

Electrical Audit of Branch:

Electrical Audit Checklist (Form A)

Branch Code _____

Name of the Branch/Office _____

AO : MADURAI / TRICHY / COIMBATORE /SALEM / CHENNAI NORTH / CHENNAI SOUTH / RBO

External Auditor Name & Company : _____

Date of Audit by Electrical Auditor _____

Branch Manager's Name: _____

PF No _____ Mail ID _____

Controller-1 RM/ CM(GB) / AGM _____

PF No _____ Mail ID _____

Controller-2 Dy GM/ GM PF No and mail ID _____

PF No _____ Mail ID _____

Sanctioned load (in KW/ KVA) _____ (As per the Electricity Bill)

Connected load (in KW/ KVA) _____ (Break up to be given in Annexure 1)

Monthly amount of energy bill (Approx.) (in Rs.) _____

(Average of last 6 months bill to be calculated in the Work sheet in Annexure 2)

Total tonnage of Air conditioners in branch in TR (Tonnage of Refrigeration) _____

(Breakup of Number and tons of ACs in Annexure 3)

Area of the Branch (in Sq. feet) _____ (GF - + FF- + SF-)

(Total area of the branch including all floors to be mentioned here)

Does the building has its own H.T. Substation? YES / NO

Sr. No.	Description	Remarks	Observation	Proposed Rectification work
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 Panels, Distribution Boards, Electrical equipments, etc?	YES / NO		
5	Whether Earthing pits are provided and connected to the equipment Body and neutral are also properly earthed?	YES / NO		
5 a	(a) Whether the Earthing Pits are identified and maintained properly?	YES / NO		
6	Whether proper exhaust fan 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		
7	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)?	YES / NO		
7 a	Additional electrical load required if any (from Power Distribution company) (in KW)	YES / NO		
8	Whether Load is distributed in all three phases to avoid unbalancing of phases and no loose electrical connections/haphazard wiring is observed in the Branch/ office premises?	YES / NO		
9	Whether isolating switches are provided for the switching off of then on essential loads premises during night and main switch to switch off the power supply to the Branch in case of fire/ emergency?	YES / NO		

10	Whether electrical equipments of Pantry etc. are properly connected to Iron socket box with MCBs. MCBs or latest type switches are provided to switch on/ off the ACs and protect them from Overload?	YES / NO		
11	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		
12	Whether Appropriate timers used in the changeover of Air conditioners, for Server Room ACs 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 ACs during the night)?	YES / NO		
13	Whether Preventive Maintenance of electric installation and equipment is carried out by skilled license holder electricians / skilled technician?	YES / NO		
14	General Condition of electrical control panels, main switch, electric Meter board and change over switch, ACs, water cooler, water filter, wiring, cables etc. is good and all DB'S, Panels, switch boards are Properly covered?	YES / NO		
15	Whether the contact numbers of persons, electricians, power distribution company, Generator service provider, vendor, UPS vendors, ACs etc. are available with Accountant/ Security guard and other staff and they are displayed in Electric room/ UPS room?	YES / NO		
16	Whether the Power Factor Panel of appropriate rating is installed?	YES / NO		
17	Whether Single line diagram is displayed in the Electrical / UPS room of the Branch/office?	YES / NO		
18	BRANCH: General condition of DBs, wiring, cables, termination, etc.	GOOD/ BAD		
19	ON-SITE ATM: General condition of DBs, wiring, cables, termination, etc.	GOOD/ BAD		

Sr. No.	Description	Details	Observation / Remarks	Proposed Rectification work
20	Whether loose electrical connections/haphazard wiring observed in the Branch premises?	NO		
21	Whether the wires in the DB'S are properly dressed, terminated and covered?	YES		
22	Whether electrical wires are properly covered/ insulated to prevent exposure of wires?	YES		
23	Whether wires are properly connected to fixtures, plugs, circuit breakers, and other equipment?	YES		
24	General condition of main panel, switch, electric Meter board and change over switch, etc.	YES		
25	Whether proper marking done for identifying the Electric Panels, DBs, switch boards, Earthing pits, etc.?	YES		
26	Whether the branch has arrangement for periodical maintenance, if so contractor name, contact no. and address of contractor?	NO		
27	Whether electrical covers in place for junction boxes, Outlets, and panel boards?	NO		
28	Whether power supply to Safe room, Locker room, Record room & Stationary room are made through Plug and Socket disconnecting arrangement for foolproof disconnection?	YES		
29	Whether sticker related to safety, switching off power and energy saving etc. are pasted in the branch?	NO		
30	Whether Lightning arrestor/conductor is provided for the Multi storied Building and connected to independent Earthing system?	YES		

