



Date: 22nd September 2016

AUDIT COMPLETION CERTIFICATE

To,
The Principal,
P.E.S. College of Engineering,
Panchakki Road, Nagsenvana,
Aurangabad 431 002

Kind Attn-Dr. Abhijeet P Wadekar.

Dear Sir,

We, Eco Energy Management System thank you for giving us an opportunity to carry out energy audit of P.E.S. College of engineering campus (Ref. No.: PESCOE/OFFICE/2016-2017/250). We appreciate the cooperation extended by the staff of the college to complete the audit in time. Without the cooperation and coordination, it was not possible to complete the audit on time.

We are sending the final report of the energy audit for your records and necessary action for reducing energy cost of the campus. We would be glad to offer our services in future also for implementation of energy efficiency services.

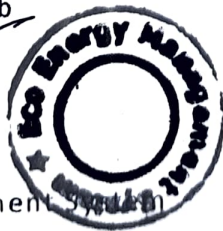
In case you have any queries or questions, do let us know.

With regards,

Mohammed Mohtasib

Principal Consultant

Eco Energy Management




2014

Electrical Safety Audit

Four Students of department of electrical engineering studying in final year has done the electrical safety audit of around 62 Branch offices of Bank of Maharashtra, Zonal Office, Town Centre Aurangabad 431001, with "Vedant Energy solutions Ltd." in month of January and February 2019 in Aurangabad Region.

Name of the students:-

1. Varun Khandalkar
2. Aachal Shirsath
3. Akshay Narwade
4. Deepak Waghmare


A.M. Paikrao
Class Teacher.


Dr. Chaudhari B.N.
Professor & Head
Department of Electrical Engineering
P.E.S. College of Engineering
Aurangabad (M.S.)

Report on:
Electrical Safety Audit

Done at:

Bank of Maharashtra, Kranti Chauk,

Address: Bank of Maharashtra, Kranti chauk, Aurangabad
Date:19-01-2019

Work Oder Details:

AX16/ZITC/AUDIT/2019, Dated 09/01/2019,

Issued by:

Bank of Maharashtra,
Zonal Office, Town Centre Aurangabad 431001.

Prepared by,

Let's begin with Small Savings..!



VEDANT ENERGY SOLUTIONS LLP
(MEDA Empanelled "A" Class Energy Auditing Company)

Address:

1-2, Udyog Pushpa Apartment, Plot No. 230, Ulkanagari,
Aurangabad, Maharashtra, India, 431005.
Ph: +919922994991 / +917774037481.

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1. Preface

We have been allotted an activity of Electrical Safety audit of the Bank of Maharashtra, Kranti chowk branch, located near Aurangabad city.

We thank you for the belief shown on us.

We appreciate the initiative taken by bank of Maharashtra and also appreciate the keen interest in Electrical Safety

It has been observed that at the project stage, every single aspect with respect from the prescribed format issued by the ZO, bank of Maharashtra, as well as other general considerations, physical observations etc were considered during the Audit.

We are thankful to the Zonal Office team as well as the Branch Manager & staff of Kranti Chauk Branch for the furthest support to all the Auditors and support staff during the Audit / Measurement Phase.

All the key areas of concern were openly discussed at local branches audit really helped us to direct our efforts towards meeting the objectives of the assignment given to us.

We hereby commit that, we have done the best effort to carry the audit on field and to prepare the report to meet the expectations of the project, however, may there be any deviation, will be well anticipated by us for correction and betterment in our work performance.

Thanking you once again and wishing you safe and prosperous business place..!

**Vedant Energy Solutions LLP,
Aurangabad**

2. Objective

To carry out detailed Electrical Safety Audit with reference to CEA 2010, IE Rules 1956 and other related standards & to suggest remedial action plan so as to ensure at most safety of "Human Being", Equipments and property from electrical hazards i.e. Electric Shock, Fire, and Hazards etc.

