## Abstract

Many raid efforts by P2TL team (Control of Power Consumption) to minimize PLN losses from deviation of the electrical distribution has not been right on target with some of the methods already used. This system is capable of providing solutions using the concept of Artificial Neural Network (ANN) backpropagation to solve this problem.

In this final project designed a system to predict the perpetrators alleging the deviation of load distribution based on the using of electricity (kWh) and hours of flame (hour) as the parameters by using ANN backpropagation.

The data used are several fields as parameters and information from the data of PLN customer and who are suspected perpetrators which gotten from PT PLN (Persero) Distribution West Java and Banten Service and Network Area Bandung. From the data, the system is able to identify deviation patterns of the electricity distribution based on the relevant parameters with high accuracy. The prediction results the data of PLN customer who will be operation target.

**Keywords:** artificial neural network, backpropagation, electricity distribution's deviation.