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Title : Development Study of Mamuju Coal Fired Power Plant 2x7 MW Concerning Technical, Economic and Environmental Aspects, and Its Influences to the Electricity Cost of West Sulawesi

ABSTRACT

In order to accelerate the availability of electricity supply throughout the country, the government applied the 10,000 MW power plant development. This project is a fast track program of power plants which use coal, gas, and renewable energies as energy sources. The project is based on ESDM Ministerial Regulation Number 02/2010. This regulation legislates the development of various power plants in Indonesia including the Mamuju 2x7 MW Coal Fired Power Plant.

In 2008, the peak load of West Sulawesi was 26.76 MW. This means West Sulawesi was lack of energy supply because the capable power was only 4.92 MW from the installed capacity of 7.10 MW. Due to this, there are problems which occur because of the lack of energy supply, such as blackouts and the low electrification ratio (36.48% at 2008). The topology of West Sulawesi which consists of mountains and hills has become its own obstacles in the development of electric power transmission and distribution lines. Mamuju 2x7 MW Power Plant is expected to be able to supply enough electricity to meet the electricity needs of the district Mamuju in particular, and West Sulawesi in general. This Final Project is intended to analyze Mamuju 2x7 MW Power Plant development in terms of technical, economic and environmental impacts aspects, also the effect on West Sulawesi’s regional electricity tariffs.

Keywords: Coal Fired Power Plant, peak load, electricity needs