3. Audit Team

VEDANT ENERGY SOLUTIONS LLP: AKSHAY CHAVAN

VARUN KHANDLKAR
ANCHAL SHIRSHAT

BANK OF MAHARASHTRA: Mr. B G SURE

**FORMAT FOR ELECTRICAL SAFETY AUDIT OF BRANCHES / ZONEL
(TO BE FILLED BY ELECTRICAL AUDITOR ONLY)**

1.1 General information-

Name of Branch - KRANTI CHAUK
Zone - Aurangabad

Sr.	Details	
01	Type of branch (Metro/Urban/Semi-Urban/Rural)	Urban
02	Staff strength detail of branch	Officers- 6 Clerk- 4 Sub Staff- 1
03	Name of designated branch manager with contact no	Mr. B.G. SURSE 9527189448
04	Name of Electrical Auditor and contact no	Mr. Rahul Deshpande 9922994991

1.2 Last Audit-

Sr.	Date of last electric safety audit		Electric risk rating (High/Medium/Low)	Compliance date	Closure date
	Start on	Complete date			
	24-06-2016		MEDIUM	-	-

1.3 Electric Supply Detail-

Sr.	Electric supply company/Dept.	Sanction Load	Maximum Load (in last one year)	Average Load (in last one year)	Any penalty (in last one year)
	MSEDCL	31 KW	15.85KW	9.575KW	

1.4 Details of Electrical Equipment-

Sr.	Equipment	Make and Model	Qty.	Rating (AMP or KVA or core x Sq. mm or Watt)
01	UPS/INVERTER	NUMERIC	4	5KVA
02	Batteries	AMARON	48	12V 150AH
02	D. G. Set	-	-	-
03	Miniature circuit Breaker (MCB)	LEGRAND SIEMENS BINTECH	46	6A, 10A, 16A, 25A, 32A, 63A
04	MCCB (Molded case circuit breaker)	URJA	1	50A
05	ELCB (Earth leakage circuit breaker)	-	-	-
06	RCCB (Residual current circuit breaker)	-	-	-
07	SFU/HRC fuse	-	-	-

1.5 UPS and Batteries-

AMC Vendor & expiry date	UPS connection (Three phase/Single phase)	Any Overload on UPS (Yes/No) (if yes give reason/details) (Overload- more than 80% of UPS capacity)	Any battery bypassed with UPS (Yes/No)(if yes give details)
YES	SINGLE PHASE	NO	NO

Any chemical rust or loose connection on battery terminal/lug (Yes/No)(if yes give reason/details)	Whether ventilation/cooling is provided in UPS room (Yes/No)	Unwanted material kept inside UPS & battery room (Yes/No) (if yes give details)	Any overheating in wire/fuse/MCB/switches etc.(Yes/No) (if yes give reason/detail)
NO	YES	YES	NO

Whether separate stand is provided for Batteries	Last date of battery back-up test on full load & have any deformity in last service report (give details)
YES	16-01-2019

1.6 AC units-

AMC vendor & expiry date (if any)	Proper electric connection with compressor contactor, relay and capacitor	Auto timer (functional/nonfunctional) (if provided)	adequate rating MCB/fuse ACs (Yes/No) for unit
NO THEY DONE ONLY IN BRANCH LEVELS	YES	NOT PROVIDED	YES

1.7 Diesel Generator-

AMC Vendor & expiry date (if any)	Date of last engine oil and filter replacement (Not more than 06 month or 250 Running hrs.)	All gauges like temp. meter, Voltmeter, ammeter, wattage, KWH, hour meter etc. are working properly (Yes/No) (If no give reason/detail)	Any deformity noise, leakage, fuel consumption rate and spark in exhaust system (Yes/No)(if yes give reason/detail)
-	-	-	-

