Common Schedule of Rates 2014-15
(Effective from 20.11.2014)

PREFACE

*****

1.0 Schedule of Rates (SR) are a set of information indicating Rates of Various Materials and Labour to be adopted for preparation of Estimates and DPRs.

2.0 After the formation of ESCOMs separate ESCOM wise SRs were being prepared and issued. In the monthly meeting held on 04.05.2009 Chaired by the Principal Secretary to Energy Dept, Government of Karnataka wherein MD KPTCL and MD's of all ESCOM's were present, it was directed to explore the possibility of preparing a Common SR applicable to all the ESCOMs.

3.0 Accordingly Common SR across all ESCOM's have been adopted as under

a. 1st Common SR – with effect from 01.08.2009
b. 2nd Common SR – with effect from 01.07.2010
c. 3rd Common SR – With effect from 01.05.2012

Procedure adopted for Preparing Common SR 2014-15

4.0 The Government of Karnataka vide letter number EN 68 VSC 2014 Dt: 20.08.2014 has constituted the Common SR committee comprising of :

1.	Sri Pankaj Kumar Pandey, Managing Director, BESCOM, B'lore	:	Chairman
2.	Sri Nagesh H, Director (Technical), BESCOM, Bangalore	:	Member
3.	Sri Lakshmana N, Director (Technical), MESCOM, Mangalore	:	Member
4.	Sri Bhagya Naik B, Director (Technical), CESC, Mysore	:	Member
5.	Sri Angadi Ashoka, Director (Technical), HESCOM, Hubli	:	Member
6.	Sri Neelya Naik, Director (Technical), GESCOM, Gulbarga	:	Member
7.	Sri Narayana Naik H, CGM (Ele), T&P, KPTCL	:	Member
8.	Sri U R Subramanyam, Director of Economic & Statistics	:	Member
9.	Sri Debashish Chakarborty, GM, IEEMA	:	Member
10.	Smt. G Sheela, GM (Ele), QS&S, BESCOM	:	Convener

The Committee met on 18.09.2014 and issued guide lines to be followed for revising material prices and labour charges. The committee directed to include new materials in the proposed Common SR 2014-15 and also to get rates from neighboring states such as Andhra Pradesh, Maharashtra, Kerala & Tamil Nadu.

The Committee further directed that the draft Common SR shall be prepared in accordance with the guide lines issued and be circulated among all the members to obtain the comments and suggestions before the second meeting.

5.0 The draft Common SR 2014-15 prepared in accordance with the directions issued in the meeting held on 18.09.2014 was circulated before the second meeting and was tabled for discussions in the meeting held on 18.10.2014.

6.0 The committee deliberated and discussed on the draft proposal placed in the meeting and accorded concurrence to adopt the draft proposal. The committee issued further guide lines to include Galvanized Line Structural Materials, Cable Entry Type Transformers, New Type Underground LT Feeder Pillar Box, Safety Materials and to delete LT Wiring Kit. The committee also directed to include Testing, Pre Commissioning Charges for 11KV CTs & PTs, LT CTs, Meters RMUs, LBS and HT/LT UG Cable and Transformers Repair Charges for major repairs.

7.0 The above suggestions were incorporated and the modified draft proposal was placed before Chairman SR Committee in the meetings held on 04.11.2014 and 12.11.2014, in the meeting it was directed to include transformer repair charges for minor repairs also with 20% increase over the prevailing repair charges which are applicable in BESCOM.

