Investigation of One Day Ahead Load Forecasting for Iraqi Power System

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Abstract

Power stations must supply the electrical load demands to achieve optimal power system operation. To meet the future load, the power system dispatcher use load forecasting techniques to schedule unit generation resources. In this paper the short term load forecasting (STLF) using feed forward Artificial Neural Network (ANN) and Multiple Linear Regression (MLR) techniques for Iraqi power system (IPS) is presented. The ANN and MLR techniques are used to forecast one day ahead load for summer and winter season. The ANN gives a very small mean absolute percentage error (MAPE) compared with MLR but it takes a longer time for training process.

References


Index Terms

Computer Science  Power Systems

Keywords

Short Term Load Forecasting, Artificial Neural Network, Multiple Linear Regression, Mean Absolute Percentage Error.