

# The Nordic/Baltic Spot Electric Power System Price: Nonlinear Error-Shock Analysis

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## **Abstract**

This paper revisits the conditional mean and volatility characteristics of the System Price for the Nordic/Baltic Spot electric power market (1994-2016). The paper's main purpose is the seasonality, scale and trend effects, intercept and serial correlation for the conditional mean and, intercept, serial correlation, asymmetry and level effects for the conditional volatility. The analysis extends previous investigations and evaluates conditional densities as well as location and scale impulse-response functions. The error shock analysis shows linear mean reversion for all price changes. For the non-linear volatility, the results report clustering and negative asymmetry. The persistence of error shocks are relatively short. The sub-period 2008-2016 reports major (minor) systematic changes for both the volatility and the asymmetry (the mean).

## **Classification:**

**Keywords:** Nordic/Baltic System Price, Seasonality, Scale and Trend Effects, Conditional heteroscedasticity, Impulse-Response functions.