8.0 In accordance with the directions issued, the material and labour charges have been revised.

9.0 Methodology adopted for revising material prices

- **Weighted Average & 5% on weighted average** on procurement cost of materials procured by ESCOMs have been considered. Eg.: Poles & Transformers.
- For some material, prevailing SR rates have been updated using **IEEMA price variation formulae.** Eg. HT/LT UG Cables & Insulators. Average of IEEMA indices for June, July & August-2014 have been consider or updating the prices.
- For some material, **prorate prices of similar materials** have been adopted, for which rates are not available, in any of the above process. Eg.: RMUs & some Line Materials.
- For some materials, **rates have been worked out** considering the raw material & conversion cost. Eg: Line Materials and Conductors.
- **Market Rates** have been considered for some of the materials. Eg: AB Cable, Dry & Amorphous core transformers, Compact Sub Station, RMUs.
- **KPWD Electrical SR Rates** for some materials like - have been adopted.
- **KPWD Rates have been adopted for civil works.**
- **In respect of 33 KV system works, the material rates have been work out based on the weighted average of procurement rates of all ESCOMs and IEEMA updated of rates.**

- **Existing rates** have been continued for some of the materials. Eg: Epoxy Termination Kits, Conventional RMU.
- Rates of neighboring Rates have been taken for comparison purpose.
- For scrap materials, weighted average of E-auction rates of BESCOM during 2014 has been considered.

NOTE:

1. The prevailing excise duties and taxes as applicable for materials have been considered in arriving the material cost.
2. THE SCHUDULE OF RATES FOR MATERIALS IS "FORD" INCLUSIVE OF ALL APPLICABLE DUTIES, TAXES AND FREIGHT & INSURANCE CHARGES.

10.0 Methodology adopted for revising Labour

25% increase is considered on Labour index of 5780 as per circular no DES/01/PWX/2014 Dtd: 14.02.2014, issued by Directorate of Economics and Statistics, Bangalore as compared to 4644 considered for Common SR 2012-13.

Labour charges are included for the following:

- Special Labour Charges for :
  - 1 to 2 Poles Works &
  - 3 to 5 Poles Works in respect of Gangakalyana & Drinking Works
  - 1 to 4 Poles works in respect of Service Connection, E&I Works
- New design & remodification of GOS.
- Charges for Fixing & Releasing of insulators applicable to insulator replacement works only.
- Fixing & releasing of meters.

The following are continued:

- **Special locality allowance:** The prevailing special locality allowances are continued for MESCOM, GESCOM, HESOM and CESC. Existing Special Locality Allowance for BESCOM is revised and adopted.
- **Additional labour charges**: 10% Additional labour charges for works in Hazardous Locations is continued.
- **Break Down Works**: For attending to the BREAK DOWN works for speedy restoration of Power Supply, payment of 25% additional Labour charges specified is continued.

NOTE: The above additional labour charges shall be paid with the specific approval for the Executive Engineer by way of O.M and shall not be paid merely because it is provisioned in the estimate.

- **Purchase of Small Items:** The LEC's carrying out works on labour contract basis is authorized to purchase small items other than poles. Conductors, Transformers, Lighting Arrestors, H.T. Insulators, Meters and GOS at SR Rates wherever the execution of the work is held up due to non availability of such materials provided the cost of such purchase is limited to 10% of the total estimate cost and after the specific approval of the Executive Engineer by the way of an OM.
- **Employees Cost**: Employees cost to be provided in the estimates at 20% of the total labour charges is continued.

11.0 Statutory Payments:

a. The prevailing rates of inspection of works revised vide No: E.N.71 EBS 2007, dated: 28.08.08 by Energy Department, Government of Karnataka and are duly enclosed in SR and instructed to include the relevant rates of Electrical inspectorate charges in all estimates and DPRS to be prepared. Whenever the inspectorate charges are revised the same shall be followed.

b. Road cutting, footpath cutting charges etc., payable to civic bodies shall be included in the estimate as applicable.

12.0 General Guidelines:

a. The Squirrel ACSR conductor shall not be used for any new works (B.O. No. B19/6723/95-96/21.06.2000 of KEB.

b. The Average span for new 11 KV lines in Urban areas shall be 40 Mtrs. In Rural areas the average span length shall be 50 Mtrs. However the average span will be 60 Mtrs. in respect of lines drawn to IP Sets.

