SIMULATION OF STIRLING DISH SYSTEM EFFICIENCY

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ABSTRACT. Solar energy is the source of the most promising energy and the powerful one among renewable energies. Photovoltaic electricity (statement) is obtained by direct transformation of the sunlight into electricity, by means of cells statement. Greenius is a powerful simulation environment for the calculation and analysis of renewable power projects such as solar thermal trough power plants, photovoltaic systems, wind parks or Dish/Stirling systems. In this work, we simulated the operation of the concentrator dish Stirling, this simulation allowed us correctly to predict the influence of the meteorological parameters (direct normal insolation, ambient temperature, air density (altitude), the angle elevation of the sun, and wind speed) on the system efficiency.

KEYWORDS: *Simulation, Dish Stirling, Greenius software, Stirling engine, Efficiency.*