

ANNEXURE-B

NEW TRANSFORMER INSTALLATION/ DISTRIBUTION TRANSFORMER CENTER INSTALLATION

- 1) Covering letter/ Application letter address to The Electrical Inspector office of the State Electrical Inspectorate 5th floor, GIDC Building Patto Panaji Goa. For approval for energire New Transformer Installation/DTC Installation.
- 2) Form "A" as enclosed in Annexure "1" duly filled and signed by the owner/authorized signatory.
- 3) Form "B" as enclosed in Annexure "2" duly filled and signed by the owner/authorized signatory.
- 4) Break up of Inspection fees as per schedule enclosed at Annexure "4"(a), "4(b)" & "4C".
- 5) Demand Draft in favor of Electrical Inspector, Govt. of Goa "payable at Panaji towards inspection fees obtained from Annexure "4"(a), "4(b)" & "4C".
- 6) List of equipment to be inspected giving details such as cable size, cable runs, equipment ratings in terms of voltage and current, charge over specification, interlocking arrangement adopted.
- 7) Manufactures test certificate for
 - a) Transformer
 - b) RUM/ Circuit Breaker /L.B.S.
 - c) LT Panel
 - d) LT/HT Cables OH conductors, ABCs etc
 - e) GOAB Switch, HG Fuse & LAs
- 8) Supervision certificate issued by Assistant Engineer, Electricity Department against the 15% supervision charges collected when the work is carried out by customer by employing licensed Electrical contractor.
- 9) Work completion and test report giving insulation resistance values and Earth resistance values issued by Licensed Electrical contractor having valid Electrical contractor license of appropriate voltage issued by Licensing Board, Govt. of Goa.
- 10) License copy of Licensed Electrical contractor issued by Licensing Board, Govt. of Goa.
- 11) Copy of Electrical supervision competency certificate/ permit License copy of Licensed Electrical contractor issued by Licensing Board, Govt. of Goa
- 12) Single line diagram of the Electrical installation giving details such as conductors used, length of line, GOAB, HG fuses, Las, circuit Breaker, load Breaker Switch, RMU Current and voltage ratings, other protection and interlocking arrangements adopted.

FORM-A

**APPLICATION FOR APPROVAL OF THE ELECTRICAL INSPECTOR TO
ENERGISE THE HV/EHV APPARATUS/INSTALLATIONS UNDER RULES 63 OF
I.E. RULES, 1956.**

1.	<p>(*) NAME OF THE INSTALLATION(s)</p> <p>PLACE/LOCATION</p> <p>WITH BRIEF DETAILS OF TRANSFORMER/D.G.SET. WITH SR. NO. & MAKE</p>	
2.	<p>(*) Name of the Applicant :</p> <p>(a) Organization:</p> <p>Address:</p> <p>(b) Nodal Officer:</p> <p>Address:</p> <p>Phone:</p>	
3.	Short circuit fault level of the installations	
4.	Interrupting capacity of Circuit Breakers	
5.	Minimum clearance of the bare conductor from the ground	N.A.
6.	Whether all relevant provisions of the I.E. Rules, 1956 have been duly complied with?	Yes/No
7.	<p>Whether the installation has been completed, connected and ready for energisation</p> <p>(i) If YES - Attach completion certificate</p> <p>(ii) If NOT - Indicate Target completion date and dates when inspection can be carried out</p>	<p>Yes/No</p> <p>Target Date:</p> <p>Inspection Dates:</p>
8.	<p>Supervision/Completion Certificate</p> <p>(i) Supervision Certificate by S.D.O if the works are undertaken by the consumer itself by engaging a licenced electrical contractor.</p> <p>(ii) Completion Certificate for all works executed by the Department either Departmentally or by engaging a licenced electrical contractor.</p>	

Application Form for approval of the Electrical Inspector to Energise the HV/EHV Overhead Transmission Lines and Underground Cables etc. under Rule 63 of the I.E. Rules 1956.

