

## **Impacts of voltage dips in doubly fed induction motor for wind turbine generation system.**

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In this paper we provided the description of double fed induction motor (DFIM) used in wind turbines. We researched the dynamic conditions of the DFIM, back-to-back convertor and the rotor side convertor (RSC) during symmetrical voltage dips with the help of crowbar protection system by using *Matlab/Simulink*. We also analyzed the influence of the crowbar circuit on the low voltage ride through (LVRT).

*Keywords: double fed induction motor (DFIM), double fed induction motor, voltage dip during transient process, crowbar circuit protection, symmetrical voltage dips, wind power plant.*