

Business Reform Action Plan 2017

Certification of Electrical Installation by Electrical Inspectorate

A. Statutory requirements for electrical work execution and electrical safety approval to energies the High Voltage/Extra High Voltage/Generator installations :-

Procedure:

- (i) The owner/ investor first needs to execute the electrical installation works under the provisions of India Electricity Regulation (IER), 1956 as per approved drawings through licensed Electrical Contractors. The process to obtain the approval of electrical drawing from the Electrical Inspectorate is explained below. List of the Lisenced Electrical Contractor issued by Lisencing Board, Electrical Inspectorate, Patnais available/ uploaded on the website i.e. www.energy.bih.nic.in.
 - (ii) After completion of the electrical installation work, the owner/ investor needs to make application to the Electrical Inspectorate in the prescribed format, provided below as Form-B, for the necessary approval. Form-B also contains the details of documents required to be submitted with the application. Form-B can be downloaded from website www.energy.bih.nic.in.
 - (iii) Once the application is received, the necessary scrutiny of the information and the documents will be done at the levels of Electrical Inspector>Senior Electrical Inspector> Chief Electrical Inspector.
 - (iv) In case of non-attachment/absence of the necessary documents along with the application, the applicant shall be requested to submit the same and also a demand for inspection fee shall be raised.
 - (v) After submission of the requisite document and the inspection fee by the applicant, EI/SEI/CEI/ authorized person shall conduct an inspection of the electrical installation.
 - (vi) If the electrical installations are found in general conformity with IER, 1956, necessary approval will be issued.
- For a business/industrial investment requiring clearance from Electrical Inspectorate towards obtaining the electricity connection, State has developed an online system for filing and processing of the application by the Electrical Inspectorate. The service is delivered through the online Single Window Portal.
 - The applicant has to first register herself in the Single Window System(SWS) and fill in the Common Application Form (CAF) to get the Stage I clearance of the business/ industrial investment proposal from the State Investment Promotion Board.
 - After the Stage I approval, applicant can apply for the requisite approval from the electrical inspectorate through the SWS. The step by step process of online filing of CAF followed by application to the Electrical Inspectorate and processing of application by the Electrical Inspectorate is explained in **Annexure-I**.

B. Electrical Drawing approval :-

- Application from the owner in the prescribed format-FORM-A containing details of documents, (can also be down loaded from website:-www.energy.bih.nic.in) with details of proposed installation in HP/KVA/KW and electrical load sanction copy of the electrical energy supplier.

Detail of documents/drawing required :-

- Approved drawings of the existing installation if any. (In case of addition & alteration of the existing Installation if any)

Electrical Drawings:-(To be submitted in triplicate not to scale)

- Single line drawing of the electrical system showing the proposed, existing and future installation details if any, together with protective devices, measuring instruments, cable sizes along with their capacity and rating.
- Site plan showing the location, plan and elevation of the proposed Transformer and DG sets, showing the all round clearances.
- Earthing scheme showing the location of earth pits, size of earth leads and earthing method.
- Blue print/ computer print drawing duly signed by the owner and authorized consultant/engineer/licensed contractor as applicable.
- Fee for the approval of the drawings shall be raised and scrutiny of the drawings shall be done for approval.

- **Medium voltage installations :-** The supplier shall commence the supply of energy if he is satisfied that the consumer/owner has complied with provisions of IER, 1956.

- [The supplier has to submit a list of all consumers (Rule 10 of IER,1956), energy supplied by him along with the name of licensed contractor carried out the installation work and inspection report in the form II contained in Annexure-IX A of the IER, 1956]

* ***List of the Licensed Electrical contractor issued by Licensing Board, Electrical Inspectorate, Patna- uploaded on website :-www.energy.bih.nic.in***

- **Levy of Fee :-** Fee shall be levied for testing and inspection and generally for the services of an Inspector under the Act and the Rules in accordance with the scales specified in the Department of energy notification No 49 dated -26th November, 1991 and order issued there in.

- [where a supplier is about to supply at medium pressure (Voltage) to a consumer, he shall in notice to the Inspector of his intention to supply such energy, as required by sub-rule (3) of rule 51 of IER, 1956 also certify that the fees payable by the supplier and the consumer in respect thereof have been paid .