1	Name of the feeder/overhead line	
2	Applicant: (a) Organisation & Address (b) Nodal Officer, with Address, Phone & Fax nos.	
3	Status of works (a) If completed (furnish completion certificate) (b) If not completed (Furnish target completion date and dates when inspection can be carried out)	
4	Route length of the feeder (KM)	
5	Size of: a. Conductor b. Ground wire	
6	Span(meter) a. Average b. Minimum c. Maximum	
7	Minimum clearance to ground (meter) a. At Normal spans b. At Road Crossing i. National Highway ii. State Highway iii. Other Roads	
8	Minimum clearance at a. Power Lines Crossing i. 400 KV ii. 220 KV iii. 132 KV iv. 66 KV v. 33/22 KV vi. 11 KV vii. LT LINES b. At Railway crossing c. At River crossing d. At special crossing	
9	Minimum calculated factor of safety for conductor and Towers	
10	Span(meter) a. Anti-climbing devices	

Calculation of Inspection Fee for HV installation (below 66 kV)

Please calculate the inspection fee as per the following format and send the Demand draft in favour of "Electrical Inspector, Govt. of Goa", payable at Panaji, Goa.

Sl. No.	Equipment	Rate (Rs.)	Quantity	Amount (Rs.)
1	Double Pole Structure with LA, GOAB, Fuse			
	11 kV	Rs. 500		
	22 or 33 kV	Rs. 1000		
2	HV Current Transformers (set of three)	Rs. 250	set	
3	HV Potential Transformers (set of three)	Rs. 250	set	
4	HV Lightning Arrestors (set of three)	Rs. 250	set	
5	HV Breaker /OCB/VCB	Rs. 500		
6	Transformer			
	0 - 100 kVA	Rs. 250		
	above 100 - 500 kVA	Rs. 500		
	above 500 - 1000 kVA	Rs. 1000		
	above 1 - 5 MVA	Rs. 1,500		
	above 5 - 10 MVA	Rs. 2,500		
	10 - 20 MVA	Rs. 3,750		
	each additional 10 MVA	Rs. 500		
7	Cable			
	HV cable / run	Rs. 250	run	
	MV Cable / run	Rs. 100	run	
8	Bus-duct			
	HV bus-duct	Rs. 250		
	MV bus-duct	Rs. 100		
9	Capacitors installation per bank	Rs. 500	bank	
10	Battery bank installation per room	Rs. 500	room	
11	HV panel (without breaker)	Rs. 250		
12	MV Panels /LT Panels	Rs. 100		
13	Motors			
	0 - 5 HP	Rs. 30		
	above 5 - 10 HP	Rs. 45		
	above 10 - 25 HP	Rs. 150		
	above 25 - 50 HP	Rs. 250		
	above 50 - 100 HP	Rs. 400		
	> 100 HP	Rs. 500		
14	Lighting load: (limited to Rs. 500 max.)	Rs. 50 / kW	kW	
15	DG-set: a) Generator			
	0 - 31.25 KVA	Rs. 250		
	above 31.25 - 125 KVA	Rs. 750		
	above 125 - 625 kVA	Rs. 1,500		
	above 625 - 1250 kVA	Rs. 2,500		
	above 1250 kVA - 12.5 MVA	Rs. 5,000		
	above 12.5 - 62.5 MVA	Rs. 7,500		
	above 62.5 - 250 MVA	Rs. 10,000		
	above 250 - 625 MVA	Rs. 15,000		
	each additional 125 MVA	Rs. 5,000		
	b) Cable for DG-set (MV)	Rs. 100		
	c) Panel for DG-set (MV)	Rs. 100		
			Total	

SCHEDULE OF INSPECTION FEES

ANNEXURE-4(b)

(w.e.f 5th Dec 1998)

4(b)

MOTORS (A)

1.	Upto 05HP		3.75KW	30.00
2.	Above 5	Upto 10 HP	7.5 KW	45.00
3.	Above 10	Upto 25HP	18.75KW	150.00
4.	Above 25	Upto 50 HP	37.5KW	250.00
5.	Above 50	Upto 100 HP	75 KW	400.00
6.	Above 100HP			500.00

GENERATORS (B)

1.		Upto 25KW	250.00
2.	Above 25KW	Upto 100KW	750.00
3.	Above 100KW	Upto 500KW	1,500.00
4.	Above 500KW	Upto 1000KW	2,500.00
5.	Above 1000KW	Upto 10,000KW (10MW)	5,000.00
6.	Above 10,000KW	Upto 50,000KW (50MW)	7,500.00
7.	Above 50,000KW	Upto 2,00,000KW (200MW)	10,000.00
8.	Above 2,00,000KW	Upto 5,00,000KW (500MW)	15,000.00
9.	Each additional 1,00,000KW		5,000.00

TRANSFORMERS & SYNC CONDENSORS (C)