Minimum size of the conductor to be used:

(a) 11kV lines:

Minimum size of the conductor to be used for all new 11 KV lines shall be Rabbit ACSR only.

(b) LT lines:

a) **Urban areas:** Minimum size of conductor to be used for phases and neutral shall be Rabbit ACSR conductor.

b) **Rural areas:** The minimum size of conductor to be used shall be Weasel for phases and neutral.

c) **Only Weasel** Conductor shall be used for Street Light Control, Gangakalyana and water works.

(c) Usage of Poles:

- Only RCC poles shall be used for dead ends, DP structures, Transformer Centers and Anchor Points.
- PSC/PCC poles shall be used as intermediate poles.
- Square Poles shall be used for erecting of 25KVA Transformers on single pole.

(d) Life Time Guarantee:

Where ever Dry Type Transformers, Cable Entry Type Transformers, Compact Sub-Stations are provisioned in the estimate/used in the field procured by the prospective consumer for self execution works, the equipments shall be maintained for the entire life time by the consumer.

- In all Self Execution works provision shall be made for BEE 3 Star or Higher Rated Transformers only upto 100KVA. Provision for Conventional Transformers may be made for 250kVA and above capacity.
- Material code number for all materials have been provided in the SR and the same has to be used while preparation of the **estimate and in the indents**.
- All the field officers and inspecting officers should ensure that the materials used shall confirm to the relevant IS specifications and the works executed are in accordance with the approved drawings / stipulated norms. The UG cable/PVC wires used for the work shall carry ISI markings.
- Guy set includes Anchor Rod, Turn buckle, Guy wire, Strain Insulator, Guy clamp with Bolts, Nuts and Washers.
- As per Government Electrical Inspectorate order No. CEG/ D/T/13306/86-87 dated: 17.12.1986, E.G. Stirrups shall be used in the following locations:
    - Within the town / village limits.
    - In the factory premises.

13. Provision for ACSR Conductor:

a. ACSR conductor in the cost data sheet includes an additional quantity of 1.5% of the requirement to cover the sag, binding wire for binding conductor on the insulators and jumper connections.

b. While working out the cost data sheet, provision has been made for all the materials including general conductor accessories. In case of requirement of any special accessories like wedge clamp, strain clamp etc., separate provision has to be made for such materials.

c. All the necessary materials required for execution of work are included in the cost data sheet. Hence contingencies at 2% on the estimate cost is provisioned only to take care of unforeseen materials and labour and shall be paid as per actual if incurred, with the specific approval of the Executive Engineer, by way of issue of O.M.

14. Provision for inspectorate charge shall be made as a separate item in the estimate as per the applicable rates. The current applicable rate of inspectorate charges is provided in the Common SR.

15. For short lines less than 1 KM, the estimates shall be prepared as per actual requirement of the materials.

16. Concreting:

a. Concreting of poles shall be taken up depending on soil conditions. Separate provision has to be made in the estimate, at the rates provided in the SR.

b. 1:4:8 Cement Concrete has to be provided for base concreting.

c. 1:2:4 cement concrete has to be provided for pole concreting coping etc,.

17. All transformers above and inclusive of 25 KVA capacities are to be provided with GOS and HG fuse units.

18. As per Board order No. KEB/308/3/(82-83) dated:25.02.1993 of KEB and as per the decision of Technical Committee meeting held on 25.06.1993, 25/63/100 KVA transformer shall be provided with LT Protection Kit. Transformers with 250 KVA capacities and above shall be provided with LT Distribution Box with MCCB. In city limits transformers with 100 KVA capacity shall be provided with LT Distribution Box with MCCB, the rate has been furnished in the Common SR.