1.8 Details of other electrical equipment-

Sr.	Equipment	Make and Model	Qty.	Load(KW) required to run single equipment	Total Power Requirement (KW)	Detail
1.	Computers	ACER,HCL	13	100 W	1300W	
2.	Printers	CANON,HP	5	60 W	300W	
3.	Passbook printers	LIPI PB2 KIOSK	3	50W	150W	
4.	Cash counting Machine	PARSHWA	2	330 W	660W	
5.	Split Cs/Window ACs	VOLTAS	6	1515 W	9090W	
6.	Fans	CROMPTON	7	40W	280W	
7.	Tube Lights	PHILIPS	4	36W	144W	
8.	Bulbs	WIPRO	8	7W	56W	
9.	Router	CISCO	2	12 W	24W	
10.	Fire alarm and Burglar alarm	MAYUR QULITRONICS	2	3.5W	7W	
11.	CCTV	SAMSUNG	8	60	480W	
12.	Signboard	-	-	-		

1.9 Electric supply (Three phase)

Phase-I	Phase-II	Phase-III
R-Y	Y-B	R-B
424.2V	426.2V	424.9V

1.10 Electric Load Distribution (in volt)

R-phase(R-N)	Y-phase (Y-N)	B- phase(B-N)	E-N Voltage
246.4 V	246 V	245.6 V	4.25V
0.15 A	8.10 A	5.29 A	

2.1 Earthing System-

Sr.	Separate earthing for UPS and raw power (Yes/No)	Type of earthing (chemical/Normal)	Earth - neutral voltage	Location	Earth pit identified (Yes/No)
	YES	NORMAL	3.29 V	UPS INPUT	YES

2.2 PROFILE OF LOAD REQUIREMENT/SAFETY DEVICES/ELECTRICAL WIRING:

- I. Total Load Requirement (KW): 12.491 KW
- II. Sanctioned Load (KW): 31 KW
- III. Electrical Wiring Diagram with last date of updating: -
- IV. Rating of Earthing:-
(1) Size of material of earth wire: 1.5 Sq.mm
- V. Total no. Of MCBs: 46
- VI. Whether MCBs are ISI approved: VISIBLE ON MCB
- VII. Whether MCBs are of appropriate rating: YES
- VIII. Capacity of UPS System : $5\text{KVA} \times 4 + 500\text{VA} \times 2 = 21\text{KVA}$
- IX. Whether all Electrical cables/wirings are of appropriate rating, ISI approved & fire resistant: YES

2.3 Status of presence of electrical safety hazards:

Sr. No.	Safety Hazard Yes/No Remarks	Yes/No	Remarks
1.	Existence of non ISI/standardized appliances	NO	
2.	Whether the existing wiring is more than 20 years old.(Wiring more than 20 years old must be recommended for replacement)	YES	
3.	Whether Fire detection and Alarm system is installed?	YES	
4.	Whether sufficient number of fire extinguishers is installed?	YES	
5.	Is the First Aid Box Available with appropriate Filling?	YES	
6.	Are all the fire extinguishers ISI Marked?	NO	
7.	Are all the Fire Extinguishers installed at Visible and accessible places	YES	
8.	Are fire extinguishers servicing and refilling done as per required Periodicity?	YES	
9.	Do the Staff Members Know to operate the fire extinguishers?	NO	
10.	Branch CCTV Whether working or not?	YES	
11.	On Site ATM CCTV whether working or not?	NO ATM	
12.	ATM Load Connected to Mains or Branch UPS?	NO ATM	
13.	Segregated UPS room with proper ventilation/exhaust is provided?	YES	
14.	Is their display of emergency telephone number of nearest fire station, hospital and key person?	NO	
15.	Whether frequent sparking at certain place(s) reported	NO	
16.	Whether switches found with burnt marks	NO	
17.	Existence of non-standardized tube lights/CFLs/Bulbs and TL starters and chokes	NO	
18.	Dampness in walls and ceiling	NO	
19.	Loose switches/plugs	NO	
20.	Naked wiring or connections	YES	
21.	All Electrical cables/wiring are in conduits and are protected by a fire proof insulation	YES	
22.	Seepage /Leakage of water in walls or on and around electrical installations	NO	
23.	Whether connection to each AC is provided through an individual MCB of appropriate rating & of standard make and ISI approved.	YES	
24.	Whether there is frequent tripping due to overloads?	NO	
25.	Whether Category of Cables / fire rating i.e. FR, FRLs visible clearly?	YES	
26.	Whether mock drills are conduct?	NO	

