"Impact of Solar Energy in Power System"

This thesis paper is submitted to the Department of Electrical & Electronic Engineering, Stamford University Bangladesh for the partial fulfillment of the degree of Bachelor of Science in Electrical & Electronic Engineering.

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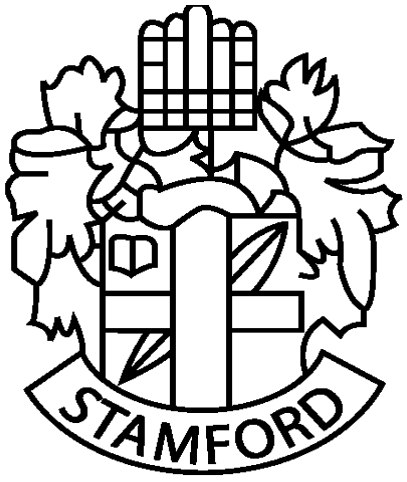

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DECLARATION

This is to certify that this work has been done by us and it has not submitted elsewhere for the award of any degree.

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ABSTRACT

It is known to us that the solar energy is one of the most effective recource in Power system. Power obtained from a photovoltaic (PV) array need to be processed for optimum utilization. The Maximum Power Point Tracker (MPPT) makes it sure that the load always gets the maximum available power obtained from the PV array.

For different types of load condition and solar insolation variation, the power extracted from the solar panel varies .The current through the panel and the voltage across it is multiplied by an analogue multiplier given a signal at the output proportional to the PV power. The proportional power signal is differentiated whose output is employed to vary the duty cycle of a DC-TO-DC converter to optimize the deliverance of power to the load.

In our thesis paper we designed and studied the Impact of Solar energy in Power System using MPPT.