19. Cost data sheets for works of providing HT&LT Over Head Lines, Aerial Bunched Cables, Distribution Transformers Centers for 25/63/100 KVA on single 9 Mtr. RCC poles of Square Section & DP Sets, RLM unit for 25/63/100 KVA Transformer Centers, Compact RMUs & Packaged Sub Stations, HT UG Cables have been worked out and included in the Common SR for easy reference. However any modification or addition / deletion may be considered depending on the field conditions.

NOTE:

1. As per the CEA guidelines, Transformers of capacity more than 25kVA have to be erected on DP structures/Plinth only.
2. Correspondence has been made with CEA regarding erection of Transformers on 11 Mtrs. Spun Poles and till such time the final directions are received the prevailing instructions in force in respective ESCOM's shall be followed.
3. If the depreciated value of the cable proposed to be released is less than the sum of estimated labour for such release, road cutting charges payable to BMP and other civic bodies, then the releasing of the cable need not be resorted to.
4. Labour charges for releasing of materials shall be at 90% of the cost of erection. (Please see Corporate Office circular No. BESCOM/BC-35/07-08/CYS-86/DT: 23.10.07)
5. While executing the re-conductoring work the released conductor shall be returned to stores as credit in accordance with circular No. BESCOM/GM (T)/ BC-20/F-664/05-06/CYS-174, Dt: 10.01.06. (See page No_____)
6. The following additional components have to be included while preparing estimates for Distribution works which are executed on turnkey / partial turnkey basis:
    a. Service tax @ 12.36% on labour cost.
    b. Works contract tax.(if applicable)
    c. Transportation cost from Stores to site @ 2% on materials cost.
    d. Watch and ward cost @ 1% on material cost.
    e. Insurance charges @ 1% on material cost against theft & accidents.
    f. Performance guarantee and loss of interest on margin money for Bank Guarantee (BG) @ 2.5% of the value of BG.
    g. Statutory charges as per actual (For Inspectorate, Civic body etc.,)
    h. Compensation cost as per approved norms for tree cutting, crop insurance etc.
7. In estimates to be executed on labour contract basis, provision for Provident Fund charges at 13.61% and ESI at 4.75% (or as applicable) on Total Labour Charges shall be made in the estimate.

20. Important Points

- **Materials:**

- The rates in respect of items both material & labour, which are not found in this schedule of rates, but need to be provided in estimate may be obtained from the office of Quality, Standard & Safety, Corporate Office, BESCOM or from the concerned Corporate office of ESCOMs.

- The schedule of rates for materials is "FORD" inclusive of all applicable duties, taxes and freight & insurance charges.

  - **Labour charges:**

- **Component of labour charges:** The labour charge does not include any additional components.
- The additional labour charges towards special locality allowance break down charges and works in hazardous installations shall be included in the estimates as applicable.
- The special locality allowance is allowable only on basic labour charges and not on additional labour charges for works at hazardous installation and break down charges.
- **Ganga Kalyana and water works:**

  a. Special labour charges for 1 to 2 pole and 3 to 5 pole works have been separately proposed exclusively for Ganga Kalyana and water works.
  b. This is not applicable for any other type of work including E&I works.
  c. These rates are applicable only when 1 to 2 pole and 3 to 5 poles are involved and no other associated works.
  d. Estimates shall not be split to show the pole works and Transformers works etc., separately to claim these special labour charges.
  e. Certificate has to be furnished by the section officer who prepares the estimate that the estimates are not split to claim the above labour charges.

(G. SHEELA)
CONVENOR SR COMMITTEE &
GENERAL MANAGER (ELE.), Q, S&S,
BESCOM.