2.4 Other Miscellaneous Points:

- I. As per the guideline, the power supply inside the strong room must be provided through a cable, drawn out from the electrical wiring inside the strong room. The free end of the cable must be provided with a plug. When the door of the strong room is opened the cable can be drawn out through the grill gate of strong room and plug on its free end may be inserted in a live electrical socket plug installed outside the strong room. Whether the compliance of the stated guidelines observed: **YES**
- II. Whether the provision for switching off the power supply from the main distribution point provided so that the main switch can be switched off at the time of Branch's closure and power supply to all electrical installation except UPS is cut off : **YES**
- III. For ensuring continuous functioning of security alarm, fire alarms and CCTV system, whether the power supply is provided through the UPS?
YES
- IV. Whether any other important weakness in electrical safety arrangements/safety hazard noted : **YES**
- V. Whether the electrical installation confirms to Indian Electricity rules and regulations and the standards laid down by local Electric supply authorities:
YES

2.5 Heating of wire/panels-

Sr.	Heating of electric wire and panel observed (Yes/No)	No. of location/spot (where temp. is on higher)	Detail of heating equipment	Reason
-	-	-	-	-

2.6 Other Electrical Risk-

Sr.	Electrical Risk	Category (High/Medium/Low)	Reason/detail and recommendation (For High only)
01	Any hanging electrical wire/ temporary electric connection etc. in premises	MEDIUM	There must be no hanging wires & they must be circulated through the conduits properly.
02	Any multi pin plug or extension cable/board use in premises	LOW	
03	Any dangling/loose electric connection or portion of live wire with damage jacket/insulation	LOW	
04	Flammable combustible material dumped near electric panel (those electrical equipment run on 24x7 basis)	LOW	
05	Voltage Fluctuation	LOW	
06	Any MCB/Fuse etc. by pass from the electrical system	LOW	
07	Any other electrical risk	LOW	

2.7 ATM/E-gallery (Only for on-site (Near to branch))-

No. Kiosk of	No. of AC units	Auto timer for ACs available(Yes/No) &Auto timer (functional/nonfunctional)	UPS & batteries (working/nonworking)
-	-	-	-

Heating of electric wire and panel observed (Yes/No))	Any poor rating MCB/fuse etc. used in ATM/E- gallery (Yes/No)	Any loose connection/multi pin plug etc. in ATM/E-gallery (Yes-No)	Any other electrical observation in ATM/E-gallery
-	-	-	-

2.8 Risk Rating-

Overall electric risk category (High/Medium/Low)	Reason
MEDIUM	

2.9 Summary-

Sr.	Observation	Rating (High/Medium/Low)	Recommendation (Strictly specify detail of electrical equipment/wire etc. only)(e.g.- 01 MCB of 16 amp of UPS incomer replace)
1	Hanging electric wires are found	Medium	Circulate hanging wires through the appropriate size of conduits properly
2	Unwanted material in ups room	High	Remove unwanted material from UPS room, clean the UPS room properly
3	Fire extinguisher placed on ground floor.	Medium	It is necessary to install all the fire extinguisher at visible and accessible place
4	Hanging ceiling fan rose in wash room.	Medium	Make proper connections of hanging ceiling rose
5	Improper connections of MCB.	Medium	MCB Must be properly connected and covered.
6	Joints found in ups room.	High	Try to avoid joints, improper method. Use joint free/new cables.
7	Tapped cables are found on 1 st floor.	Low	Replace the tapped cables
8	Earth to neutral voltage found higher on 1 st floor switch board.	Medium	Make proper earthing connections of switch boards and also earth pits too
9	Open smoke detector found in manager cabin.	High	Make proper connections of open smoke detector

2.10 Other Electrical Details -

Other points	Remark
Average monthly unit consumption	2298KWH
Incoming line details cable size	95sq.mm
Incoming line breaker rating	50A MCCB
Check the phase wise distribution wattage	R- 0.063KW Y- 3.45KW B- 2.24KW
Check the computer I/P supply voltage	228V
Check the phase wise current requirement recalculate	R- 0.15A Y- 8.10A B- 5.29A
Cable type & size of computer input	3×0.75 Sq.mm
Check the joint	YES
Colour wise distribution of cable for different load	YES FOUND
No of earth pits	2
Earthing grid	YES
Computer earthing	YES
Electrical room if available condition	YES
Lighting arrester provided /Not	NO
Separate earthing provided for lightning arrester/Not	NO

