



Drawing Approval from Tamil Nadu Electrical Inspectorate (TNEI)

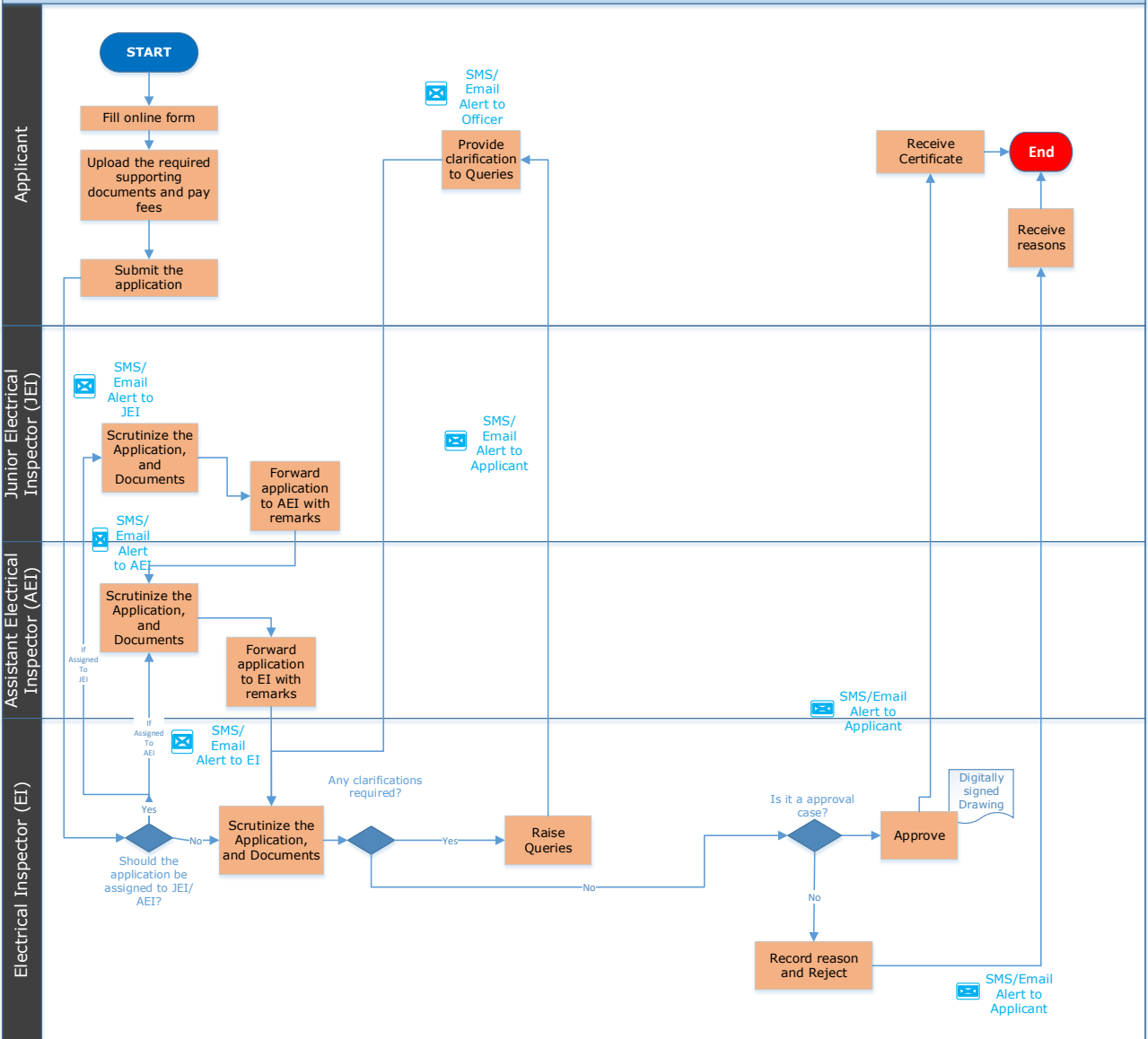
Procedure, List of Supporting Documents and Fees

