



European Regulation Forum  
on Electricity Reforms

## Stockholm SESSA Conference "Addressing Market Power and Industry Restructuring for Consumer Benefits" Press Release

**S**ESSA, a programme financed by the European Commission, is a European forum on electricity market reforms (<http://www.sessa.eu.com>). One of the aims of the programme is to evaluate electricity markets reforms in Europe and elsewhere, and to identify good examples of market design, market power mitigation, schemes for introduction of renewable energy and many other aspects of electricity market reform.

**E**lectricity market reform is motivated by the consumer benefits that increased competition and trade across national borders are expected to bring. These benefits include lower prices, resulting from increased efficiency in electricity generation and distribution, as well as from reduced margins between prices and the relevant marginal costs. But the lower prices should not come at the expense of security of supply, the environment and the long term sustainability of energy supply.

**T**he SESSA programme involves both researchers and stakeholders, and includes a series of conferences, each one focused on a particular set of issues. The second SESSA conference, *Addressing Market and Industry Restructuring for Consumer Benefits*, was held in Stockholm, Sweden, October 7-8, 2004. It was aimed at assessing market power and industry restructuring from the point of view of consumer benefits, particularly with respect to

prices, security of supply and introduction of renewable energy. In the following the main conclusions are summarised.

**M**arket power, i.e. the power of an individual generator or retailer to raise market prices by its own supply decisions, is a major potential threat to the consumer benefits of electricity market reform. Market power problems may arise for many reasons, but are in general less likely if the degree of concentration is low. Thus measures to reduce concentration, or to keep concentration at an acceptable level, are effective components in any market power mitigation strategy.

**O**ne way of reducing concentration is to integrate national electricity markets and thus extend the relevant market. From this point of view the Nordic wholesale electricity market is a good example of a well integrated market, and a case where geographical extension of the market has

effectively diluted market power in the generation segment.

**A**nother way of reducing market power problems in concentrated markets is to reduce the market power of the incumbent by encouraging divestiture, resisting mergers, and requiring VPPs as well as reducing barriers to entry in general. In the wholesale market this amounts to reducing entry barriers for new generators and/or opening up for import. From this point of view the England & Wales market, where significant entry of new generation capacity has taken place, is a good example.

**I**n retailing consumer stickiness plays an important part in restraining competition. Switching and information costs may significantly restrain consumer mobility and in effect deter entry and reduce competition. In addition low consumer mobility opens up for price discrimination of consumers who, by not responding to offers by competitors to the incumbent retailer, have revealed themselves to be less price-sensitive. Moreover, in retail markets, there is a quite large minimum economic scale for covering advertising and other costs. This works as an incentive for retailers to get bigger. However, the fundamental limit on competitive pressure comes from the consumer stickiness.

**F**rom a social efficiency point of view retail electricity prices should be equal to the relevant marginal costs of providing electricity and associated services to the final consumers. Among other things this means that both short run and long run variations in wholesale prices should, at least on the margin, be reflected in retail prices. If this is not the case both the short run incentives to adjust consumption to current scarcity/surplus conditions and the long run incentives to invest in new capacity will be distorted. As a result the cost of maintaining security of supply will be unnecessarily high.

**H**owever, the security of supply issue has both short run and long run aspects. In the short run security of supply is a matter of having sufficient available capacity on the supply side and flexibility on

the demand side. In the long run it is a matter of having a technology and fuel mix that can sustain fuel supply disruptions and unexpected technological failures. Thus the introduction of renewable electricity, i.e. wind power, power based on biomass fuels etc., has both an environmental and a long-run security of supply dimension.

**A**t current conventional fuel prices and environmental regulations and charges renewable electricity to a large extent is not competitive. Thus the introduction of renewable electricity depends on the value attached to their contribution to long run security of supply. But it also depends on the institutional arrangements for inducing generators to invest in renewable electricity. Direct subsidy has so far been the commonly used method to promote the introduction of renewable electricity.

**I**n recent years, however, another system, *tradable green certificates (TGC:s)*, has been introduced or considered in several European countries. The aim is to create a market where different types of renewable electricity can compete on equal terms, thus relieving governments and public agencies from effectively being involved in detailed investment decisions in the power industry. The basic design of TGC systems is that generators receive one TGC per unit of "green" electricity generated, while consumers are required to buy and hold a certain number of TGC:s per unit of electricity consumed. So far the practical experiences of TGC systems are limited, and before any definite conclusion about TGC systems can be drawn several issues about market design and the interaction between TGC and electricity markets have to be analysed. Remaining questions to be answered are for example: Is the TGC system really more efficient than a mere subsidy scheme while taking transactions costs into account? Is the TGC system really compatible with the European ETS- system? How well does the TGC system cope with volatility of wind power generation? How precise is the percentage certificate requirement as a policy instrument for generating renewable generation capacity?