

ABSTRACT

With increase in population rapidly the demand for the energy is also increasing. To attain the increasing need of population the conventional resources are depleting with a very fast rate in comparison to the rate of its generation. So, it becomes the prime duty to find an alternative to these resources. The nonconventional or renewable resources fall up as an alternative for the exhaustible resources. Solar, Wind, Thermal etc. are some of the most important sources of non-conventional form of energy. The paper presents the way in which wind turbine in cooperation with Maglev technology together can be used for the production of energy. As some areas experience very low wind speed, these areas are not very productive with the wind energy. As the conventional wind turbine has to overcome a very high friction in order to start. This requires comparatively high speed due to ball bearings. And so, the Horizontal axis wind turbine (HAWT) is found inappropriate. The Vertical axis wind turbine with Maglev technology is found to be a perfect alternative in such areas. With Maglev wind turbine the power output can be obtained with low wind speed as 1.2 – 1.5 m/s and up to speed as high as 40 m/s[6]. The massive ordinary wind turbine creates just 5 MW of energy. Whereas one extensive maglev could create 1 GW of power which can supply power to around 7,50,000 homes.

Keywords- Vertical axis wind turbine, Maglev, Magnetic Levitation, wind power

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