

# The Impact of Behavioral and Structural Remedies on Electricity Prices: The Case of the England and Wales Electricity Market

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## Abstract

During the liberalization process the UK regulatory authority introduced behavioral and structural remedies in order to mitigate an exercise of market power and lower electricity prices. In this paper we analyze the impact of a behavioral remedy implemented through price-cap regulation and a structural remedy implemented through divestment series on the dynamics of electricity prices during peak-demand periods. We use an *AR-ARCH* model with relatively novel and flexible skew-generalized error distribution. The model is extended to include individual incumbent producers' market shares calculated based on residual demand and other explanatory variables.

We find statistical evidence for a decrease in the influence on electricity prices by the larger incumbent producer after the second series of divestments. At the same time, though, we find an increase in the influence on electricity prices by the smaller incumbent producer. Nevertheless, volatility of electricity prices decreased in this last regime period.

*Keywords:* electricity prices; uniform price auction; residual demand; conditional volatility; regulation

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