World Academy of Science, Engineering and Technology International Journal of Energy and Environmental Engineering Vol:13, No:01, 2019

Feasibility Study of a Solar Farm Project with an Executive Approach

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Abstract : Since 2015, a new approach and policy regarding energy resources protection and using renewable energies has been started in Iran which was developing new projects. Investigating about the feasibility study of these new projects helped to figure out five steps to prepare an executive feasibility study of the concerned projects, which are proper site selections, authorizations, design and simulation, economic study and programming, respectively. The results were interesting and essential for decision makers and investors to start implementing of these projects in reliable condition. The research is obtained through collection and study of the project's documents as well as recalculation to review conformity of the results with GIS data and the technical information of the bidders. In this paper, it is attempted to describe the result of the performed research by describing the five steps as an executive methodology, for preparing a feasible study of installing a 10 MW – solar farm project. The corresponding results of the research also help decision makers to start similar projects is explained in this paper as follows: selecting the best location for the concerned PV plant, reliable and safe conditions for investment and the required authorizations to start implementing the solar farm project in the concerned region, selecting suitable component to achieve the best possible performance for the plant, economic profit of the investment, proper programming to implement the project on time.

Keywords: solar farm, solar energy, execution of PV power plant PV power plant

Conference Title: ICREES 2019: International Conference on Renewable Energy and Energy Systems

Conference Location : Zurich, Switzerland **Conference Dates :** January 14-15, 2019