ABSTRACT

Population growth in Province of North Sumatera, if average each year an increase of 2.07%. While the peak load growth per year on average an increase of 5.80%. However, this increase does not offset the increase in power plant that is capable. Power capable of in the North Sumatera each year only an increase of 4.25%. So that started the crisis occurred in 2004 (deficit) of electricity around 100-200 MW. Therefore with built PLTP Sorik Merapi 55 MW, is expected to overcome the electricity crisis that occurred at this time.

Key Word: Electric energy crisis, Peak Load, Sumatera Utara Geothermal Power Plant 55 MW