ABSTRACT

Electrical energy deficit problem that occurred in Sumatera especially at West Sumatra in particular caused a lot of factors. One of them is due to the energy supply is not balanced with the amount of load that must be supplied by PLN. Observing these conditions, utilization of alternative energy should be sought based on local potentials that are renewable and environmentally friendly. One of them is a source of geothermal energy. As a region that has a great geothermal potential, it is possible that if in the area of West Sumatra was constructed geothermal power plants to reduce the deficit of electric energy occurs. Mount Talang in particular the construction of 36 MW geothermal power plants in the Solok.

Development of 36 MW geothermal power plants of Mount Talang in Solok district, West Sumatra is included in the 10,000 MW project to be built by PLN to meet the shortage of electricity in the coming years, especially in West Sumatra. In this final project will be discussed about the influence of 36 MW of geothermal power plants of Mount Talang on Sumatra regional electricity tariffs, particularly West Sumatra. The development review PLTP include technical aspects, economic, social, and environmental aspects.