

ABSTRACT

The electricity system in the West Sumatra Governor's office is the most important part in a building. Electrical systems must be installed in accordance with predetermined standards in order to avoid disturbances such as hot wires, safety trips and avoid short circuit interference. Therefore an analysis is performed on the performance of the electrical system using qualitative descriptive methods. Descriptive qualitative methods include data collection, data processing, data analysis and formulated a conclusion that refers to the analysis of the data. This method is to find out whether the performance of the existing electricity system in the West Sumatra Governor's office is in accordance with the 2011 PUIL standard. From the results of the analysis, it is found that the compatibility between the installed electricity and the 2011 PUIL standard is 19 out of 26 comparisons or 73.07%. In the selection of cables and safety ratings there are some that currently no longer comply with the standards and must be replaced as in the PAC 1A panel must be replaced by cables and in PPI A panels, PAC 1A, PAC 4A, PPI B, PP3 B, PAC 3B must be done safety changes, while the results of the analysis of loading on the panel in the morning and afternoon load imbalance reached 11.33%, while in the afternoon the load imbalance reached 11.67%.

Keywords: *Electrical System, PUIL 2011, load imbalance.*