Annexure 1**TOTAL CONNECTED ELECTRICAL LOAD OF THE BRANCH / OFFICE**

Sl.No	Load Description	W / KW / KVAR	QTY	TOTAL(KW)
1	UPS LOAD (Annexure 5)			
2	AC LOAD (Annexure 3)			
3	POWER LOAD (PDB) (PANTRY/ PUMP etc)			
4	LIGHTING LOAD (Annexure 4)			
5	CAPACITOR BANK			
TOTAL CONNECTED LOAD IN BRANCH				

Annexure 2**TANGEDCO MONTHLY ELECTRICITY BILL DETAILS****SC NUMBER:**

Billing month of	Units Consumed KWH	Bill amount Rs.	Power Factor	Penalty (if any) Rs.	Maximum Demand KW	COPY ENCLOSED
MAR-						
APR-						
MAY-						
JUNE-						
JULY-						
AUG-						
AVERAGE						

Annexure 3

Sl.No	Type of AC	TONS	QTY	TOTAL TONS(TR)	POWER (KW)
1	SPLIT TYPE				
2	SPLIT TYPE				
3	CASSETTE				
4	DUCTABLE				
5	VRF				
6	WINDOW				
		TOTAL			

Annexure 4

Sl.No	Light/Fans	Watts/each	QTY	TOTAL Watts	POWER in (KW)
1	Tube light				
2	LED downlighter				
3	LED 2X2				
4	Ceiling Fans				
5	Exhaust fans				
6	Street lights/ outdoor lights				
		TOTAL			

Annexure 5

Sl.No	UPS loads	Watts/each	QTY	TOTAL Watts	POWER in (KW)
1	PC				
2	Printer				
3	Passbook printer				
4	Monitors				
5	Hub /Switches				
6					
		TOTAL			

OVERVIEW OF AUDIT OBSERVATIONS AND PROPOSED RECTIFICATION WORKS IN PHOTOGRAPHIC FORM

BRANCH STATUS (TICK MARK)	OBSERVATIONS AND PROPOSED RECTIFICATION WORK	PHOTOGRAPHS
<p>LOW RISK: All the Electrical installations are under safety limits</p> <p><input type="checkbox"/></p>		
<p>MEDIUM RISK: Requires improvement on Electrical safety aspects</p> <p><input type="checkbox"/></p>		
<p>HIGH RISK: Immediate action to be taken on Electrical installations</p> <p><input type="checkbox"/></p>		

ELECTRICAL PARAMETERS RECORDED AT SITE

PARAMETERS	TEST POINT	READING	NORMAL RANGE	REMARKS
VOLTAGE READING	R-Y			
	Y-B			
	B-R			
	R-N			
	Y-N			
	B-N			
CURRENT READING	R PHASE			
	Y PHASE			
	B PHASE			
	AVG CURRENT			
FREQUENCY	HZ			
POWER FACTOR	PF -			
LOAD (KW) IN EACH PHASE	R PH -	Y PH -	B PH -	
LOAD (KVA)				
MD (KVA)				
NEUTRAL TO EARTH VOLTAGE				
CAPACITOR BANK RATINGS				

AMC DETAILS OF EQUIPMENT IN THE BRANCH / OFFICE

SNO.	EQUIPMENT	AMC PERIOD	AMC VENDOR DETAILS
1	ELECTRICAL OPERATION & MAINTENANCE	From: To:	Vendor Name: Contact no.:
2	DIESEL GENERATOR (HIRING / OWNED)		Vendor Name: Contact no.:
3	UPS & BATTERIES		Vendor Name: Contact no.:
4	AIR-CONDITIONERS		Vendor Name: Contact no.:
5	LIFTS		Vendor Name: Contact no.:

EARTHING SYSTEM AT THE BRANCH

S. NO.	DESCRIPTION	OBSERVATIONS / REMARKS	RECOMMENDATIONS AS PER SAFETY STANDARDS	RISK LEVEL
1	Whether sufficient body Earthing is provided for LDB, PDB, UDB, Main panels, APFC, COS, etc.?	YES / NO		
2	UPS Earthing Details			
	a) No. of Earth pits for UPS	Qty.		
	b) Whether UPS is provided with separate Earthing?	YES / NO		
	c) Neutral to Earth voltage	VOLTS		
3	Raw power Earthing Details			
	a) No. of Earth pits for raw power	Qty.		
	b) Whether raw power is provided with separate Earthing?	YES / NO		
	c) Neutral to Earth voltage	VOLTS		
4	DG set Earthing Details			
	a) No. of Earth pits for DG set	Qty.		
	b) Whether DG set is provided with separate Earthing for Body & Neutral?	YES / NO		
	c) Neutral to Earth voltage	VOLTS		
5	Solar Plant Earthing Details			
	a) No. of Earth pits for Solar plant	Qty.		
	b) Whether Solar plant is provided with separate Earthing?	YES / NO		
	c) Neutral to Earth voltage	VOLTS		
6	Whether immediate rectification required for Earthing?	YES / NO		
7	Whether gland Earthing provided for all cables?	YES / NO		

