



Electrical Safety Audit Report

Risk category of the Branch: (High/ Low/ Medium)

Branch Name					
Branch Code					
RBO					
UPS Capacity		Make		Year	
Electrical Installation/ Wiring				Year	
Lights Provided	LED/ CFL :				
AC Installed	VRF/Ductable/ Cassette/ Split :				
DG Set Capacity		Make		Year	
Earthing (Ohm)	Body (GI)		UPS (Copper) (ohm)		
Electrical Load					
Power factor					
Type of consumer	(HT/LT) : Category/ Commercial / Industry				
Irregularity Photos	Yes/ No				
Electricity Bills	Three Months:				
Load Calculation	Sheet attached: (Yes/ No)				
UPS/DG set/ AC/ Lights Details in given format	Sheet attached : (Yes/ No)				

PROFORMA FOR ELECTRICAL AUDIT

Branch Name & Code		
Address		
BM PF No. and Name		
Sanctioned Load		
Connected Load		
Monthly bill of energy bill (Approx.)		
Total tonnage of Air Conditioners in Branch (TR)		Year of Installation:
Area of the Branch (Sq feet / sq. meter)		
Date of Audit		

S.No	Description	Details	Remarks
1	Whether MCCBs/MCBs/ELCBs are provided with proper rating to cater the load	YES / NO	
2	Whether light and emergency light are provided in electrical rooms/operating areas for easy operation & maintenance works	YES / NO	
3	Whether Pump room, DG set room, UPS room, electrical room. etc. are maintained dry and in good condition and obsolete/hazardous/old items are not dumped there.	YES / NO	
4	Whether water seepage is observed near any of the Electrical Panel, Distribution Boards, Electrical equipment etc.	YES / NO	
5	Whether Earthing pits are provided and connected to the equipment, Body of the connected equipment	YES / NO	
6	Whether the earthing pits are properly maintained	YES / NO	
	Earth Pit Resistance Values GI Earthing:_____ ohm Copper Earthing: _____ohm		
7	Whether proper exhaust fan/AC for Ventilation of panel room/electrical room/UPS room is provided and paper, old material or any other scrap kept near DB/Panels/UPS/Batteries etc. are not kept there.	YES / NO	

8	Whether penalty is being imposed in electricity bills on account of higher load/poor power factor etc. (It may be ascertained from the electricity bill of April / May / June / July). Additional electrical load required if any (from power Distribution company)	YES / NO	
Penalty for Maximum Demand/ Load Amount Rs: Month of : _____ Contract Demand:_____ Recording Maximum Demand: _____			
9	Whether Load is Distributed in all 3 phases to avoid unbalancing of phases and no loose electrical connection /haphazard wiring observed in the branch/office /premises	YES / NO	
Per Phase Voltage & Current Readings RY: RN: R: YB: YN: Y: BR: BN: B:			
10	Whether isolating switches are provided for the switching off of the nonessential loads premises during night and main switch to switch off the power supply to the branch in case of fire/ Emergency	YES / NO	
11	Whether electrical equipment of Pantry etc. are properly connected to Iron socket box/ 16A Socket with MCBs. MCB s or latest type switches are provided to switch on/off the AC s and protect them from overload.	YES / NO	
12	Whether Proper preventive maintenance after opening of Panel boards and distribution Boards are carried out by the license holder Electrician or skilled technicians of Equipment manufacturers / Service providers.	YES / NO	
	Last date of when it is conducted:		
13	Whether Appropriate timers used in the changeover of Air conditioners for server room Ac's and for signage Boards to make auto ON/OFF (for schedule timings). The thermostat of Ac's at server rooms should be set to say 30 degree centigrade so they are not run only when the temperature is too high (to minimize chances of fire due to idle running of Ac's during the nights)	YES / NO	
14	Whether preventive maintenance of electric installation and equipment is carried out by skilled license holder electricians / skilled technician/ Empanelled Contractor	YES / NO	
15	General Condition of electrical control panels, Main switch, electric meter board and change over switch, Ac's, Water coolers, water filter, wiring cables etc. is good and all DBs, Panels, Switch boards are properly covered.	YES / NO	

