The European electricity market is undergoing fundamental upheaval. The regional and national supply monopolies that have existed until now are being broken up and are giving way to a market with direct contractual relations between producers and consumers. With the passing of the Electricity Market Law (Elektrizitätsmarktgesetz) by the Swiss Parliament, the basis of a progressive liberalization of the electricity market in Switzerland has been laid, four years after the coming into effect of the European Directive concerning common rules for the internal market in electricity. If a referendum is not called for by 7 April 2001, the Electricity Market Law will take effect as of 1 September 2001.

Economic Background
For Switzerland, the passing of the Electricity Market Law is significant in two respects: With exports of 50% relative to internal consumption, Switzerland is an important center of energy trade in central Europe. It is therefore imperative that the Swiss production installations are not cut off from the European market. Furthermore, larger consumers in Switzerland should be provided with the same conditions in their choice of electricity suppliers as are enjoyed by their competitors in the EU area, so that they too are able to avail themselves of lower electricity prices.

The Origin of the Electricity Market Law
The Swiss Electricity Market Law originated in a draft by the Department of the Environment, Traffic, Energy and Communication ("UVEK") that was published for comment in 1998. The bill focused mainly on the functional separation of generation, trade, transportation and distribution (Unbundling) and free network access (Third Party Access). This means that the consumers can purchase energy from any producer they wish instead of just from the network operator that had been the situation until now. The network operators, on the other hand, also have to transport energy for third parties. In contrast to the transportation and the distribution that continue to be subject to a monopoly, competition will thereby evolve in the area of generation.

The draft proved to be controversial and provided a large amount of material for discussion. The Council of States increased the market access quota for final distributors, simplified network access for decentralized producers and introduced instruments for the standardization of different network costs. An agreement was finally reached in December 2000: in the end, an increased market access for end distributors was maintained, the conditions for network access were more clearly defined, and limited assistance was scheduled for hydro-electric and small generating plants.

Regulated Network Access
The Electricity Market Law, like most of the laws of the European Union, provides for the introduction of “regulated access”. The network usage fees for this model, contrary to the “negotiated access”, are not negotiated, but fixed by the network companies in accordance with proscribed criteria. Thereby, Switzerland adopts the principle of cost orientation, i.e. the network operators are paid according to the costs they incur. In order to avoid abuse, all authorized users have to pay the same price for the use of the network. This is meant to ensure indiscriminate access to the network. The only exceptions to this rule are solar, wind and wood energy plants up to 1 MW output (water energy 0.5 MW): they can be exempted from the cost of use for a period of 10 years. The network operators must guarantee the faultless operation of the network as well as connection for all users. As long as the market is not yet fully liberalized, they are also obliged to supply all customers not yet present on the market. A newly created arbitration committee that will be administratively attached to the UVEK, will decide any disputes.
arising. The Committee will however not receive any instructions from or be answerable to the administrative authorities. Thus it is endowed with a status similar to the competition committee.

Creation of a Swiss Network Company
The transfer network at an all-Swiss level will be operated, after a transit period of three years, by a single national company under private law (Swiss network company). The Swiss Confederation and the Cantons will have seats on the administrative board of this company. This is to avoid the existing operators of the transfer networks that as a rule are also engaged in the areas of production or distribution of electricity, granting priority of use to their own customers. The establishment of a Swiss network company will furthermore reduce the administrative expense connected with the transfer and will create clear responsibilities in the area of transfer. Persons authorized to transfer will no longer be confronted with several operators of transfer networks, but will only have to negotiate with one party. With regard to the distribution networks, the requirements for the neutrality of its operators do not extend so far. In order to guard against discrimination in this area, they will be obliged to keep separate accounts for all ranges of enterprises (accounting separation).

Full Liberalization of the Market after Six Years
The energy market can basically be opened in several stages to a certain degree of market liberalization or to the full liberalization for consumers and producers. The European Union foresees a liberalization in three steps to a minimum degree of 33%. Switzerland has decided in favor of a full market liberalization after six years. The market is to be opened up in three steps. When the law is implemented, consumers with more than 20 million kWh of consumption per year will receive free access to the market and end distributors will be able to freely purchase 20% of their sales. After three years, the large consumers’ threshold will be lowered to 10 million kWh, and the volume of access for final distributors increased to 40%. Small producers with installations of up to 1 MW of output from renewable energy sources will be admitted to the market immediately.

Effects of the Market Liberalization on the Electricity Market
The law that was finally passed in Parliament represented a compromise of competing interests. It is still unclear whether and by whom a referendum may be called for. Should, however, the law come into effect as intended on 1 May of this year, the energy market is likely to experience a marked dynamism in the near future. The efficiency hoped for as a result of increased competition will affect the structure of the electricity industry as well as energy consumption. The pressure on costs and productivity is likely to result in savings and efficiency potentials being used for increased cooperation or mergers with other enterprises. In the area of production, we can expect an accelerated concentration of enterprises, by analogy with the experiences noted in England and the Netherlands. As a consequence of market liberalization, new players will appear as brokers and traders of electricity. The liberalization of the electricity market, however, does not only entail advantages. In particular, it cannot be ignored that the increased demand for electricity conditioned by price, may strongly counteract the long-term savings goals of the Swiss government that were set out in the framework of the Energy 2000 Program. It may, for example, exert a greater stress on the environment. In conclusion, it can be stated that the electricity market has doubtlessly come closer to the goal of providing our economy with a competitive supply of electric energy. It remains to be seen whether the supporting measures for the protection of the environment that are envisaged will be sufficient to keep to a minimum the negative effects of the liberalization.