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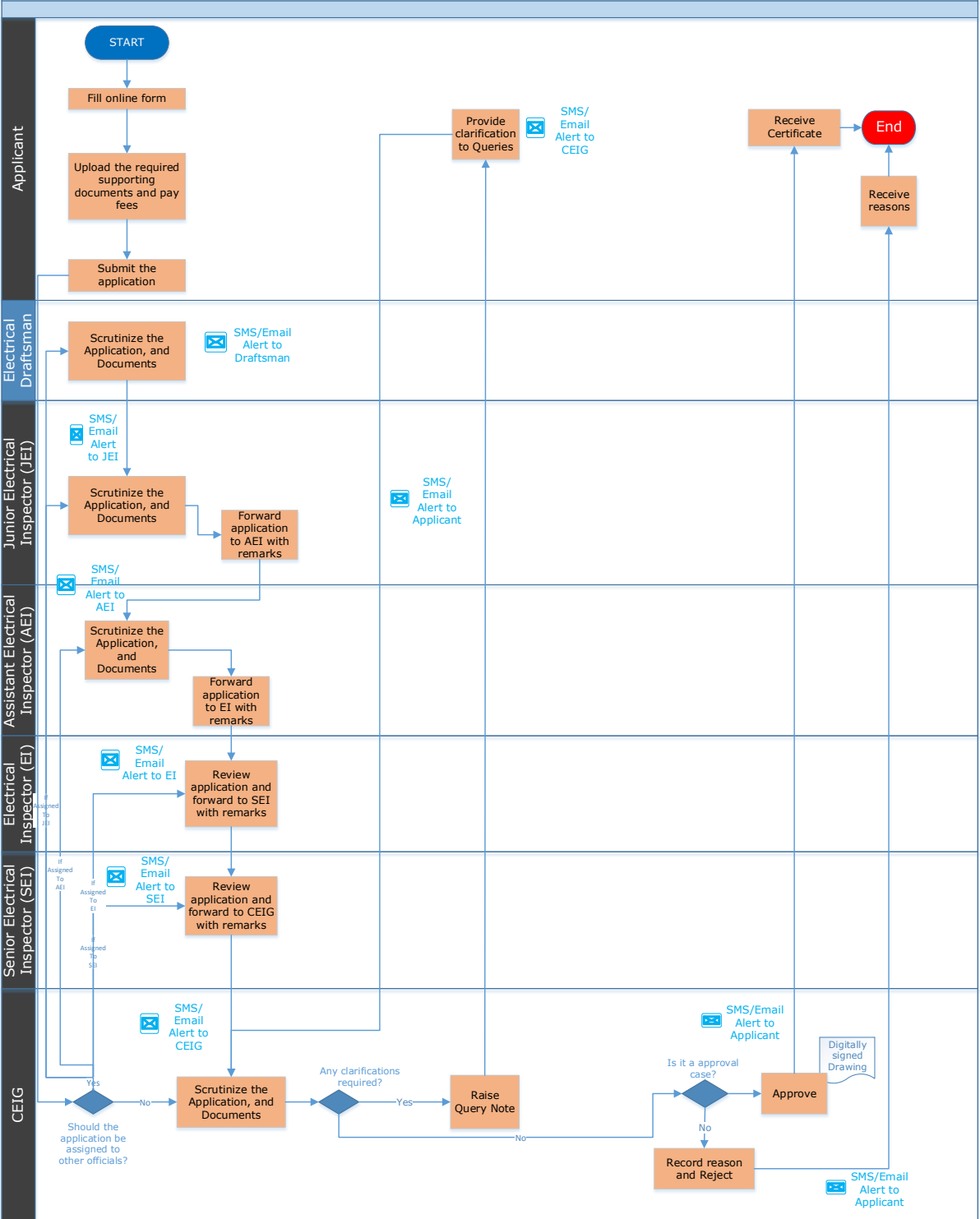
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1 Procedure