16	Whether the contact numbers of persons, electricians, power distribution company, Generator service provider, Vendor UPS vendor, Ac's etc. are available with Accountant / Security guard and other staff and they are displayed in Electric Room / UPS room.	YES / NO	AC Vendor: Electrical Vendor: UPS Vendor:
17	Whether the power factor panel of appropriate rating is installed	YES / NO	
	Weather Fixed Capacitor/ APFC Panel Installed: Working Status of Capacitor Panel: (Yes/ No): Capacity of Capacitor panel Installed:_____KVAR Present PF Value: : _____ Any Penalty imposed (Yes/No) : _____ If Yes amount of Penalty: _____ Month: _____		
18	FIRE PREVENTION MEASURES	YES / NO	
a	All old disposable records, broken furniture etc. accumulated at the premises have been cleared.	YES / NO	
b	Combustible leaf, litter / waste papers etc. in and around the branch is removed / cleaned periodically	YES / NO	
c	No stationery / records / old obsolete items are stored / kept in the system / UPS room	YES / NO	
d	Storage racks in stationery / record room kept at a safe distance of at least 3 ft from electrical points / switch / junction boxes.	YES / NO	
e	In the pantry / canteen LPG is used	YES / NO	
19	SERVER AND UPS ROOM	YES / NO	
i	Server room have dual AC units having timer circuit device with independent circuit	YES / NO	
ii	Whether fan installed in UPS room	YES / NO	
20	ELECTRICAL SAFETY	YES / NO	
	Power supply to record / stationery room is made through plug and socket arrangement	YES / NO	
21	FIRE PROTECTION / FIRE CONTROL EXTINGUISHERS AND FIRE ALARM SYSTEM	YES / NO	
	Are fire extinguishers available in the following work area and clearly marked and accessible A. Systems/UPS Room: CO2(3kg/4.5kg) x 2 B. Banking Hall: Water CO2 type C. Stationery Room: Water CO2 type	YES / NO	
22	DG SET / GENERATOR	YES / NO	
	At least two 6 kg ABC capacity fire extinguishers are placed near the DG	YES / NO	

1. Summary of Observations:

S.no	Observations and Measures Suggested	Priority

2. Single Line Diagram

3. Approximate Branch Layout (Not to Scale)

4. Irregular Photos of the Branch

5. Three months Electricity Bills

6. AGE of Air conditioning:

7. AGE of Electrical Works:

NAME OF THE BRANCH:		DATE OF VISIT:		
CONNECTED ELECTRICAL LOAD SHEET				
S.N.	PARTICULARS	NO.	EACH WATT	TOTAL WATT
A	LIGHTING LOAD			
1	Tube Light			
2	Spot light			
3	2'x2' LED Square Fitting			
4	Other Load			
5	48" Ceiling Fan			
6	Wall Fans			
7	Exhaust Fan			
8	Signage / Other Load			
9	Street Light Fitting			
	TOTAL of (A)			
B	COMPUTER / UPS / MIC'S LOAD			
1	UPS			
2	Other Power Load (Xerox machine, other machine etc)			
	TOTAL of (B)			
C	POWER LOAD			
1	Aqua Guard			
2	Tea Coffee Machine			
3	Refrigerator / Water Cooler			
4	Pantry / Other Raw Power Load			
	TOTAL of (C)			
D	A.C. LOAD (TR)			
1	VRF AC			
2	Split AC (1.0 TR)		1200 W	
3	Split AC (1.5 TR)		1600 W	
4	Split AC (2.0 TR)		2200 W	
5	Cassette AC			
6	Other Air-conditioning Load			
	TOTAL of (D)			
	TOTAL CONNECTED LOAD (Watt)			
	TOTAL CONNECTED LOAD (KW)			

S. No.	UPS Make	Capacity	Date of Installation	Under AMC Yes/No	Name of AMC holder	Period of AMC	Battery Rating & Qty	Date of Installation

		Qty	Year	Inverter/ Non inverter	AMC status	Remarks
Split AC	1 TR					
	1.5 TR					
	2 TR					
Cassette A/C	2 TR					
	3TR					
	4TR					
Dut cable AC	5.5 TR					
	8.5 TR					
	11 TR					
	14 TR					

DG Set Make	DG set Capacity	Year of Purchase	Sound proof (Yes/ No)	Own/ Hiring	if Hiring charges per month\ (Rs)

LED LIGHTS (Yes/ No)	CFL			LED		
	2'X2' (Square)	Down Lights (Round)	Tube Lights	2'X2' (Square)	Down Lights (Round)	Tube Lights

