



TO STUDY AND ANALYSIS OF PV CELLS SYSTEM WITH PWM DURING VARIOUS TIME

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Abstract:

In this paper, we are studies the PV cells without Load and with Load as 1Amp. 3Amp, 5Amp. The PV cells are generated the Electrical power in the form of D.C.. The generated electrical power by PV Cells are increase and decrease. In this way we are using the PWM devices for stable D.C. Voltages.

Keywords: PV Cell; PW; and Storage System.

Cite This Article: Dr. S. K. Mahobia (2017). "TO STUDY AND ANALYSIS OF PV CELLS SYSTEM WITH PWM DURING VARIOUS TIME." *International Journal of Engineering Technologies and Management Research*, 4(8), 12-16. DOI: 10.29121/ijetmr.v4.i8.2017.87.

1. Introduction

In this study, The PV Cells, PWM, Electrical Load are used during. The electrical Load is various types such as 1Amp. 3Amp, 5Amp. First of all D.C. voltage are generated by Solar cells and connected with the PWM Devices and finally output voltage are obtaining.

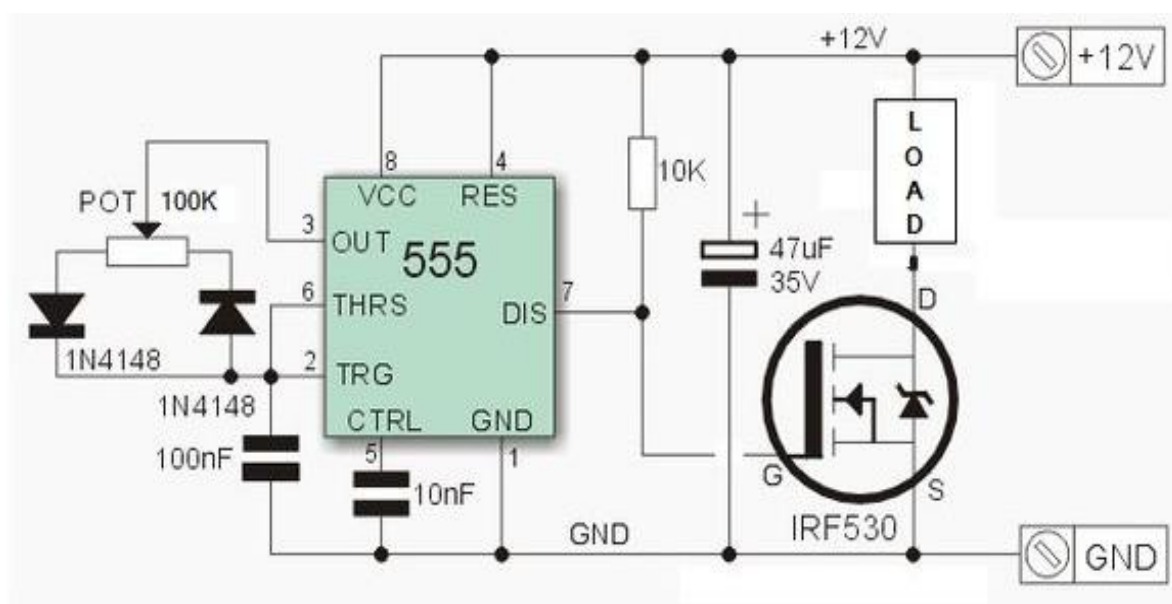


Figure 1: circuit diagram

2. Performance Testing

Table 1: Voltage with respect to time without using PWM technique

Sr. No.	Time	Voltage (in D.C.)
1	09:00	8
2	10:00	10
3	11:00	12
4	12:00	15
5	13:00	17
6	14:00	18
7	15:00	17
8	16:00	13
9	17:00	9

