This paper investigates the behaviour of prices in the Spanish electricity market liberalization during the period from June 29, 2001 to May 1, 2007. The work has two aims: First, conduct a descriptive analysis of the behaviour of the price series classified by time and intensity of demand. On the other hand, six models are presented and estimated to characterize the series of daily prices, which represent the bulk of the features found in it. Finally, we select a model with first order autoregressive component, conditional volatility for the residuals (GARCH) and it is not necessary to incorporate jumps. It is further noted that the 2006 regulatory change affects the behaviour of prices.

Key words: electricity prices, GARCH, mean reversion, seasonality, jumps. JEL: C22, G10, L94.