4. Photographic Evidences

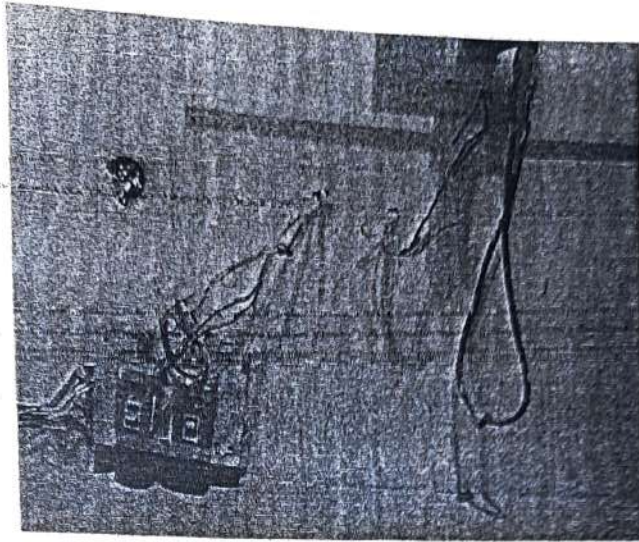


Figure no.1 - Improper connections of switch boards are found. Switch boards are mounted near to ground floor.



Figure no.2 - Hanging ceiling rose is found in UPS room.

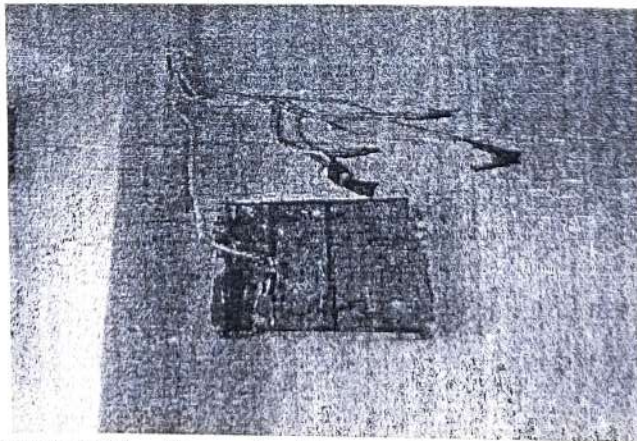


Figure no.3 - Tapped cables are found in UPS room.