A. Typical Cost Data Sheet for preparation of estimates on LABOUR CONTRACT

Sl. No.	Particulars	Amount (in Rs.)
1	Materials Cost	
2	Labour Charges	
3	Special Locality Allowance @ ……..% on labour charges on Sl. No. 2 above (applicable for areas mentioned in page no. …….. Part-6)	
4	Break Down Charges at 25% on labour for speedy restoration of power on Sl. No. 2 as above. (To be incorporated after competent approval).	
5	Additional labour charges at 10% on Sl. No. (2) for working on Hazardous installations. (To be incorporated after competent approval).	
6	Service Tax @ 12.36.% on Total labour charges.	
7	Contribution towards employees provident fund charge @ 13.61% & ESI @ 4.75% (wherever applicable) on Total labour charges	
8	**Transportation cost from stores to site (wherever applicable at 2 % on material cost)	
9	*Contingencies @ 2% on Total material & labour	
10.	Employees cost @ **20%** on total labour Charges (2+3+4+5)	
11	Statutory charges as per actuals (Inspectorate charges, civic body charges etc.,)	
12	Compensation cost for tree cutting etc., as per approved norms.	
13	**Total Cost of Estimate in Rs.**	

Note:-

1) All the materials required for execution of works are included in the cost data sheet. The contingency at 2% provisioned is only to take care of unforeseen material and labour and when applicable shall be paid after the specific approval of the Executive Engineer by way of issue of an O.M.

2) **This is to cover the admissible transportation charges, Labour for loading and unloading and for carrying the materials by head load, which shall be paid as per actuals.

4) <u>It shall not be construed that all the above amounts mentioned in the estimates has to be paid to the contractor</u>. The payment shall be arranged as per actuals.

5) The LEC's carrying out works on labour contract basis are authorized to purchase small items other than poles, Conductors, Transformers, Lightning Arrestors H.T. Insulators, Meters and GOS at SR rates wherever the execution of the work is held up due to non availability of such materials provided the cost of such purchase is limited to 10% of the total estimate cost and after the specific approval of the Executive Engineer by the way of an OM.

B. Typical Cost Data Sheet for preparation of Estimates for TOTAL TURNKEY

Sl. No.	Particulars	Amount in Rs.
1	Materials cost	
2	Labour charges	
3	Service Tax @ ..... %on Total labour charges.	
4	Contribution towards employees provident fund charge @ 13.61% & ESI @ 4.75% (wherever applicable) on Total labour charges	
5	Transportation cost from stores to site @ 2% on material cost	
6	Contingencies @ 2% on material + labour cost	
7	Watch and ward cost @ 1% on material cost	
8	Insurance cost against theft & accident @ 1% on material cost	
9	Performance guarantee and loss of interest on margin money for BG @ 2.5% of the value of BG	
10	Statutory charges as per actual (Inspectorate charges, civic body charges etc.,)	
11	Compensation cost for tree cutting etc., as per approved norms	
12	**Total Cost in Rs.**	

Note:-

1) While preparing the estimate provision has to be made specifically for the conductor accessories such as Wedge/ PG clamps, Alkathene Tube, etc., duly assessing the quantity.

2) The contingency at 2% provisioned is only to take care of unforeseen material and labour. This has to be paid only for any additional work carried out and as per actual.

3) The materials to be procured by the agency shall conform to ESCOM's specifications and got inspected before execution of work. The material shall be procured by the agencies from the approved vendors.

C. Typical Cost Data Sheet for preparation of Estimates for PARTIAL TURNKEY

Sl. No.	Particulars	Amount in Rs.
1	Materials cost a. ESCOM's portion b. Agency portion	
2	Labour charges	
3	Service Tax @ ..... %on Total labour charges.	
4	Contribution towards employees provident fund charge @ 13.61% & ESI @ 4.75% (wherever applicable) on Total labour charges	
5	Transportation cost from stores to site @ 2% on material cost	
6	Contingencies @ 2% on material + labour cost	
7	Watch and ward cost @ 1% on material cost	
8	Insurance cost against theft & accident @ 1% on material cost	
9	Performance guarantee and loss of interest on margin money of BG @ 2.5% of the value of BG	
10	Statutory charges as per actuals (Inspectorate charges, civic body charges etc.,)	
11	Compensation cost for tree cutting etc., as per approved norms	
12	**Total Cost in Rs.**	

Note:

1) While preparing the estimate provision has to be made specifically for the conductor accessories such as Wedge/ PG clamps, Alkathene Tube, etc., duly assessing the quantity.

