.

It is not envisaged that such mechanisms and systems will be necessary to permit the long distance carriage of electricity to become the norm. This is unlikely, given the losses incurred when transporting electricity. Indeed; in many respects most of the single market objectives will be met through direct generation investment of EU firms in other Member States. Nonetheless, trade will and must play an important role in developing the internal market for electricity, particularly for eligible customers situated close to the border. The establishment of such tariffication systems and trade facilitating mechanisms must, therefore, represent a high and pressing priority for the Commission, the independent TSO's, and national regulators and ministries.

Thus, there was a clear recognition in the meeting that such tariffication systems and trade facilitating mechanisms must be set up, and rapidly so.

With respect to possible tariffication systems. a number of different approaches were discussed. In particular:

- Mr Tacoen, Chairperson of the Energy Consultative Committee, presented an approach where the total transmission fee for a transaction originating in area and terminating in another area could be determined by adding fractions of the postage stamps of the TSO areas through which transmission occurs. This would avoid "pancaking". The total transmission fee could then be capped by stipulating that the coefficients for each fractions may not result in a total postage stamp that is higher than the most expensive postage stamp passed through (The formula should be:  $T_{total} = a_1 T_1 + a_2 T_2 + \dots + a_n T_n$ )
- Mr Lederer of EdF presented a similar approach that went further insofar, as he proposed to develop the above mentioned coefficients ( $a_1$ ,  $a_2$ ,  $a_n$ ) to specific

coefficients for the TSO of origin, the TSO's of transit and the TSO of destination. This approach would take into account the different cost implications for origin, transit, and destination systems.

It was generally agreed that the ideal approach towards a cross-border tariffication system, one that is wholly cost reflective, is illusory insofar as perfection is sought.

In these circumstances, it appears that it might be appropriate to endeavour to commit to one system such as, or similar to, these presented above, implement it and make it applicable vis-à-vis eligible customers as of 19 February 1999, and then attempt to progressively improve it.

Subsequently, ex post clearing and settlement mechanisms will be necessary among TSOs, allowing TSOs to properly distribute the income from transmission tariffs according to more sophisticated and cost reflective calculation which can take into account real measured physical flows including loop flows.

The Commission underlined that in its view such an issue would preferably be dealt with, at least at an initial stage, by the newly developing TSO's under the control of Regulators. Whilst the Commission could bring forward proposals in this area, it is reticent to do so insofar as industry will resolve this issue in the near future.

At present; however, there appears to exist no body or association, of the newly emerging independent TSO's that meets the two main criteria (according to the Commission and several Regulators) necessary to permit it to fill its role:

- independence : The TSO body must be independent of the interests of other sections of industry which are essentially customers of the TSO. This does not, however, mean, that the body should not have mechanisms to ensure that it is fully able, in its decision-making, to take account of the interests and opinions of its customers.
- representative: The body must represent all EU TSO's, irrespective of the present situation regarding interconnection and trade; the single market will clearly lead to a continual evolution in this area, and all EU actors must be fully involved with decision-making in this area.

In order to address these issues, the Commission proposed a meeting of the TSO's in Brussels, in the near future and the presentation of proposals to the Regulators. This approach was viewed favourably by the meeting.

## **Session II: Unbundling**

The Directive requires management and accounting unbundling of the TSO. However, most Member States or companies have chosen to go further than this and to opt for full unbundling<sup>1</sup> or for legal unbundling<sup>2</sup>.

---

<sup>1</sup> Where the TSO is operated as a separate company, which is not controlled by a given company with major electricity generating assets.

<sup>2</sup> Where the TSO is operated as a separate company, but which is nonetheless controlled by a directly or indirectly, owning important generating assets.

Thus, only a few Member States have opted for management unbundling. The Commission explained its interpretation of the minimum requirements necessary for the obligations of management unbundling to be met:

- Those responsible for managing the TSO should not sit on the Board of Directors of the vertically integrated company. An alternative system to ensure corporate control and responsibility should be established, reflecting the "management independence" of the TSO.
- As mentioned above, the fundamental objective behind the requirement for management separation is the need to prevent discrimination by the TSO towards potential competitors of the vertically integrated company. Where the management of the TSO is closely linked to that of the parent, such discrimination will be difficult to avoid. This measure, therefore, forms the basis of the requirement of "management separation". The precise manner in which this is put into effect will differ according to the structure of the company in question and domestic company law, but it must be ensured that the structure chosen permits the senior management to take decisions independently of the commercial interests of the vertically integrated company.
- Measures should be taken to ensure that the personal interests of the management of the TSO are taken into account in a manner that ensures that they are capable of acting independently. Where the personal interests of the senior management of the TSO are intrinsically linked to those of the vertically integrated company, it is difficult to see how "management independence" can exist in practice. Thus, measures should be taken to ensure the "financial and career independence" of the management from the vertically integrated parent.
- The TSO must maintain control over all assets necessary to maintain and develop the network. Decisions on how to develop the network and how and when work should be carried out to eliminate capacity bottlenecks, must be solely in the hands of the TSO. The TSO should then be able to take and execute these decisions in the interests of all its customers, not favouring the interests of the vertically integrated company. Equally, it should not be dependent on the vertically integrated company for its ability to materially carry out its decisions.
- Clear "Chinese walls" must be put into place. Article 9 of the Directive requires that the *"transmission system operators must preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its business"*. This is of considerable importance: one concern of vertical integration is that the parent company might use the information regarding requests for TPA, available via its vertically integrated TSO, to propose counter-offers to the customer in question, thereby systematically deterring all new entry on "its" market. To prevent such abuse, Clear Chinese wall procedures and mechanisms must be established.