Procedure for Obtaining Drawing Approval- < 630 KVA

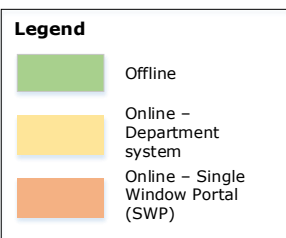
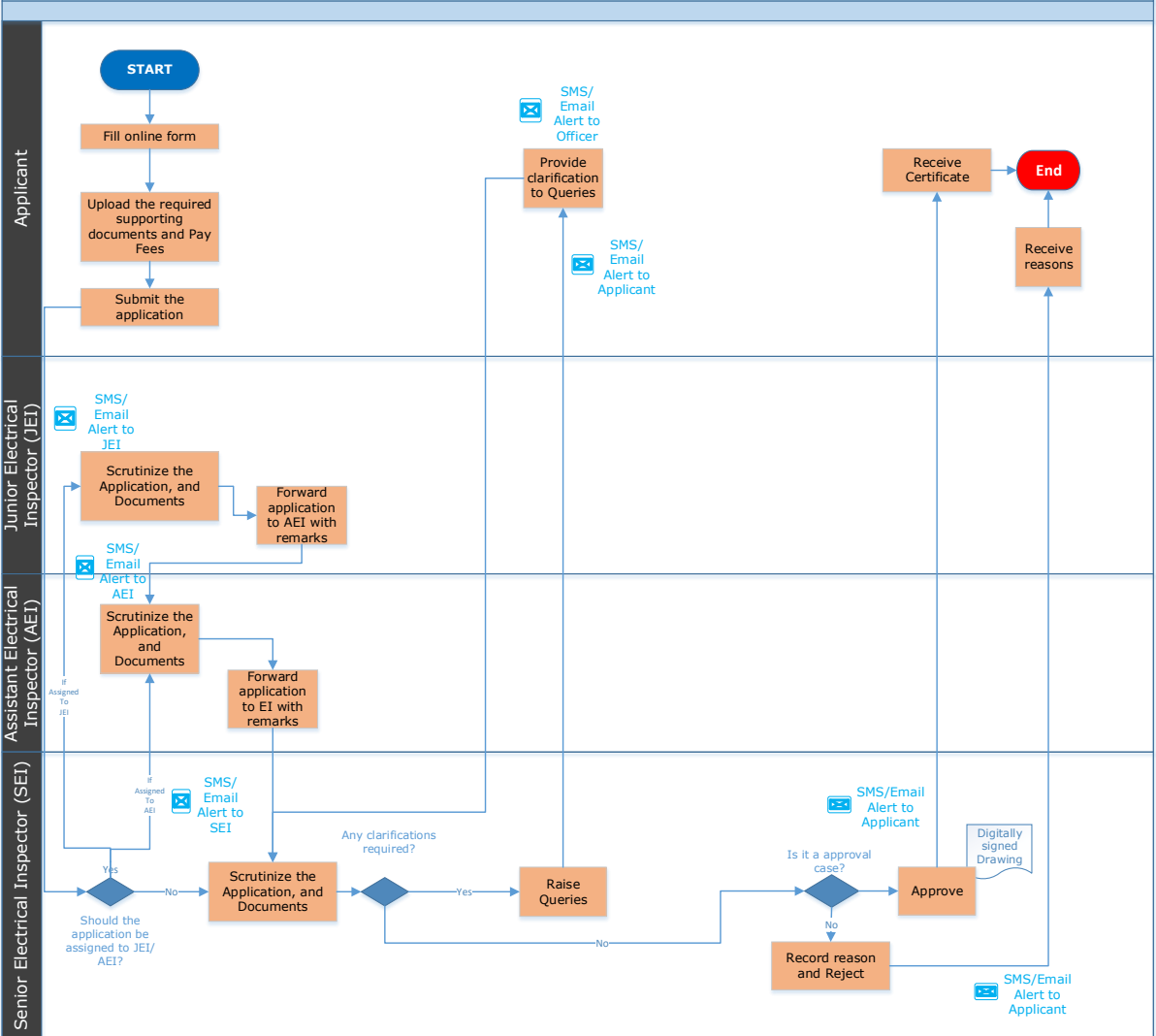


Procedure for Obtaining Drawing Approval (>630 KVA for Chennai Region and > 2500 KVA in Coimbatore region)



*In Coimbatore region, the application will be forwarded from AEI to SEI, authority EI will not be involved

Procedure for Obtaining Drawing Approval (between 630 KVA and 2500 KVA in Coimbatore Region)



