

Abstract

For predicted load electricity that must be provided each day, PT. PLN Bandung taking the constant value 750 kVA each hour each day. That means that the level of accuracy the results prediction very small. So, needed a system by taking one of the nerve network method of imitation, that is able to predict the burden of electricity each day accurately.

Kohonen network is selected to complete the load input power of this network is a competition with the training without supervision (unsupervised competitive learning). However, before entering the input Kohonen, used first network Radial Basis Network (RBF) to calculate the predicted value of average value and standard deviation. Second input value is required to calculate the predicted normalization who then used as parameters forming Kohonen network. Parameter the average value and standard deviation of entries be inverted during the process of training was found to be the optimal parameter values. The expected output is the result of the input that has a value profile error the least MSE.

Experiments conducted with the amount of electrical load 600. Input parameters for RBF network is the average value of 14 and 350 neuron. Load data from 600 entries, are grouped into 6 classes, while that of pattern 60 in accordance with the number of input parameters generated. The process produces a predicted average of 3.6772 load error, error average (mean) of 3.4689, and standard deviation error of 4.2863.

Keywords: Kohonen Network, RBF, MSE , Prediction Load Electricity.