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## Load Forecasting in Short-Term Including Meteorological Variables for Balearic Islands Paper

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**Abstract:** This paper presents a comprehensive survey of the short-term load forecasting (STLF). Since the behavior of consumers and producers continue changing as new technologies, it is an ongoing process, and moreover, new policies become available. The results of a research study for the Spanish Transport System Operator (REE) is presented in this paper. It is presented the improvement of the forecasting accuracy in the Balearic Islands considering the introduction of meteorological variables, such as temperature to reduce forecasting error. Variables analyzed for the forecasting in terms of overall accuracy are cloudiness, solar radiation, and wind velocity. It has also been analyzed the type of days to be considered in the research.

Keywords: short-term load forecasting, power demand, neural networks, load forecasting

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