## ABSTRACT

It is realized that electricity can not be kept in big amount, will become a trouble if P.T PLN rises electricity higher than customers need. So it's better that electricity is risen as much as people need, not overloaded that makes a wasteful of energy. Therefore we need a method to predict how much electricity should be risen appropriately to the customers need.

In order to predict how much electricity shoul be risen appropriately to the customers need, we will make an application that approximate the number of electricity needed in a short term or in every hours in a day. This application will be made by Backpropagation Momentum of Artificial Neural Network method. The major superiority of Artificial Neural Network is the ability of paralel computing by learning the taught patterns.

The advantage of this system application is P.T PLN can predict much electricity that should be risen appropriately to the customers need.

**Key words:** Backpropagation Momentum of Artificial Neural Network, parallel computation.