PRESS RELEASE

Increased volatility of electricity prices for Belgian households

(Article published in the September 2010 Economic Review)

An analysis based on the specific nature of price-setting by Belgian electricity suppliers

Since the end of 2007, electricity prices in Belgium have not only been more volatile than before, but also more volatile than those charged in neighbouring countries. In previous analyses, the Bank has singled out methodological changes in the registering of time series. It has also shown that these changes in methodology cannot be the only explanation for this volatility and, consequently, that the price-setting mechanism in the liberalised Belgian energy market must be different from the method used in neighbouring countries. More particularly, there is a need to look further for factors that explain why fluctuations in energy raw material prices play such an important role.

This article examines in detail how electricity prices charged to households are established. Most private customers (more than 85 p.c.) have signed variable price contracts with their electricity supplier. The price in this type of contract is adjusted each month to reflect changes in indexing parameters. One of the parameters reflects changes in wages and material costs, while others follow changes in the costs of fuel needed to generate electricity. Similar parameters had already been used before the energy markets were opened up to competition. On the deregulated market, each supplier is free to choose these parameters and the fuel mix is in fact likely to vary from one supplier to the next.

There is evidence that the increase in volatility is directly related to the use of the fuel price indices, coupled with the rising volatility of natural gas and coal prices.

This article shows that these indices work on the assumption that the supplier has a fixed fuel mix. In reality, this fuel mix can vary: the supplier may decide to buy his electricity from other generators, the generation mix differs between producers, variations in relative prices of primary fuels (natural gas, coal, uranium) tend to change the fuel allocation in power plants, etc. Before liberalisation (more specifically, before 2004), the definition of the indexing parameter reflected fuel costs more precisely. However, this definition was based on companies' internal data and had to be adapted to the context of market liberalisation.

Moreover, the indices do not include several cost components, such as changes in costs related to cutting greenhouse gas emissions and costs stemming from public service obligations.

The law requires the indexing formulae to be mentioned in supply contracts. Yet the contracts do not mention any underlying cost components. Moreover, it is overly complicated for the average household to decipher these formulae and to know exactly what is hidden behind the indexation. It goes without saying that this situation does nothing to help transparency, nor the comparability of prices charged by different suppliers.

Price developments also appear to be much less volatile in the neighbouring countries. There, fluctuations in primary fuel prices are not passed on to the electricity prices charged to residential customers in the same way. It also appears that prices are adjusted less frequently in these countries.

One possible way of reducing price volatility is to use a system of compulsory prior notification instead of the current automatic indexation mechanism. In the Netherlands, this has been combined with a “safety net” methodology, under which the regulator must decide beforehand whether a proposed price change is acceptable, taking due account of supplier costs.