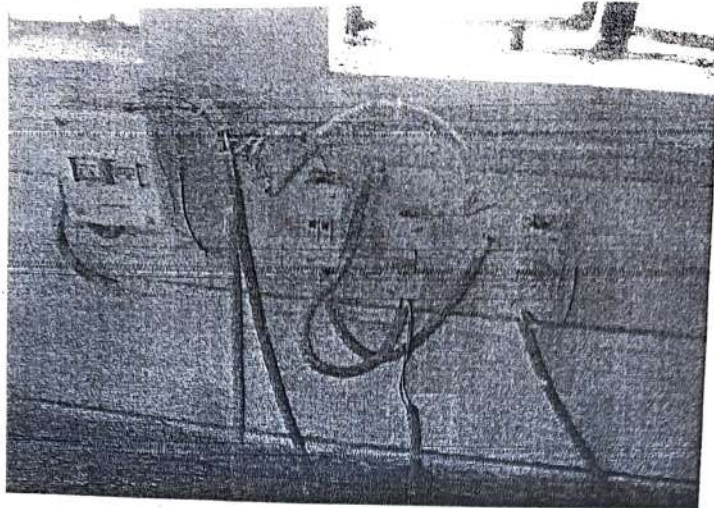


Figure no.4 - Joints are found near MCB connections in UPS room

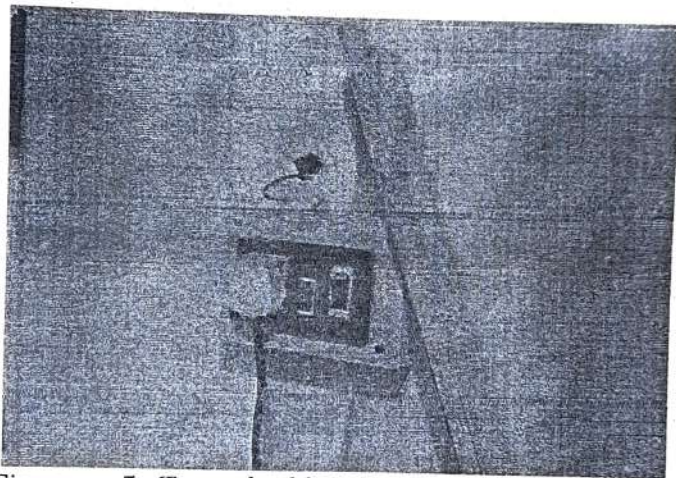


Figure no.5- Tapped cable is found near switch board.

ACTION PLAN

FOLLOWING POINTS TO BE CONSIDER FOR IMPROVEMENT FROM ELECTRICAL SAFETY HAZARDS: -

1. DEFINING SOP (STANDARD OPERATING PROCEDURES) & SOP TRAINING SHOULD BE GIVEN TO ALL STAFF MEMBERS BRANCH.
2. TRY TO AVOID JOINTS, IMPROPER METHOD. USE JOINT FREE/NEW CABLES.
3. IMPROPER CONNECTIONS OF SWITCH BOARDS ARE FOUND. SWITCH BOARDS ARE MOUNTED NEAR TO GROUND FLOOR.
4. DISPLAY EMERGENCY TELEPHONE NUMBERS OF NEAREST FIRE STATION, HOSPITALS AND KEY PERSON, IT IS USED IN EMERGENCY PURPOSE.
5. OPEN SMOKE DETECTOR FOUND IN MANAGER CABIN. TO CHECK PROPER CONNECTIONS.
6. PROPER CONDUIT PROVIDED FOR NAKED WIRES.
7. PROVIDE DOUBLE EARTHING FOR UPS AND OTHER ELECTRICAL EQUIPMENT (COMPUTER, CASH COUNTING MACHINE ETC.)
8. EXPECTED REVIEW AUDIT FREQUENTLY IN EVERY HALF YEAR.
9. PREVENTIVE MAINTENANCE CARRIED OUT LICENSED CONTRACTOR AND SHOULD BE MAINTAIN ITS RECORDS.



VEDANT ENERGY SOLUTIONS LLP

A One Stop Solution House

INTERNSHIP CERTIFICATE

This Certificate is awarded to,

VARUN KHANDALKAR

In appreciation for your successful completion of
"Electrical Safety Audit" as an intern at "Vedant Energy Solutions LLP".
The internship was conducted between Date : (18/01/2019 to 02/02/2019)

Director,
(Mr. Rahul Deshpande)





VEDANT ENERGY SOLUTIONS LLP

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INTERNSHIP CERTIFICATE

This Certificate is awarded to,

AACHAL SHIRSATH

In appreciation for your successful completion of

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Director.

(Mr. Rahul Deshpande)





VEDANT ENERGY SOLUTIONS LLP

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INTERNSHIP CERTIFICATE

This Certificate is awarded to,

AKSHAY NARWADE

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"Electrical Safety Audit" as an intern at "Vedant Energy Solutions LLP".
The internship was conducted between Date : (18/01/2019 to 02/02/2019)

Rahul Deshpande



Director,
(Mr. Rahul Deshpande)

REPORT
ENERGY AUDIT
OF
P.E.S.COLLEGE OF ENGINEERING.
NAGSENVANA,AURANGABAD

8/5/2021

VIVEK GOSAVI

DATE OF AUDIT:

01-08-2021 and 02-08-2021

AUDIT TEAM:

