

Structured Tariff Calculation to Promote Geothermal for Energy Security

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Abstract : This paper analyzes the necessity of a structured tariff calculation for geothermal electricity in Indonesia. Indonesia is blessed with abundant natural resources and a choices of energy resources to generate electricity among other are coal, gas, biomass, hydro to geothermal, creating a fierce competition in electricity tariffs. While geothermal is inline with energy security principle and green growth initiative, it requires a huge capital funding. Geothermal electricity development consists of phases of project with each having its own financial characteristics. The Indonesian government has set a support in the form of ceiling price of geothermal electricity tariff by 11 U.S cents / kWh. However, the government did not set a levelized cost of geothermal, as an indication of lower limit capacity class, to which support is given. The government should establish a levelized cost of geothermal energy to reflect its financial capability in supporting geothermal development. Aside of that, the government is also need to establish a structured tariff calculation to reflect a fair and transparent business cooperation.

Keywords : load fator, levelized cost of geothermal, geothermal power plant, structured tariff calculation

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