2) The contingency at 2% provisioned is only to take care of unforeseen material and labour and is not payable to the contractor at 2% but payable at actuals.

3) The materials to be procured by the agency shall conform to ESCOM's specifications and got inspected before execution of work. The material shall be procured by the agencies from the approved vendors.

D. Typical Cost Data Sheet for preparation of estimates on Deposit Contribution work

Sl. No.	Particulars	Amount (in Rs.)
1	Materials Cost	
2	Labour Charges	
3	Locality allowance at .... % on labour charges (applicable for areas mentioned in page No. ..... Part-6)	
4	Service Tax @ 12.36%on Total labour charges.	
5	Contribution towards employees provident fund charge @ 13.61% & ESI @ 4.75% (wherever applicable) on Total labour charges	
6	Transportation cost from stores to site @ 2% on material cost wherever applicable	
7	% *Contingencies @ 2% on Total material & labour	
8	Employees cost @ 20% on total material + labour Charges (1+2+3)	
9	Statutory charges such as Road cutting charges payable to BBMP or local authorities as per actuals	
10	Government electrical inspectorate charges as per actuals	
11	Compensation cost for tree cutting etc., as per approved norms	
12	Total Cost of Estimate in Rs.	

Note:

1) The estimate is only provisional.
2) The final cost of the work shall be worked out after completion of the work and difference amount has to be collected from the applicant before commissioning.

E. Typical Cost Data Sheet for preparation of estimates on Self execution work

Sl. No.	Particulars	Amount (in Rs.)
1	Materials Cost	
2	Labour Charges	
3	Locality Allowance @ ....% on Labour Charges (Applicable for areas mentioned in Page No. ..... Part-6)	
4	*Contingencies @ 2% on Total material & labour	
5	Employees cost @ 10% on total labour Charges (2+3)	
6	Statutory charges such as Road cutting charges payable to BBMP or local authorities as per actuals.	
7	Government electrical inspectorate charges as per actuals.	
8	Compensation cost for tree cutting etc., as per approved norms	
9.	Total Cost of Estimate in Rs.	

Note:- Supervision charges shall be collected at 10% on all the items from 1 to 4 .

1) All the materials required for execution of works have to be arranged by the agencies.

2) No material shall be supplied by ESCOMs.

3) The materials shall conform to ESCOMs specifications and shall be got inspected before execution of work. The material shall be procured by the agencies from the BESCOM approved vendors. Bills and Test Certificate in respect of the materials procured shall be furnished to BESCOM (Please see circular No. BESCOM/BC-20/F-1111/2008-09/Dated 24.06.2010).

F. Typical Cost Data Sheet for preparation of Estimates for TOTAL TURNKEY (33kV System)

Sl. No.	Particulars	Amount in Rs.
1	Materials cost	
2	Labour charges	
3	Civil Engineering Charges	
4	Locality Allowance @ ....% on Labour Charges + 30% of Civil Engineering Charges (Applicable for areas mentioned in Page No. ..... Part-6)	
5	Total Material Cost = Material cost + 70% of civil Engineering Charges.	
6	Total Labour Charges = Labour charges + 30% Civil Engineering charges + locality allowance.	
7	Employees cost at 20% of the labour charges.	
8	Service Tax @ ..... %on Total labour charges.	
9	Work Contract Tax @ 12.5% on 70% of Civil Engineering Charges.	
10	Contribution towards Employee Provident Fund Charges & ESI @ 4.75% (wherever applicable) on Total labour charges at 13.61%	
11	Transportation cost from stores to site @ 2% on material cost	
12	Contingencies @ 2% on material + labour cost	
13	Watch and ward cost @ 1% on material cost	
14	Insurance cost against theft & accident @ 1% on material cost	
15	Performance guarantee and loss of interest on margin money for BG @ 2.5% of the value of BG [Value of the BG = Sum of item Nos. (5) to (14)]	
16	CESS at the rate of 1% on the cost of construction.	
17	Statutory charges as per actual (Inspectorate charges, civic body charges etc.,)	
18	Compensation cost for tree cutting etc., as per approved norms	
19	**Total Cost in Rs. (Sum of item N. (5) to (18)**	

