# 38. PARAMETER STABILIZATION USING SIMULINK

Suma Muraleedhar, Monica.R, sumamuraleedhar@gmail.com,monicachan5493@gmail.com

The wind energy is one of the renewable sources which possess a good potential. It is inexpensive when compared to other sources of energy. The varying speed of wind results in difficulties to get a constant voltage output from wind turbines driven by the variable speed. The chance of getting an appropriate frequency output is also less in the present scenario. This paper presents the method of stabilizing the output voltage for a standalone wind turbine driven by variable speed wind. The method is based on the using a voltage regulator for the varying voltage of wind turbine driven by variable speed. The regulated and stabilized voltage is supplied to the utility. Storage system is also proposed which will provide power when wind regulated voltage is dropped due to low wind speed or even in the case of absence of wind. Key Words — Voltage stabilization, Renewable energy, Variable speed wind turbine, Storage system, Automatic switch



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