PLC Based Fuel Filling Station

Final Year Project Report

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DEPARTMENT OF ELECTRICAL ENGINEERING

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Project Advisor: Khalid Asghar

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Abstract

Our project is product-oriented plus research-oriented. It basically focuses on the needs of customer in our country Pakistan which is suffering from major energy crisis, where load-shedding is at its peak, where our old techniques of productions need to be replaced by modern techniques which are more efficient, time ,saving, and cost effective. So our project focuses on this problem and tries to solve it to some extent. Basic problem which we are facing in our country is that we don't have excess to those technological techniques in fuel filling stations, majority of the filling stations are manually operated. They service providers have to bear to the monthly salary of the person which attends the customers at the feeder of the fuel station. The customers are always running short for the time so they can't wait in line for their turn. We design a system which works on basic levels. First level is to design a PLC Based fuel filling system.

For this purpose we have used the HMI (Human Machine Interface)-PLC (Programmable Logic Controller)-Solenoid Valves-Liquid Flow Transmitter. Reason for doing this project is that this system's efficiency is more than the manually filling station in terms of price, time saving and running cost.

On second level we have to try to give more comfortable and easy to use interface on HMI. On this device we are providing the facility to the customers to fill their fuel tanks themselves, including the flexibility to get the fuel in short time, don't have to wait in queue to wait for your turn, transparency between the station and service providers since no human interference is involved.

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