Note:-

1) While preparing the estimate provision has to be made specifically for the conductor accessories such as Wedge/ PG clamps, Alkathene Tube, etc., duly assessing the quantity.

2) The contingency at 2% provisioned is only to take care of unforeseen material and labour. This has to be paid only for any additional work carried out and as per actual.

3) The materials to be procured by the agency shall conform to ESCOMs specifications and got inspected before execution of work. The material shall be procured by the agencies from the approved vendors.

ABSTRACT OF COMMON SR 2014-15 COST DATA SHEETS

			CSR 2014-15	
Cost Data Sheet No.	**PARTICULARS**	**Unit**	**Total cost of Estimate (In Rs.)**	**Labour Charges only casual (In Rs.)**
			Material + Labour (Both casual and Regular)	**Labour**
1	11 kV 3-Ph SC line with 40 mtrs span on 9 mtr supports using Rabbit conductor	Km	304439	40639
2	11 kV 3-Ph SC line with 50 mtrs span on 9 mtr supports using Rabbit conductor	Km	273522	34729
3	11 kV 3-Ph SC line with 50 mtrs span on 8 mtr supports using Rabbit conductor	Km	246544	31065
4	11 kV 3-Ph SC line with 40 mtrs span on 9 mtr supports using coyote conductor	Km	513125	47804
5	11 kV 3 Ph. SC Line and 3 phase - 4 wire LT line on 9.0 mtr supports with an average span of 50mtrs using Rabbit Conductor for H.T. and WEASEL for L.T Lines	Km	466124	60975
6	11 kV 3 Ph. SC Line and 3 phase - 4 wire LT line on 9.0 mtr supports with an average span of 40 mtrs using Rabbit Conductor for H.T. and L.T Lines	Km	555933	63975
7	3 Ph. 4 wire LT line on 8 mtr supports with 60 mtrs span using Rabbit Conductor (IP Set installations)	Km	184786	25676
8	3 Ph. 4 wire LT line on 8 mtr Supports with 40 mtrs span using Rabbit Conductor	Km	277643	34507
9	3 Ph. 4 wire LT line on 9 mtr Supports with 40 mtrs span using Rabbit Conductor	Km	308845	39232
10	3 Ph. 5 wire LT line on 9.0 mtr supports Using Rabbit conductor with a span of 40mtrs (For Cities, Towns and Residential layouts)	Km	367363	44406
11	3 Ph. 5 wire LT line with 8.0 mtr Supports Using Rabbit conductor with a span of 50 mtrs	Km	308138	34751
12	3 Ph. 5 wire LT line with 8.0 mtr Supports Using Weasel with a span of 40 mtrs	Km	192233	28392
13	L.T 3 Ph. 5 wire LT line with continuous earth wire on 9.0 mtr supports using RABBIT for phase, neutral and street light control and 8 SWG G.I. wire for continuous ground wire with 40 mtrs span in vertical configuration	Km	389288	48932
14	11 kV 3 ph. SC line on 9 mtr supports using **Rabbit** conductor with 40 mtrs span with vertical configuration in congested area	Km	330921	45509
15	**Providing 2 pole structrue at the tapping point using RCC pole**			
	a) 8 mtr RCC	Per unit	47724	4725
	b) 9 mtr RCC	Per unit	51114	4855
16	Providing 3 Pole Structure using 9 Mtrs RCC Poles	Per unit	43299	6783
17	Providing Metering to IP Set installations using SMC Box	Nos	6992	700
18	Laying of 1km length of 11kV 3 core 95 Sq.mm XLPE UG Cable using Horizontal drilling method a.Flat armour b. Round Armour	Km	1617740 1743990	862809
19	Laying of 1km length of 11kV 3 core 95 Sq.mm XLPE UG Cable using Conventional laying involving excavation of soil a. Flat armour b. Round Armour	Km	974165 1100415	183547
20	Laying of 1km length of 11kV 3 core 240 Sq.mm XLPE UG Cable using Horizontal drilling method a. Flat armour b. Round Armour	Km	2113255 2354315	862897
21	Laying of 1km length of 11kV 3 core 240 Sq.mm XLPE UG Cable using Conventional laying involving excavation of soil a. Flat armour b. Round Armour	Km	1471687 1712747	185307