- **Payment of fees:-** (a) fees payable shall be paid :-
(i) at the local Treasury or the State Bank of India, Patna or any of the branches thereof to the credit of Government under the head "**0043. Taxes and Duties taxes** on Electricity fee Indian Electricity Rules, 1956, and fees for the electrical inspection of Cinemas" by challan in triplicate, the duplicate copy being forwarded to the Senior Electric Inspector, Bihar, Patna, or

(ii) at the office of the Senior Electric Inspector, Bihar, Patna/Electric Inspector, Patna by Money order or by Bank Draft. When the fees are deposited by Money order the purpose of deposit should be clearly stated in the Money order coupons, failing which money order will not be accepted.

(b) Fees for any inspection, examination or test shall be paid in advance.

Inspection and reporting :-

(a)	Scrutiny report and approval of drawing of the proposed Electrical installations.	10 days from the date of receipt of fees.
(b)	Approval under Rule 63 & 47A	20 days from the date of receipt of fees.
(c)	Approval under Rule 63 & 47A	Less than 10 days in respect of which notice of the intention to have such inspection made, after receipt of fees and a surcharge of 25 percent of the fee.

Electrical Inspectorate, Patna
Energy Dept. Govt. of Bihar

Format for approval of drawing- FORM- A

(Can be down loaded from website: www.energy.bih.nic.in)

We furnish the following particulars & drawings and request that the drawings may be approved and communicated: -

Details of Installation and address:-

1. Name of owner of the Organization and address
.....
.....
2. Location/Jurisdiction of power supply Co. (NBPDC/ SBPDCL/ franchisee) under which this service falls
3. Load sanction details and letter (Enclose a copy of it)
4. System of supply :-
 - (a) Incoming supply voltage
 - (b) Capacity of proposed Transformers/Generator with voltage ratio
5. The detail drawings are submitted in triplicate (Not in scale)
 - (I) Approved Electrical drawings (In case of existing Installation)
 - (II) Single line diagram.
 - (III) Site Plan of the equipment installation.
 - (IV) Earthing scheme.

Date:-

Signature

Place :-

Name-

Mobile/Telephone No.-

Format for approval to energies the HV/EHV and Generator installations under rules 63 & 47A of Indian Electricity Rule, 1956.

Application Format-(Form -B)

(Can be down loaded from website: www.energy.bih.nic.in)

1. Applicant

(a) Name of owner of the Organization and address.....
.....

(b) Name and address of the concerned officer of the Organization installation
.....

2. Electrical Installation details :-....
(Type/Voltage level)

3. Circuit Breaker/AB Switch details :-.....

4. Minimum ground/horizontal clearances of the bare conductors-

5. Whether the installation(s) are placed in positions, properly connected, duly completed and is (are) ready for energisation: -

(i) If, Yes- Attach completion certificate.....

(ii) If, No - Indicate targeted date of completion.....

6. Whether all the relevant provisions of the IER, 1956 have been duly complied with..... Yes/No

7. Enclosures :- (Please tick the relevant block as applicable for the installation)

(A) Electrical drawings (approved/not approved) -

(B) Site Test Result :-

(i) Insulation resistance test

(ii) Earth resistance of individual electrodes,

Combined electrodes and earth mat

(iii) High Voltage test

(iv) Polarity test

- (v) Relay calibration test
- (vi) Annunciation test
- (vii) Function, sequence and interlock test
- (viii) Dielectric test (BDV) of oil
- (ix) OCC/SCC test of Generator

8. Copy of :- (To be enclosed)

- (i) Transformer/Generator/equipments purchase Invoice
- (ii) Manufacture's routine test certificate
- (iii) List of equipments/motors installed with name, make, quantities and rating
(HP/KVA/KW)
- (iv) Details of licensed contractor/engineer/consultant (Authorized) executed the installation and performed the site tests as mentioned at Sl.No.-7.
- (v) In case the work sublet to another contractor then details of sub-contractor to be submitted.

Signature of owner/In-charge of Installation

Designation & Seal

Date

Mobile/Telephone No.-