VIVEK GOSAVI---- CHIEF AUDITOR

MR.SATISH THORAT----ENGINEER

Mr. MAHESH DALVI---AUDITOR

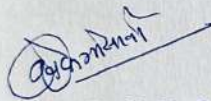
Dr. B. N. CHAUDHARI SIR----H.O.D. ELECTRICAL DEPARTMENT


VIVEK GOSAVI
Electrical Consultant
BEE Certified Energy Auditor
(EA-4521)

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VIVEK GOSAVI
Electrical Consultant
BEE Certified Energy Auditor
(EA-4521)

ACKNOWLEDGEMENT

The Management of M/S P.E.S.College of Engineering, Nagsenvana ,Aurangabad is energy conservation conscious and has taken proper measures to maintain the optimum energy utilization in the college. The management felt need for energy audit to know the present level of energy performance and to improve in case of any possibility

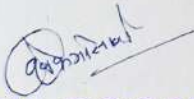
In the energy audit it is clearly revealed that management is committed to maintain the safe conditions in college. I highly appreciate this commitment

We express our sincere thanks to Pricipal Dr. Wadekar Sir, Dr. Chaudhari Sir, for their every help and co-operation during the electrical energy audit.

Every effort has been made that all statements, information offered in this report are given in good faith without bias and prejudice. They refer to the conditions prevalent at the time of Energy Audit.

We are pleased and thankful for the trust, the management had shown in us and assigned the job of "Energy Audit". So hereby we are submitting our report to the Management of M/S P.E.S.College of Engineering, Nagsenvana ,Aurangabad

Vivek Gosavi
EA-4521



VIVEK GOSAVI
Electrical Consultant
BEE Certified Energy Auditor
(EA-4521)

Methodology

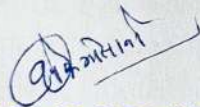
The methodology adopted for achieving the desired objectives viz. assessment of the current operational status and energy savings included the following:

Discussions with the concerned officials of the unit for identification of major areas of focus and other related systems.

A team of professionals visited the plant and had discussions with the concerned officials/supervisors to collect data/information on the Load Distribution and Energy Consumption pattern. The data were analyzed to evaluate the specific power consumption and also to arrive at a baseline energy consumption pattern.

Measurements and monitoring with the help of appropriate instruments including continuous and/or time-lapse recording, as appropriate and visual observations were made to identify the energy usage pattern and losses in the system.

Computation and in-depth analysis of the collected data, including analysis and other techniques as appropriate, was done and to evolve suitable energy conservation plan/s for improvements/reduction in Specific Energy Consumption.



VIVEK GOSAVI
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PREFACE:**P.E.S. College is L.T.consumer of M.S.E.D.C.L.**

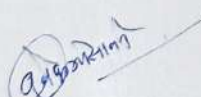
The total load is distributed on 5 L.T. meters. The development of the college has taken place in phases hence as per the enhancement of load in newly constructed buildings, the infrastructure is added.

In the electrical energy audit, it is clearly revealed that management is committed to maintain the optimize energy utilization conditions in premises. The phase wise investments in Transformer, cables, switchgears made by the management as per the suggestions received from technical experts and concerned is the clear indicative of intention and commitment of management to ensure energy efficient working condition in premises.

Management itself has taken initiative much earlier to conduct the energy audit, is self-explanatory action to highlight the concern of management to maintain the energy efficient working

As the development of Institution and hence the electrical infrastructure has taken place in phases almost in @ 27 years, there are some energy inefficient practices in the electrical distribution system as a whole as of now. Over the period as the technical support team is busy with the routine maintenance and expansion planning and execution even though the team is trying to maintain the complete infrastructure of the Institution as per relevant energy standards, scope of energy saving is there which is very natural.

This electrical energy audit is an attempt to bring all these points in the notice of management for the necessary corrective action and in turn to help the management to pursue its motive to maintain electrical energy premises.



