

# HOW TO ENSURE COMPETITION IN ELECTRICITY MARKETS IN THE LONG RUN

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A major motivation for the promotion of the liberalisation of electricity markets is the assumption that it will lead straightforward to competition in electricity generation as well as electricity supply.

In this paper we argue that this is an illusion. If liberalisation, deregulation, and privatisation are the only elements of restructuring it will not lead to a competitive electricity market but rather to the opposite: an oligopoly or even a monopoly exerting heavily market power.

We pretend that the following conditions are unavoidable to bring about real competition:

- the existence of excess capacities;
- a large number of generators;
- a large number of suppliers;
- a rigorous separation of the grid from generation and supply;
- an equilibrium between short-term (e.g. balancing and spot markets) and long-term markets (e.g. bilateral contracts, forwards)

To verify this hypothesis in this paper the experiences of various liberalised markets are analysed. some major findings:

- In E&W the number of generators have been increased several times to avoid gaming. The pool in E&W has never worked satisfactory until it has been abolished in 2001. A major shortcoming of the English market was that no long-term contracts were allowed. Positive was that the regulator took care that sufficient capacities existed and exist.
- In Central Europe (mainly Germany and France) the major problems are: (i) a very small (and continuously decreasing) number of generators, and (ii) a lack of serious unbundling between generation and transmission; This leads to cross-subsidization

of generation by the network operation and to a heavy discrimination of other and new generators;

- The market in the Nordic countries (Norway, Sweden) has performed almost ideally until in 2000/2001 the first signs appeared that demand increases have finally compensated excess capacities. Since then the number of investigations on possible market abuse by the generators and gaming has increased.
- In California some of the major reasons for the disaster were: (i) lack of excess capacities; (ii) lack of a long term market;

The major conclusion of this analysis is: All five conditions described above must be fulfilled simultaneously to bring about a competitive electricity market! If only one of these conditions is missing, competition will remain an illusion and the result is a distorted market again. In the worst case even more distorted than before the start of restructuring. In this case the recommendation to a government is: Revise and improve your regulation system but hands off from liberalisation, privatisation and deregulation!