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PRESS RELEASE

The single European electricity market: A long road to convergence

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The liberalisation of the electricity market in Europe forms part of a wider trend towards the deregulation of network industries around the world. Whereas empirical evidence generally suggests that deregulation has had a positive effect on efficiency and consumer choice, in telecommunications and air travel for example, the results forecast for the electricity sector are much less clear-cut. Given that only a few countries have completed their deregulation process, the available evidence is not yet comprehensive enough to arrive at a definitive conclusion. Moreover, it tends to be adversely affected by factors which are external to the deregulation process. For instance, rising oil, gas and coal prices as well as the implementation of the Kyoto Protocol are responsible for much of the increase in bulk electricity prices, but, as that impact cannot be quantified, it is impossible to know how prices would otherwise have moved, i.e. the real impact of deregulation. Nevertheless, as this paper has attempted to highlight, there are a number of issues arising from electricity deregulation, which might have a bearing on the final outcome.

The main problems are related to the unusual characteristics of "electricity" as a product, which make the industry very different from other network industries: electricity is not storable, demand and supply must be constantly balanced, and demand is both volatile and inelastic. As a consequence, the traditional market clearing mechanisms, such as delivery delay or substitution with other goods, are not available for electricity. This implies price volatility on power exchanges and makes the system more vulnerable to climatic conditions. It also creates the need for a heterogeneous production park with sufficient reserve generation capacity. This in turn might give rise to economies of scale in some subsegments and the existence of inframarginal rents, thereby creating entry barriers hindering competition.

Although there is an economic rationale for choosing heterogeneous generation technologies, today's heterogeneity in terms of the generation mix across European countries has been dictated by past country-specific choices based on a combination of economic, geographical, geopolitical and/or political considerations. Nevertheless this mix has important consequences in deregulated markets: generators based in countries where the least costly techniques (i.e. nuclear and hydro power) are available enjoy an *ex nihilo* competitive advantage. This advantage is further strengthened when greenhouse gas emissions are internalised.

In order to avoid a system breakdown, efficient coordination and exchange of information are required between the various segments of the sector, i.e. generation, transmission, distribution and supply. The unbundling of these segments, which is one of the key objectives of the deregulation process, has complicated the achievement of this crucial requirement and entails a new cost factor – transaction costs – that might reduce the potential gains arising from the introduction of competition in generation and supply.

Difficulties also arise with respect to the interconnection capacities between national markets which are widely considered to be inadequate. This is a major obstacle standing in the way of the creation of a single European market. Greater interconnection capacities would in many cases solve the problem of concentration on national markets. The European Commission has taken initiatives to remedy the situation, such as financial support for investments where critical bottlenecks exist. Since these investments will take a long time to bear fruit, the Commission has recently highlighted the benefits of developing regional markets as an interim stage on the road to a European market. In practice, with the exception of Nord Pool, national markets are still far from being integrated. Regional integration initiatives are, however, emerging, such as the recent decision to link up the Belgian, French and Dutch markets.

The electricity industry is also faced with two important conflicting issues, i.e. having to meet the requirements of the Kyoto Protocol whilst maintaining the security of energy supplies. Kyoto's unequal national reduction targets and the use of different technologies, combined with the existence of entry

barriers, might distort competition. As far as security of supply is concerned, there are a number of reasons why the market by itself might not be able to achieve a satisfactory level of reserve capacity as well as an appropriate diversity in the mix of fuels used by electricity-generating plants.

In order to minimise the impact of these difficulties in terms of the way the deregulation process is likely to develop, a consistent, stable and uniform regulatory framework must be put in place.