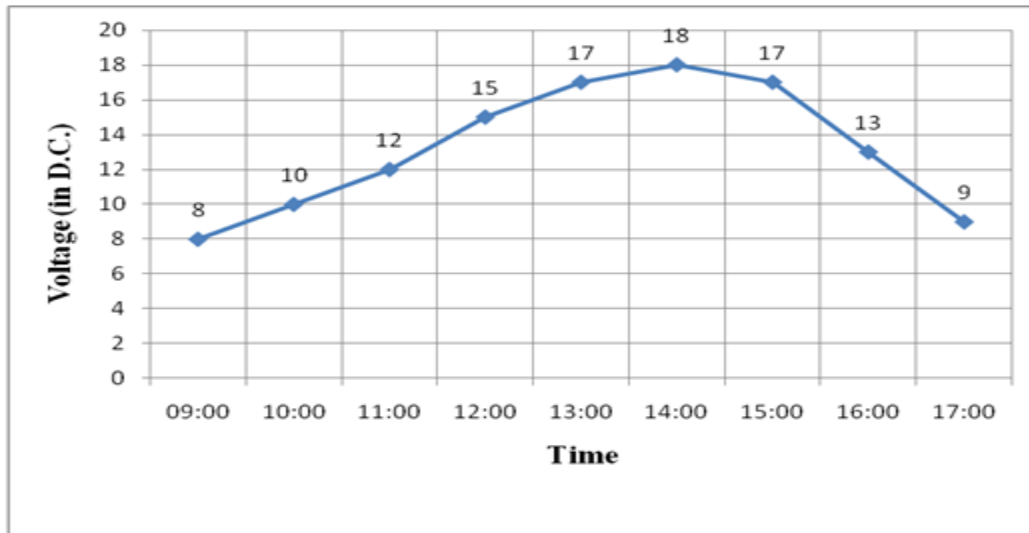


Figure 2: Voltage with respect to time without using PWM technique

Table 2: Voltage with respect to time using PWM technique with 1 Ampere

Sr. No.	Time	Voltage (in D.C.)
1	09:00	10
2	10:00	12
3	11:00	13
4	12:00	16
5	13:00	17
6	14:00	18
7	15:00	17
8	16:00	11
9	17:00	10

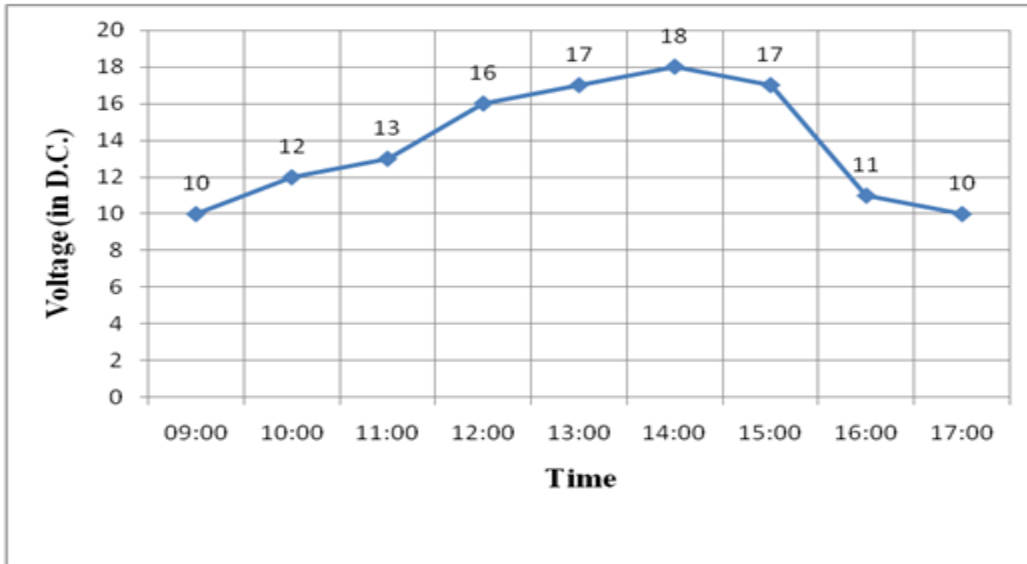


Figure 3: Voltage with respect to time using PWM technique with 1 Ampere

Table 3: Voltage with respect to time using PWM technique with 3 Ampere

Sr. No.	Time	Voltage (in D.C.)
1	09:00	8
2	10:00	10
3	11:00	12
4	12:00	12
5	13:00	12
6	14:00	12
7	15:00	11
8	16:00	10
9	17:00	9

