VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

B.L.D.E. ASSOCIATION'S

VACHANA PITAMAHA DR. P.G. HALAKATTI COLLEGE OF ENGINEERING & TECHNOLOGY

BIJAPUR - 586103

PROJECT REPORT ON

"REGENEDYNE MAGLEV WIND POWER GENERATION"

The future wind power...

Submitted in partial fulfillment as a requirement for the award of degree of

BACHELOR OF ENGINEERING

IN

ELECTRICAL AND ELECTRONICS

UNDER THE GUIDANCE OF

PROF.Dr (Smt) S.R.SAVANUR

SUBMITTED BY

VISHAL D DHAREPPAGOL	2BL09EE028
MAHESHWARI M KONAGUTTI	2BL09EE013
ABHINAYA D PADAKI	2BL09EE001
SAMPATH TARADI	2BL09EE019

2012-13

ABSTRACT

Since a decade the demand for electricity is increasing at alarming rate and the demand for power is running ahead of supply. The present day methods are not sufficient to keep pace with ever increasing demand. The recent severe energy crisis has forced to think & develop the power generation by renewable sources (wind power).

This project dwells on the implementation of an alternate configuration of a wind turbine for power generation purposes. Regenedyne (magnetic levitation) has apparently moved to prototype stage. The floating blades spin with little resistance, and the power output is increased. They also can spin in light breezes. This provides efficient frictionless Power Generation with less maintenance, compared to Horizontal Axis Wind Turbine (HAWT).

The aim of this major qualifying project is to design and implement a magnetically levitated vertical axis wind turbine system that has the ability to operate in both low and high (3m/s to 40m/s) wind speed conditions.

This new model of wind turbine uses magnetic levitation to reduce the internal friction of the rotor which is considered as a revolution in the field of wind technology, producing 20% more energy than a conventional turbine, at the same time decreasing operational costs by 50% over the traditional wind turbine.

Hence this technology provides an extreme efficient, versatile and elegant method of producing power from wind with nearly zero pollution. Our choice for this model is to showcase its efficiency in varying wind conditions as compared to the traditional horizontal axis wind turbine and contribute to its steady growing popularity for the purpose of mass utilization in the near future as a reliable source of power generation.

Hence the main objective of this project is to harness wind energy in more efficient way with frictionless magnetic levitated operation.