

DYNAMIC BEHAVIOR OF THE BRUSHLESS DOUBLY FED INDUCTION GENERATOR UNDER SYMMETRICAL AND ASYMMETRICAL FAULTS

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ABSTRACT

Wind energy has become ever more popular in recent decades. With its increasing penetration, requirements for grid connection have been established. Among these requirements, the low voltage ride through capability is regarded as the most challenging requirement found in wind generators which are integrated into the grid. The induction generators are behaving differently for symmetrical and asymmetrical faults. In this the brushless doubly fed induction generator (BDFIG) is used because of its lower cost and higher reliability when compared with DFIG. This paper explains about the dynamic behaviour of BDFIG under symmetrical and asymmetrical low voltage dips supported by MATLAB simulations is provided.

KEYWORDS: BDFIG, Wind Energy

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