

PROCEDURE FOR INSPECTION OF ELECTRICAL INSTALLATIONS

UPTO 250KVA

Generally inspection of electrical installations is carried out under Regulation-30 (Periodical inspection & testing) & Regulation-43 (Approval by Electrical Inspector for the installation before commencement of supply or recommencement after shutdown for six months) of Central Electricity Authority (Measures relating to safety and electric supply) Regulation-2010. So, electrical inspection is divided in to two parts, one periodical & other initial.

The inspection / drawing approval fees are to be deposited through treasury challan (e-challan only) under proper Head of Account in the name of the owner of installation & the purpose should be mentioned in the remarks column of treasury challan. The fees for inspection / drawing approval etc. are as per Notification No.21610 dt.28.12.2001 which is available on our official website (**as1.ori.nic.in/eicelectricity**).

1. Initial inspection

Substation / MV Installation / Lines

- (i) (a) All the requisition for approval of MV & HV drawings shall be made in the prescribed format (Annexure-A) along with duplicate copy duly signed by Electrical Supervisor, Electrical Contractor & Owner of the Installation.
- (b) Required fees in shape of treasury challan for approval of drawings shall be accompanied along with requisition.
- (c) Necessary permission letter from DISCOM, OPTCL etc. shall be submitted.
- (d) The copy of work order issued by the owner of the installation to the licensed electrical contractor, who will execute the work, shall be submitted.
- (e) On receipt of drawings in complete shape, the same shall be approve by Concerned Electrical Inspector or send for modification if required technically. Then final approved copy will be sent to owner to carry out the work.
- (ii) After completion of work submit the requisition for inspection to the concerned Inspector with following documents.
 - a) Deposit the initial inspection fees in shape of treasury challan in the respective head of account **“0043-00-102-0034-01001-000”**.

- b) Completion report in the prescribed format (Annexure-B) duly signed by the Owner, Contractor & Supervisor.
- c) Detail equipment list to be inspected in the format given in item 5A of completion certificate.
- d) Pre-commissioning test results of all the installations duly signed by the Owner, Contractor and Supervisor on the following points.
- e) List of authorised persons proposed to be engaged for operation and maintenance of the installations.
- f) In case of transmission lines the following additional requisites are to be furnished.
 - (i) Statement of ground clearance.
 - (ii) Statement on all power line crossing, telephone line crossing, railway line crossing, roads and N.H. crossing, river, pond and canal crossings.
 - g) Railway line clearance from Railway Department.
- (iii) Extend due co-operation for inspection such as safe access to equipment, installation & records.
- (iv) Inspection report shall be issued within a week of inspection.
- (v) Compliance to the defects i.e. rectification report to be submitted within the stipulated time mentioned on the inspection report.

2. Periodical Inspection & testing of installations

- (a) Every owner of electrical installation shall deposit the inspection fees on or before the date stipulated in the inspection fee demand notice and the copy of the treasury challan be submitted to the concerned Inspector with request for inspection.
- (b) Extend due co-operation for inspection such as safe access to equipment, installation & records.
- (c) After inspection, the report will be issued by the concerned Inspector within a week.
- (d) Compliance to the defects i.e. rectification report to be submitted within the stipulated time mentioned in the inspection report.

APPLICATION FORMAT FOR SUBMISSION OF DRAWINGS FOR APPROVAL

To

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Sub: Submission of Drawings for approval.

Sir,

With reference to the above captioned subject, find enclosed herewith the following drawings of our proposed HV/MV installation for the purpose of Industrial / GP / etc. along with the treasury challan No.....dated.....for Rs..... (Rupees.....) only. The drawings may be checked and approved early, so that, the work can be started soon.

The drawings for the proposed electrical installations have been distinguishably marked from the existing one. The list of drawings and other required information as applicable are given below.

(A) LIST OF DRAWINGS

Sl. No.	Description of Drawings	Voltage level	Quantity (in No.)	Rate (in Rs.)	Amount (in Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
1.	Single line diagram of the Sub-station & as well as MV installation (For Licensee, metering arrangement for auxiliary consumption must be accompanied)				
2.	Drawing of Power Transformer / distribution transformer showing the clearances				
3.	Earthing arrangement drawing of the total installation including Earth Pit section				
4.	Cable routing / drawing				
	TOTAL Rs.				

- (A) Status of construction work against the proposed equipment / installation
- (B) Name of the Electrical Contractor to whom work has been awarded. (Copy of the detailed work order enclosed)
- (C) License / Project license No. of the Contractor with period of validity

Yours faithfully,

Encl: As above

Signature
Name
Designation
Name & address of the Firm

COMPLETION CERTIFICATE

We certify that the installation below has been installed by me/us and tested and that to the best of my knowledge and belief it complete with CEA (Measures relating to safety and electric supply) Regulation, 2010 as well as 732-1963 code of practice for Electrical wiring installation System voltage upto 650V / 11KV / 33KV and is ready for inspection.

- 1 Name and address of the Owner of the Electrical installation. :
- 2 Location of the Electrical Installation. :
- 3 Purpose of the Electrical Installation. :
- 4 Voltage and System of Supply :
- 5 A. Details of Equipments. :

<u>Sl. No.</u>	<u>Name of App.</u>	<u>Make / Sl. No.</u>	<u>Capacity</u>	<u>Current</u>	<u>Voltage</u>	<u>Control equipment</u>	<u>Make & Capacity</u>
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- B. Type of the System of Wiring :
- C. Conductor size :
- D. If the work involves installations of overhead lines/or underground cables. :
- E. Conductor / Cable size :
- F. Type & specification of support of overhead line :
- i. Length of line :
- ii. Average span length :
- iii. State if clearance are maintained as per relevant regulation of CEA (Measures relating to safety and electric supply) Regulation, 2010.
- 6 Earthing
 - A. Type one Electrodes :
 - B. Size of Earth Wire/ Flat :
 - C. Size of earth electrodes provided :

- 7 Test result :
- i. Insulation resistance for the whole installation :
 - ii. Between each conductor and earth :
 - iii. Between each conductor Insulation resistance for each apparatus :
 - i. Between each conductor and earth :
 - ii. Between each conductor Earth resistance for the system earthing :
- 8 Name & address of the contractor with License No. & grade. :
- License of the Supervisor under whose Supervision work has been executed. :
- 9 Name & permit No. & Grade of the Lineman/Wiremen/Electrician engaged in the work. :
- 10 Date of the completion and final checking of the work by the Supervisor. :
- 11 If the work has been taken up with specific authority of the Electrical inspector in the absence one required competency/contractor/Supervisor of the authority quoted. :
- 12 Detail of Pre-commissioning tests & setting has been furnished in the enclosed statement.

Work executed by
Owner
(Contractor)

Supervisor