Third Party Evaluator's Opinion on Kota Panjang Hydroelectric Power Plant (HEPP) and Associated Transmission Project

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Relevance

The objectives of the project were highly relevant when it was first conceived in the early 1990s as a source of electricity generation that relied on non-fuel resources and at the same as a means in expanding rural electrification in a reliable and efficient manner. Demand for electricity had been accelerated at a rapid pace due to increased economic activity, not only in Java island but in outer islands as well. Riau and West Sumatera provinces which were part of Region III of the Sumatera island, had the potential to develop electricity capacity generated from hydro power, because energy supply from other sources such as natural gas, geothermal and coal were available in a very limited supply.

At present and in the future, the project will still be highly relevant because of continuing emphasis by GOI to place high importance in the development of alternative energy sources including renewable energy sources such as hydropower, geothermal, biomass and wind-based power generation. PLN as the sole state owned company in charge of electricity generation production has embraced the need to develop renewable energy source for its energy supply mix.

The development of Kota Panjang HEPP has contributed to a decline in Riau province's average cost of electricity generation, because previous to the project the province had relied solely on diesel power generation which had been very costly. This is despite the fact that Kota Panjang HEPP average cost is still higher than comparable other hydropower average costs.

Sustainability

Sustainability of the Kota Panjang HEPP from the financial aspect is highly questionable due to external and internal factors. The external factors namely the electricity price setting which is set below its average cost falls outside the project's reach. Any electricity price changes have to be set by the central government with the approval of the parliament. It is therefore up to the parent company (PLN) and the government to commit subsidized funding to finance the sustainability of the project.

The alternatives are to reform the PLN state owned company, the electricity price setting and decentralizing the provision of regional electricity to the regional government concerned if it is deemed feasible. The latter case is attractive for resource rich regions with abundant resources such as Riau province. The internal factors of the project management should be enhanced further to reduce any inefficiency that would drive down production costs.

Sustainability of the project would also depend on how well the operational capacity is managed. It is only later being realized that water protection measures, soil erosion and basin conservation management are the key factors. To ensure various effective measures to protect the technical life of the Kota Panjang reservoir, the project needs to develop community development strategies by involving not only surrounding community directly affected by the project, but upstream community as well. The strategy has to be internalized by the firm and avoided being charity programs that have proved to be ineffectual elsewhere.