

ABSTRACT

Name : Almer Naufal Farisi Pratama
Study Program : Electrical Engineering
Title : Analysis of a Transmission System Disturbance Using SPSS
Application at the Substation of PT. PLN (PERSERO) ULTG
Bogor.

This study aims to analyze the types and frequency of disturbances occurring in the transmission system at the Substation of PT. PLN ULTG Bogor by utilizing SPSS as a statistical analysis tool. The transmission system plays a vital role in delivering electrical energy from power plants to consumers, making any disturbance a significant threat to supply continuity and system reliability. The data used in this research consists of historical disturbance records over a specific period, including the type of disturbance, time of occurrence, and recovery duration. The analysis methods applied include descriptive statistics, frequency analysis, and correlation tests to identify relationships between variables. The results indicate that the most frequent disturbance is inter-phase hubung singkats, which predominantly occur during the rainy season. Moreover, a correlation signication was found between the type of disturbance and the recovery time. These findings are expected to serve as a reference for trasnsmission system operators in enhancing reliability and operational efficiency.

Keywords : transmission system, electrical disturbances, SPSS, statistical analysis