THE PREDICTION ANALYSIS OF LOAD POWER TRANSFORMER NEED AT JABODETABEK ELECTRICAL RAILROADS USING POLYNOMIAL REGRESSION AND MULTIVARIATE LINIER REGRESSION METHODS

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ABSTRAK

Jakarta is the example of metropolitan region surrounded by satellite cities. It has low main road capacity, therefore most people tent to use public transportation such as electric railroads (KRL) in doing activities. Its users increase yearly. The increasing of the public transportation users causes additional electric railroads as well. On the other hand, it also indeed causes load power transformer need increase. Besides, the increasing user numbers also influence the need of KRL and rail station yearly increase as it is. The use of polynomial regression and multivariate linier regression methods were to predict the number of rail operated in the same time in 2030. The data can be used to predict load power transformer need. Load power transformer need prediction was conducted to avoid the increase of unknown or unpredicted power. The need of load power transformer in 2015 was 239650 kVA, while the prediction 2030 will reach 317970 kVA.

***Keywords**: Electrical Railroads, Prediction, Regression, Transformer Power.*