IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 6, June 2022
Impact Factor: 6.252

Hybrid Power Generation System

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Abstract: *Due to limit of use of conventional energy sources, these days emphasis is given on to the use of non-conventional sources of energy. Among them is the very popular wind energy source, in which wind energy is converted into mechanical form of energy first and then with the help of a generator this mechanical energy available is converted into electrical energy thereafter this form of energy become ready to be used by the users. Though this form of energy is abundantly available the problem is today's machinery. In its simple construction a vertical axis wind mill is constructed instead of it being rest on a thrust bearing it is levitated in air using magnetic property of same pole repelling each other. One magnet is fitted into the wind mill while the other is fitted in to the hoist. Generator is coupled with is wind mill thereby generating the electricity efficiently and at a larger capacity. The electricity generated from this type of wind mill is also very large compared to the conventional wind mills. Wind energy turbines are not that kind of efficient to produce continues & sufficient power so that, to overcome the problem associated with conventional turbines we are introduces to make hybrid electricity generation system along with Solar panel as a new breed being developed. This has motivated for combining two or more renewable energy resources i.e., hybrid power generation. The project deals with the study and design of hybrid system of solar and wind energy for rural area's applications.*

Keywords: Solar, wind, hybrid power, higher electrical output

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