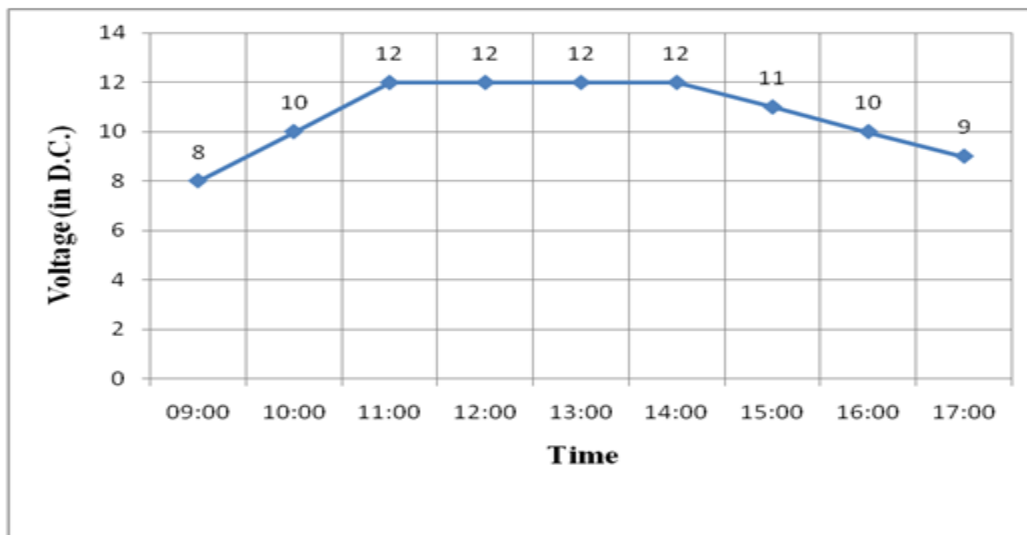


Figure 4: Voltage with respect to time using PWM technique with 3 Ampere

Table 4: Voltage with respect to time using PWM technique with 5 Ampere

Sr. No.	Time	Voltage (in D.C.)
1	09:00	7
2	10:00	10
3	11:00	12
4	12:00	12
5	13:00	13
6	14:00	12
7	15:00	11
8	16:00	10
9	17:00	8

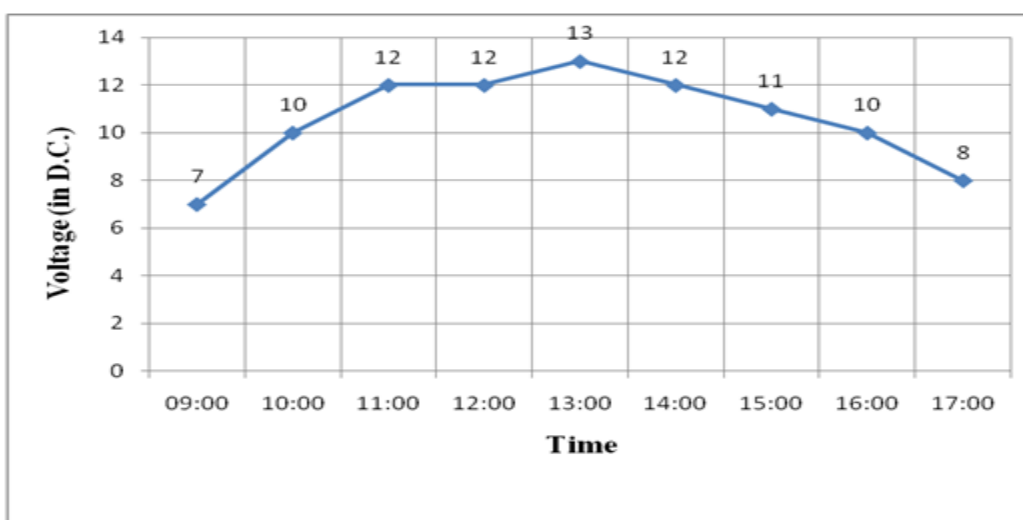


Figure 5: Voltage with respect to time using PWM technique with 5 Ampere

3. Conclusion

In this paper, we are achieving the stable D.C. voltage with the help of PWM devices. The stable voltage are achieving such as 12 V. D.C. during the time 11:00 to 14:00 which are shown in table.3. Using of PWM technique with 3 Ampere. These stable voltages are used in various electronics devices and other electronic circuits.

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