DETAILS OF UPS & BATTERIES IN THE BRANCH

UPS MAKE	CAPACITY IN KVA	1-PHASE OR 3-PHASE	Make of Batteries	Number & AH Value of Batteries
BRANCH				
ON-SITE ATM				

A. UPS PARAMETERS

PARAMETER	TEST POINT	ACTUAL READING	NORMAL RANGE	REMARKS
INPUT VOLTAGE	Phase to Phase			
	Phase to Neutral			
OUTPUT VOLTAGE	Phase to Phase			
	Phase to Neutral			
CURRENT READING	R Phase			
	Y Phase			
	B Phase			
	Avg. Current			
UPS LOAD IN EACH PHASE	R -	Y -	B -	
NEUTRAL TO EARTH VOLTAGE				

DIESEL GENERATOR (DG) SET

S. NO	DESCRIPTION	OBSERVATIONS / REMARKS		RECOMMENDATIONS AS PER SAFETY STANDARDS	RISK LEVEL
1	Is the DG set on hiring or owned by the Bank?	Hiring 'or' Owned			
2	DG set capacity	KVA			
3	DG set make	OEM			
4	Is the DG set with Acoustic enclosure?	YES / NO			
6	No. of DG set Batteries	Nos.			
7	DG set Battery rating	AH			

DOCUMENTATION OF ELECTRICAL SAFETY AUDIT

FINAL AUDIT REPORT

- i. The final report should be typed. The report shall include the photographs illustrating the condition of the installations, safety hazards, audit observations, ramp condition, signage condition, etc.
- ii. Thermography report(HT installations) or IR temperature report should be enclosed, wherever required.
- iii. Based on the risk categorisation, the audit observations should be highlighted ORANGE & RED.
- iv. The information required should be neatly typed in each and every columns and rows of the formats. The reports received with “partly filled formats” or not containing desired information in each and every columns / points / row shall be treated as INCOMPLETE and such reports shall be summarily rejected. In such case, the Auditor has to re-audit the branch within 7 days and re-submit the report.

AUDIT DOCUMENTS TO BE SUBMITTED FOR PROCESSING THE AUDIT FEES

- I. **Soft copy of the final reports in E-mail:** The soft copy of the final report with necessary photographs, thermography images & SLD in pdf format must be forwarded to the e-mails of the following:-
 - Branch E-mail (For example: sbi.XXXXX@sbi.co.in i.e. if the 5 digit branch code is 12345 then E-mail is sbi.12345@sbi.co.in)
 - Branch Manager's E-mail
 - RBO E-mail
 - Module Electrical Engineer E-mail
- II. **Soft copy of the reports in USB pen drive:** Copy of all the final reports must be submitted in a USB pen drive along with the bill to RBO. The soft copy of the reports and the drawings is to be saved in your data base and shall be submitted when requested by the Bank.

DECLARATION OF THE ELECTRICAL SAFETY AUDITOR

1. I _____ working for M/s. _____ as Electrical Safety Auditor bearing Govt. issued Electrical license no. _____ hereby confirm my identity as per the authorization letter no. _____ dated _____ issued by AO / RBO.
2. I hereby confirm that I have physically visited the _____ Branch, code: _____ on _____ at time from _____ am to _____ pm for Electrical Safety Audit of the above Branch and all the above observations / readings are actually recorded by me at site between 10.00am and 4.00pm and there is no omission of any data
3. I hereby confirm that my observations recorded in the Electrical Safety Audit (ESA) report has been detailed to the Branch Manager physically at site for necessary rectifications and photographs of my observations will be forwarded to the Branch Manager for identification in the hardcopy of the final report.

SIGN & SEAL OF ELECTRICAL SAFETY AUDITOR

NAME OF THE AUDITOR :
NAME OF THE AUDITING FIRM :
AUDITOR'S ELECTRICAL LICENSE NO. :
VALIDITY OF THE ELECTRICAL LICENSE :
CONTACT NO.: EMAIL ID:

DECLARATION OF THE BRANCH MANAGER

1. I hereby confirm the identity of the above Electrical Safety Auditor who has physically visited our Branch on _____ at time from _____ am to _____ pm for conducting the Electrical Safety Audit.
2. I hereby acknowledge that the observations recorded in the Electrical Safety Audit (ESA) report has been brought to my notice physically at site and the same will be taken up for immediate rectifications.

BRANCH MANAGER NAME :
PF NUMBER:
CONTACT NO.: EMAIL ID:

SIGN & SEAL OF THE BRANCH MANAGER