1.		Upto 100KVA	250.00
2.	Above 100KVA	Upto 500KVA	500.00
3.	Above 500KVA	Upto 1000KVA	1,000.00
4.	Above 1,000KVA	Upto 5,000KVA	1,500.00
5.	Above 5,000KVA	Upto 10,000KVA	2,500.00
6.	Above 10,000KVA	Upto 20,000KVA	3,750.00
7.	Each additional 10,000KVA		5,000.00

POLE MOUNTED S/S (D)

1.	Pole Structure (Include GO SWITCHES, LA & DO FUSES) MV 275.00 HV (Upto 11KV) 500.00 HV (Above 11KV) 1,000.00	
2.	Each Distribution Box	100.00

GENERATING STATIONS (B)

		EHV/HV	MV
1.	Bus Duct/ Cables from Generator to Switchgear	250.00	100.00
2.	Control Panel of each Generator	250.00	100.00
3.	Block of Distribution Panels with continuous Bus	250.00	100.00
4.	Cable / Overhead Line from Power House to Switchgear	250.00	100.00
5.	Cable from transformer to Switchgear/ Control Panels	250.00	100.00
6.	GO Switch/Bus Links for small Outdoor Transf. In. Gen. Stn		100.00

ORID SUBSTATION / OUTDDOR SWITCHYARD (66KV & Above) (C)

1.	Each Block of Panels in Control Room or Substation	50.00 Per Cubicle
2.	Battery room Installations	500.00 Per Battery Room
3.	One Block of MV Distribution Panel or Switches	250.00
4.	One Bank of Capacitors	500.00
5.	Each set of LA's, CT's, PT's CVT's and Coupling Capacitors	250.00
6.	Each set of Buses inclusive of its Isolator	250.00
7.	Each set of EHV Isolator	(a) 220KV & Above (b) Below 220KV
		500.00 250.00
8.	Each set of OCB's/SF	(A) EHV (B) HV
		1,000.00 500.00

DISTRIBUTION SUBSTATION (33/11.33/0.416. 11/0.416KV) (D)

1.	Incoming Pole Structure with No Transformer but with GO Switch, DO Fuse and LA (A) MV - 275.00 (B) HV Upto 11KV - 500.00 (C) HV Above 11KV -1,000.00	
2.	Block of Control Panels with Circuit Breakers and continuous Bus	50.00 Per Panel
3.	HT Cable from pole to transformer	250.00
4.	Cable from Pole to Control panel (Indoor S/S)	250.00
5.	Set of Control Panels	250.00
6.	Cable from Control Panel to transformer	250.00
7.	Each Distribution Box	100.00
8.	Cable from MV Switch Board to outgoing Overhead Line	50.00 Per Cable

OVERHEAD LINES & CABLES (I)

1.	EHV Line / Cable (Above 33KV)	250.00
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Calculation of Inspection Fee for EHV installation (66 KV and above)

Grid Sub station/ out door switchyard (66 KV and above)

Sl. No.	Equipment	Rate (Rs.)	Quantity	Amount (Rs.)
1	Each block of panels in control room or sub-station	Rs. 50 per cubicle		
2	Battery room installation	Rs. 500 per battery		
3	One block of MV distribution panel or	Rs. 250		
4	One bank of capacitors	Rs. 500	set	
5	Each set of LAs, CTs, PTs, CVTs and coupling Capacitors	Rs. 250	set	
6	Each set of buses including isolator	Rs. 250	set	
7	Each set of EHV isolator		set	
	Below 220 KV	Rs. 250		
	220 KV and above	Rs. 500		
8	Each set of Circuit Breaker	Rs. 1000		
		Rs. 1000		
	Total			

Inspection fee for Overhead lines and cables

Sl. No.	Description	Rate (Rs.)	Quantity	Amount (Rs.)
1	EHV line/ Cable 33 KV and above	Rs. 250/ per 5 km		
2	HV line/ Cable below 33 KV	Rs. 150/ per 5 km		
3	MV line/ cable	Rs. 100/ per 5 km		
4	Tee off point			
	EHV/HV	Rs. 100/ per point		
	MV	Rs. 50/ per point		
5	Each tower in EHV line (above 66 KV)	Rs. 250		
6	Each crossing (Road, river, lines and buildings)			
	EHV/HV line	Rs. 250		
	MV line	Rs. 50		
	Total			