During the subsequent debate, many participants expressed the view that management unbundling will not be sufficient to ensure equal treatment of consumers. If we look at the present situation in Europe, only a few countries have decided to limit unbundling to

management. while a majority of countries have decided to impose the legal separation of TSO from the parent company, which means the creation of a totally new subsidiary. Mr. Ranci noted that legal separation, while making things clearer, does not prevent totally the parent company from influencing the conduct of TSO. He therefore was in favour of a full ownership unbundling (Finland. Spain and United Kingdom).

It was Clear from the discussion that concerns about the real independence of TSO's were shared by a very large majority of participants.

### **Session III: Regulating the TSO**

The need for TSO regulation comes from the monopoly position that it holds in the electricity market, which makes of TSO the perfect example of a monopoly service supplier. Mr. Ordonez underlined that in sectors characterised by a strong natural monopoly, liberalisation necessarily need to transit through a restructuring/regulation of the sector before submitting the market to the monitoring of competition law. This element was also underlined by Mr Van Velzen (Member of the European Parliament) who noted that when a monopoly becomes a business some pro-active mechanisms must be created otherwise there would be no real competition and no incentives for efficiency. Several participants underlined the important role to be played by Regulators (and regulation) during this phase.

To verify where regulation could intervene the discussion focused on some aspects of TSO's fundamental for carrying out their tasks efficiently:

1) Non-discrimination. Independence of TSO is a pre-condition to ensure that the TSO will not be influenced by other interests (mainly generation and supply) when carrying out its activity. The objective is to prevent any abuse from TSO in terms of discrimination between users.

It is clear that where TSO is fully unbundled from other activities (legal or ownership separation) no problems should occur and discrimination could well be treated only under competition rules. However, as several participants underlined, an absence of sufficient unbundling would leave the door open to discrimination, with an uncertainty as to the capacity of competition mechanisms to effectively verify this uncompetitive behaviour. It appears therefore essential. in this latter case, to adopt some active non-discrimination measures, like active regulatory audits carried out on a regular basis and not only on a complaint basis.

2) Price. One of the most important aspects reflecting the efficiency of TSO concerns prices applying to transmission. Participants focused here on the question of the choice between an ex-ante "regulatory approach" and an ex-post "competition policy approach" regarding the regulatory control of such prices. With regard to the first approach, Mr. Saunders (Offer) presented the British system which is based on a RPI-x% approach with a price limit set up by Offer and imposed on the TSO. As he underlined, this system creates a great impulse in terms of increased efficiency. Mr Cronenberg (Germany) supported the competition approach existing in Germany, where TSO's are free when establishing prices, but submitted to the monitoring of the competition authority which can sanction them for excessive pricing and abuse of dominant position.

The discussion showed that a majority of Member States were concerned whether it would be appropriate to rely on an approach purely competition-driven in this area. As Mr. Jones (European Commission. DG XVII) explained, proving excessive pricing under the competition rules can be extremely long and difficult (unless it is combined with effective price control), while time is important in negotiations for electricity supply.

3) Dialogue and co-ordination between TSO's. This aspect is fundamental for ensuring the interchanges of electricity between Member States. To this respect, all the participants underlined the necessity to ensure that an adequate technical and commercial approach is established to permit cross-border electricity trade (see discussion on cross-border pricing).

#### **Session IV: Ancillary services**

Ancillary services (or system services) are a pre-requisite of all the electricity systems. As required by the Directive, the TSO has the responsibility to ensure the availability of all these services. However, as Mr. Schwarz underlined, it appears logical and in line with the spirit of the Directive, and in particular with the articles 4-6 which liberalise new generating capacity, that ancillary services be in the future offered under competitive conditions.

It is therefore necessary to ensure a balancing between the creation of a market for ancillary services and the need to keep ancillary services within the system responsibility of TSO. Mr Schwarz noted that the provisions of German Grid Code permits to realise such a balance by identifying these services and adopting an approach case by case according to the characteristic of each service and the specific operators responsible to carry it out. However, interventions, in particular from TSO, showed that the opening of these services to competition would not be easy because of the complexity and integration of these services with the operation of the network and because of the relatively limited profitability of carrying out these services independently.

It is generally agreed that ancillary services should be given the possibility to be offered under competitive conditions on the market. However; because of some constraints like the integration with the system operation and the limited profitability of these services, it is not yet clear how and when this will be realised.

#### **Session V: Stranded Costs**

Mr Jones presented the present state of the procedure on the transitional regime which may be granted by the Commission on the basis of Article 24 of the Directive. He informed that a large majority of the notifications made by Member States concern stranded costs to be recovered through levy-based schemes. As the article 24 only concerns demands for transitional regime which request an explicit derogation from the requirements of the Directive, it appears that only a few notification really fall under the scope of Article 24. Nonetheless, Member States were invited to complete notifications to DG XVII of their stranded costs as it will be important to take a formal decision on the applicability of Article 24 for all schemes, in the light of the need for legal security. The notifications concerning levy-based schemes may fall under the State-aid rules and as such should be notified to the Commission, DG IV (Competition Directorate), where Mr. Colson is the Head of Unit charged of this dossier.

## **Conclusions**

The meeting concluded with unanimous agreement on the quality of the debate of these two days. The broader participation to the Forum in a view of the specific topics treated has proved extremely helpful for the richness of the discussions and for the identification of the main issues.

There is the clear wish and intention of the participants to pursue the positive experience of the Forum and to held the meetings at the European University Institute of Florence which provides an appropriate seat for this meeting. The date of the next Forum of the European Electricity Regulation will be fixed shortly.