2 Checklist of supporting documents

#	Item
1	Identification Proof If Single Ownership, Aadhaar card and GST Registration Certificate If Partnership, Partnership Deed If Private/Public Ltd., Memorandum and Article of association of Company If trust, Trust Deed If Registered Society, Registration Certificate from Government
2	Brief write-up on the proposal of setting up new enterprise or expansion of existing enterprise
3	Site plan showing point of supply, factory & other buildings, location of transformer(s), generator(s), power house, H.T. installation routes of main (Over Head & Under Ground) & Topo plan with adjacent plot details, main road approach, route of TANGEDCO's lines, etc.,
4	All switchyard layouts, Substation layouts showing the working clearances around transformer / switchgear / DG / equipment, safety working clearances to nearest structure/ building, clearance from ground in case of open air terminal installations, adopted creepage and air clearances, oil drain and containment arrangement, bill of materials used, factor of safety, applicable design calculations, etc.,
5	Single line diagram of the complete electrical installation from the origin of installation to final power and lighting circuits with complete details of transformer/generator/ motor/equipment, wiring, control & protection, method of laying, starting methods, earthing details, etc.,
6	a) High Voltage /Mains Panel room layout showing the plan, sectional, elevation & general arrangement drawings with clearances marked on all sides and ventilation arrangement b) Physical layout drawings of the factory showing the location of switchboard assemblies, DBs, control panels, equipment, motors, zone of explosive atmosphere if any, stairway approach, emergency exits, etc.,
7	Type of earthing system adopted with details of neutral earthing, protective earthing, etc., and complete earthing design arrangement with applicable calculations
8	In case of electrical installations receiving supply at 110kV or more, the following documents have to be sent additionally a) Soil resistivity test reports with polar graph of arriving average soil resistivity b) Earth mat design calculations for tolerable & attainable step & touch voltages, ground potential rise, transfer potential along with drawings as per IEEE 80/ IEC 61936 c) Short circuit current calculations at each system of voltage as per IS 13234/IEC 60909 standards d) Calculations for the anticipated mechanical stresses of switchyard equipment & supporting structures in respect of normal load conditions (dead, tension, erection, wind, etc.,) and abnormal conditions (switching forces, short-circuit current forces, loss of conductor tension, etc.,) e) Calculations for the temperature rise and ampacity of switchyard bus bars / HV bus ducts f) Lightning protection system design details with zone of protection coverage drawings g) Earth flat sizing calculations for functional earthing of transformer / NGT/NGR design, etc., and other relevant design calculations @ EHV
9	For all building installations, Upload the approved planning permit and approved drawing obtained from the DTCP / CMDA Authority
10	If the installation is in a building with Ground +3 floors and above, Elevation drawing indicating the total height of the building

3 Fees

I. EHV INSTALLATION (NEW INSTALLATION)

(i) Installation having power transformer of capacity totalling up to and inclusive of 10 MVA including the upstream and downstream installation excluding generator - **Rs.5,000/-**

(ii) Installation having power transformer of capacity totalling above 10 MVA transformer including the upstream and downstream installation excluding generator - **Rs.10,000/-**

II. High Voltage Installation (NEW INSTALLATION)

(i) Installation having transformer up to and inclusive capacity totalling 500 KVA including upstream and downstream installation and excluding generator-**Rs.1,000/-**

(ii) Above 500 KVA and up to and inclusive of capacity totalling 2000 KVA including upstream and downstream installation and excluding generator-**Rs.2,000/-**

(iii) Above 2000 KVA transformer of capacity totalling including upstream and downstream installation excluding generator- **Rs.4,000/-**

Note: For addition and enhancement of Transformer with load, fees shall be levied as specified above.

H.V. Generators

(i) New Generator Capacity up to and inclusive of 5000 KVA - **Rs.2000/-**

(ii) New Generator capacity above 5000KVA and up to and inclusive of 10,000 KVA- **Rs.3,000/-**

(iii) New Generator capacity above 10,000 KVA-**Rs.5,000/-**

M.V. Generators

(i) New Generator capacity up to and inclusive of 100 KVA- **Rs.250/**

(ii) New Generator capacity above 100 KVA and up to and inclusive of 500 KVA- **Rs.500/**

(iii) New Generator capacity above 500 KVA and up to and inclusive of 1000 KVA- **Rs.1,000/**

(iv) New Generator capacity above 1000 KVA-**Rs.1,500/-**

MULTISTOREYED BUILDING (HIGH RISE BUILDING)

(i) New Building more than 15 metres and up to and inclusive of 24 metres in height- **Rs.2,500/-**

(ii) New Building more than 24 metres in height- **Rs.5,000/-**

Note: (1) **For buildings availing HT supply, Transformer shall be billed extra as per Section II above.** Generator and other equipment need not be billed.

(2) The equipment should be erected and completion report sent within three years from the date of drawing approval failing which fresh approval should be obtained after remitting the drawing scrutiny fee in full.