

Abstract

In the context of the deployment and implementation of grid connected concentrated solar power plants which are in still progress in MENA regions, the different authority of this country like Algeria gives suitable environment for the promotion and the diversification of energy sources to produce electricity. The energy policy and legal framework are the main incentive trials to support that future environmental friendly assignment, thus in this work, a thermal performance analysis coupled to economic reliability were elaborated using SAM advisor software as a preliminary results in order to investigate whether the installation of high concentrated central receiver solar power plant in different regions (coastal, highland and Sahara) is feasible