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DEVELOPMENT OF FUZZY CONTROLLER FOR DFIG CONNECTED TO WIND TURBINE

NEERAJ KUMAR[1] & RAM AVTAR JASWAL[2]

[1]P.G. Scholar, Department of Electrical Engineering, UIET, Kurukshetra, Haryana, India

[2]Assistant Professor, Department of Electrical Engineering, UIET, Kurukshetra, Haryana, India

ABSTRACT

In present context electrical energy is playing a crucial role in development of any nation. Enormous consumption of resources like coal, oil etc. has created demand for renewable energy. Due to the current requirements for the expansion of renewable energy as sources of electrical energy, wind energy conversion is getting much interest all over the world. In present scenario the variable speed doubly fed induction generator is the most prolific concept. This paper develops simple doubly Fed Induction generator (DFIG) coupled with wind turbine using fuzzy control.

KEYWORDS: Doubly-Fed Induction Generator (DFIG), Wind Turbine, Wind Energy, Wind Energy Conversion System, Fixed Speed Wind Turbine, Variable Speed Wind Turbine, Fuzzy Control, Membership Function