ABSTRACT

Recently, oil prices have been increasing rapidly in the global market. This situation causes Pertamina to expend funds in importing oils in addition to the national production. To overcome the problem, The Government of Indonesia is gradually withdrawing its fuel price subsidy and is adjusting to following worldwide market prices. However, to a certain extent, this policy will unfavourably impact the industries powered by such energy.

The majority of electric generation in Indonesia is from fossil fuel. The figure is more than 10.5 GW requiring about 124 million barrels of oil per year, from the country’s installed capacity of 53 GW. This contrasts with renewable geothermal energy, which is able to yield economic value from very efficient operations.

The geothermal resource in Indonesia exceeds 20 GW, equivalent to eight billion barrels of oil. However, the size of the installed geothermal power plants in the country is only 852 MW, or only four percent of the total. This figure is from Pertamina’s own operation and its JOCs.

Pertamina itself now still holds 15 geothermal working areas, distributed in Sumatra, Java, and Sulawesi. To keep pace with the Government geothermal road map, Pertamina has planned to boost the contribution of geothermal powers to the country, based on development in stages. The first stage implies committed geothermal development up to 1925 MW in 2008/2009, equivalent to about nine percent of the geothermal resources. In North Sulawesi, for example, where no other resource is available, geothermal energy will be important.

Besides its use as a power source, geothermal energy can also be used directly, providing additional value for a society comprised mainly of farmers and small entrepreneurs.

INTRODUCTION

National oil reserves are falling. If Indonesia cannot find new resources, there is a possibility that the country will be an oil importer in the future, if not already by the end of this year. This condition will create a social problem since the price of oil as fuel will have a tendency to keep on increasing. The State Electricity Enterprise (P.T. PLN Persero), as the supplier of electricity which still depends very much on electric power stations using diesel (PLTD), will turn its business to more competitive resources. Therefore, geothermal is expected to be the first choice resource to meet the needs towards energy supply, under the condition that it is run professionally and efficiently.

The use of energy in Indonesia is still dominated by fossil fuel energy, such as coal, oil and gas which supply 95% of the total commercial requirement for primary energy. This situation will not change until 2010 if there is no adjustment in energy policy. In 2010, Indonesia (as also many other countries) will almost certainly be no longer a petroleum exporting nation. This is reflected in the tendency for the price of oil to increase and the instability of the oil price in the international market.

If that condition is related to the utilization of petroleum as a fuel for electric power stations, the inclination stated above will also drive an increase in electrical plant operational costs, which also have a direct influence on the production cost of electricity.