ABSTRACT

Electricity consumption prediction is the right first step to overcome the problem of electricity consumption needs in various household sectors. The need for electricity consumption from time to time always increases with respect to the number of household appliances that use electrical energy sources. The use that is carried out continuously in a certain vulnerable time can not be calculated with certainty and will have an impact on increasing the cost of electricity consumption. so planning for predicting electricity consumption is an efficient step to be able to bridge this problem.

SARIMA method is one of the prediction methods that is suitable to be implemented in the prediction of electricity load consumption. The SARIMA method uses the concept of statistical relationships between variables that are predicted by the historical values of these variables so that forecasting can be done with the model. Supporting software to predict daily load consumption using the help of Minitab software version 18.

The data used in the prediction of daily electricity consumption per hour (24 hours) is 38 days, from March 22, 2020 to April 28, 2020. The prediction results obtained are for 6 days from April 29 to May 4, which produce a model (1,0,0) (0,1,1) [24] with MSE (Mean Square Error) of 0.0095081.

Keywords: Electric Load, SARIMA, Prediction