

Thesis Title	Appropriate Forecasting Method Evaluation of Power System for Various Forecasting Conditions and Data
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Abstract

This thesis presents an evaluation of forecasting methods of electrical energy demand for various conditions and data. The five methods – smoothing, decomposition, Box-Jenkins, simple linear regression and multiple linear regression are studied in this thesis. The historical data used in this thesis are energy sales and free of charges from Provincial Electricity Authority (PEA) in fiscal years 1984 to 2001. Patterns of historical data are divided into two categories – seasonal and non-seasonal data. The least Mean Absolute Percentage Error (MAPE) of test data is used to select the appropriate method. The results show that the appropriate forecasting method can be evaluated for various forecasting conditions and data, and the MAPE of seasonal data is lower than non-seasonal data.