



AUGUST2016	1850828	0.95
SEPTEMBER2016	1850828	0.95
OCTOBER2016	1516824	0.94
NOVEMBER2016	1373751	0.93
DECEMBER 2016	1083618	0.94
JANUARY 2017	1360312	0.93
FEBRUARY 2017	1366494	0.93
<b>TOTAL</b>	<b>17605261</b>	<b>Average PF = 0.94</b>

**Table1.1:** This table is formed based on different electricity bills of PVVNL( Paschimanchal vidhyut vitran nigam limited)

## 2. METHODOLOGY OF AUDITING

### 2.1 Data collection& Analysis

For suggesting any idea regarding power consumption, it is essential to know consumption in detail. For this, team was formed who went to each department, hostels, library, labs and detailed information about appliances was collected. Many appliances were mentioned rated values on name plate but actual power consumed is measured by power analyzer. Some other useful information was also obtained with interviewing electricians working in the institute.

Light intensity was measured using luxmeter. Some approximations were taken while there was lack of information or sometimes loads was neglected considering very small fraction of total load.

Main problem was faced during the data collection concerned with time usage of electrical appliances hours per day and days per year. To sort out this particular problem, data collection was verified with electricians, students in hostel, wardens, chief warden and office workers.

### 2.2 Recommendation& Action plan

Following steps:

1. Estimating total cost after replacing an appliance or process (in rupees)
2. Estimating per year energy saving (in rupees)
3. Calculating payback period (in years) in which above two amounts balances each other.



3. Installation of biogas plant
4. Lighting saving
5. Improvement of power factor

## ACKNOWLEDGEMENT

The project is completed under the guidance of Mr. Sudhir Kumar Singh, Asst. Professor, Electrical and electronics engineering, IMSEC, Ghaziabad. The assistance received from Director, Dean, Heads of departments, chief warden of hostels, faculty and electricians of IMSEC, Ghaziabad is sincerely appreciated.

## REFERENCES

- [1] Clive Beggs "Energy Management, Supply and Conservation".
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## BIOGRAPHIES



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