8. Measured Values of the voltage, current, frequency and power factor in Electrical Meter

Parameter	Test Point	Reading at EB Meter	Reading at main Panel	Reading at AC Panel	Standard	Observations
Voltage at Incoming point (Volts)	Between phases					
	R-Y				415-440V	
	Y-B				415-440V	
	B-R				415-440V	
	Between Phase & neutral				210-240V	
	N-E				3V	
Current at incoming point (Amps)	R phase				--	
	Y phase				--	
	B phase				--	
	Neutral				--	
Frequency(Hz)						
Power factor						
Leakage Current						

Remarks/ Suggestions:

This is to certify that Mr _____ from M/s _____ has conducted Electrical safety Audit. The above details are correct.

Branch Head
Signature & Seal
Date:

Electrical Auditor
Seal of Company

Signature

Name of Electrical Auditor Supervisor's valid license No.
(In case of Electrical Contractor) Contractor's license

**ADDITIONAL POINTS FOR BUILDINGS HAVING OWN HT CONNECTION/
SUBSTATION**

Billing Demand	
Maximum Demand (MD) of (preferably April / May / June months)	
Power factor and peak load as mentioned in the electricity bill (preferably April / May / June months)	
Capacity of substation and voltage	

S, No	Description	Details	Remarks
1	Whether the permission for substation and DG sets, Electric shock treatment chart, Electrical & fire safety charts, Single line Diagram etc. are displayed in substation.	YES/NO	
2	Whether emergency contact numbers of fire station, Health center, Power distribution Co., Main contractor etc. are displayed at substation and control room.	YES/NO	
2.1	Whether electrical danger plate (fig of skull & cross bones, 11KV/33KV/440V/230V) is provided on Main Electrical Panel / electrical room / Operating Areas.	YES/NO	
3	Safety Materials like Fire extinguishers, Sand Buckets, Rubber Mats, Hand gloves, First Aid box etc. are available in substation.	YES/NO	
4	Whether the inspection of substation/DG set / Lift is done by the concerned Electrical Inspector at least once in a year and the required inspection fees paid well in time.	YES/NO	
5	Whether the observations by Electrical Inspector during his last visit have been attended. Date of his compliance report	YES/NO	Copy of letters should be enclosed
6	Whether Preventive Maintenance of Breakers, Transformers, H.T and LT panels etc. is carried out as per schedule and the contract for maintenance of Transformer / Breaker / Panels etc. are given to respective manufacturer / service Providers.	YES/NO	Attach the report
7	i. The maintenance contractor has A class Electrical contractor license and comply the requirement of the guidelines of the concerned State / Central Govt.	YES/NO	Copies should Available with concerned official
	ii. The workmen / Technicians possess the wire men / electricians license License Details :	YES/NO	

8	In case of outdoor substation, i. Whether the stone grits provided in substation yard.	YES/NO	
	ii. Whether the substation structure fencing boundary is provided, painted and well maintained.		
9	Whether Earthing test reports are provided by the Electrical contractor / Maintenance contractor?	YES/NO	
10	Whether proper nomenclature and painting is done on Electric Panels and Earthing Pits.	YES/NO	
11	Whether Transformer oil level and breather condition is checked at least once in a week	YES/NO	
12	Check last date of Transformer oil BDV test and confirm the BDV value whether it is permissible or not	YES/NO	
13	Whether mechanical and electrical interlocks of critical equipment are provided and maintained in working condition. (Operational manuals for all critical equipments should available at site)	YES/NO	
14	Whether APFC panel is provided and power factor value is maintained higher than prescribed value say 0.9	YES/NO	Confirmed / verified from electricity bill & APFC panel meter
15	Whether Lightning Arrestor and aviation light is provided (In case of Multi storied Building).	YES/NO	
16	Whether the maintenance staff wear shoes and they are well mannered and well dressed.	YES/NO	
17	Whether some training / Meeting with maintenance staff is conducted for discussion on energy conservation opportunities, challenges in Electrical safety etc.	YES/NO	
18	Thermography: observations on thermographic images at Electric Panels, Distribution Boards.		Upload the thermos graphic images on the system

Remarks/ Suggestions:

Signature

Name of Consultant / Auditor Name of the Agency Supervisor's Valid License No. (In case of Electrical Contractor) Contractor's license

Date :