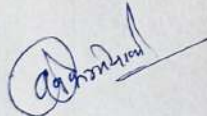
VIVEK GOSAVI
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EXECUTIVE SUMMARY

S.N.	AREA	OBSERVATION & REMARKS	SAVINGS (kWh/Month) & SAVINGS (Rs./Month)	INVESTMENT (Rs) & PAYBACK PERIOD (MONTHS)
1	Ceiling Fans	<ul style="list-style-type: none"> @ 400 regular 70W Ceiling Fans are operational 	<ul style="list-style-type: none"> 2520 kWh (42W saving/fan for 6 hrs/day, 25 days/month) 	<ul style="list-style-type: none"> Rs 1480000/-
		<ul style="list-style-type: none"> Replace these Fans by BLDC Fans in phases. 	<ul style="list-style-type: none"> Rs.21420/- 	<ul style="list-style-type: none"> 69 Months (Can be planned as 20% per year)
2	Tube Lights	<ul style="list-style-type: none"> @ 1250 regular 40W Tube Lights are operational 	<ul style="list-style-type: none"> 3750 kWh (20W saving/fan for 6 hrs/day, 25 days/month) 	<ul style="list-style-type: none"> Rs 750000/-
		<ul style="list-style-type: none"> Replace these by 20 W LEDs 	<ul style="list-style-type: none"> Rs.31875/- 	<ul style="list-style-type: none"> 24 Months
3	Underutilization of Roof Top for power generation(Main Building)	<ul style="list-style-type: none"> The roof top available is not completely used 	<ul style="list-style-type: none"> 3600 kWh 	<ul style="list-style-type: none"> Rs 1350000/-
		<ul style="list-style-type: none"> Installation of 30 Kwp Solar Power plant with optimizer 	<ul style="list-style-type: none"> Rs.30600/- 	<ul style="list-style-type: none"> 45 Months

4	Underuti- lization of Roof Top for power generat- ion(Hoste ls)	• The roof top available is not completely used	• 1800 kWh	• Rs 675000/-
		• Installation of 15 Kwp Solar Power plant with optimizer	•Rs.15300/-	•45 Months
5	Underuti- lization of Roof Top for power generat- ion(Work shop)	The roof top available is not completely used	• 1800 kWh	• Rs 675000/-
		Installation of 15 Kwp Solar Power plant with optimizer	•Rs.15300/-	•45 Months

ALL THESE OBSERVATIONS ARE OUTCOME OF THE ENERGY
AUDIT DONE ON 01-08-21 and 02-08-21.



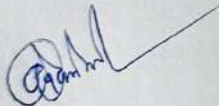
VIVEK GOSAVI
Electrical Consultant
BEE Certified Energy Auditor
(EA-4521)

SCOPE :

The scope of this Energy audit is to find out the all possible facilities to save, optimize the energy being used in the Institution, in all its possible forms available in Institution viz

- Electrical Energy
- Heat Energy

It is the aim to highlight all such possibilities which will not only save the energy required to the Institution but indirectly will improve the efficiencies of machines and will save the revenue.



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DISCLAIMER:

- This is purely energy audit, hence non compliances with Fire safety norms, are neither studied nor highlighted. The Team is not authorized to conduct fire safety audit.
- This is purely energy audit, hence non compliances with Air conditioning system safety norms, are neither studied nor highlighted. The Team is not authorized to conduct audit of HVAC system
- This is purely energy audit hence non compliances with BS OHSAS 18001 are neither studied nor highlighted. The Team is not authorized to conduct BS OHSAS 18001 audit
- This report should be treated as sample study and observations of this report are to be checked thoroughly throughout the plant and necessary corrections are to be implemented accordingly
- The Distribution System is studied as per the inputs given by Dr. B.N.Chaudhari, Prof.Fulzele, Mr. B C Kamble, Mr. Salve as per the guidelines of Authorities of the Institution.
- This report is to be treated as internal audit only, should not be produced for any legal compliance, insurance claim or as fulfilment of statutory requirement
- As the college is not operational due to pandemic condition, it was not possible to perform the load studies hence all the suggestions given are only observation basis
- Non compliances with electrical standards are studied but are not the part of this report. These will be communicated as separate report


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