22	Laying of 1km length of 11kV 3 core 400 Sq.mm XLPE UG Cable using Horizontal drilling method a. Flat armour b. Round Armour	Km	2711524 3094244	862985
23	Laying of 1km length of 11kV 3 core 400 Sq.mm XLPE UG Cable using Conventional laying involving excavation of soil a. Flat armour b. Round Armour	Km	2071961 2454681	187066
	a) Erection of 3-ph, 11 kV/433V Distribution Transformer center using 8**mtr DPTs** (For BEE 3 Star Rated Transformers)			
24	i) 25 kVA	Per unit	130632	9312
25	ii) 63 kVA	Per unit	179813	9523
26	iii) 100 kVA (with Distribution Box)	Per unit	235218	9993
	iv) 100kVA (with LT protection kit)	Per unit	221822	9952
	b) Erection of 3-ph, 11 kV/433V Distribution Transformer center using **9mtr DPTs** (For BEE Star Rated Transformers)			
24 a	i) 25 kVA	Per unit	134455	9803
25 a	ii) 63 kVA	Per unit	183816	10014
26 a	iii) 100 kVA (with Distribution Box)	Per unit	238898	10365
	iv) 100kVA (with LT protection kit)	Per unit	225502	10324
27	Erection of 3-ph, 11 kV/433V 250 kVA Distribution Transformer center using 8mtr DPTs	Per unit	332490	9833
27 a	Erection of 3-ph, 11 kV/433V 250 kVA Distribution Transformer center using 9mtr DPTs	Per unit	336079	10129
28	Erection of 25 kVA , BEE 3 Star Rated 11kV/433V, Single pole mounted transformer centre on 9mtr RCC pole Square section	Per unit	119240	7036
29	Erection of 63 kVA, BEE 3 Star Rated11kV/433V, Single pole mounted transformer centre on 9 mtr RCC pole Square section	Per unit	168422	7247
30	Erection of 100 kVA, BEE 3 Star Rated 11kV/433V, Single pole mounted transformer centre on 9mtr RCC pole Square section			
	a) With LT Distribution Box	Per unit	223479	7427
	b) With LT Protection Kit	Per unit	210082	7386
31	Erection of 250 kVA, 11kV/433V, Single pole mounted Distribution Transformer on 11mtrs spun pole with 3 GOS system	Per unit	401262	11833
32	Providing Compact RMU 11kV class VCB/SF6 Type (1 Incomer+2 Breakers+1 Outgoing)			
a	Schenider Make	Per unit	1075936	10222
b	ABB Make	Per unit	1078975	10510
c	Seimens Make	Per unit	1076285	10411
d	MEI	Per unit	1075752	10847
33	Providing Compact RMU 11kV class VCB/SF6 Type (1 Incomer+1Breakers+1 Outgoing)			
a	Schenider Make	Per unit	759135	7632
b	ABB Make	Per unit	762141	7883
c	Seimens Make	Per unit	760278	7812
d	MEI	Per unit	759766	8143
34	Providing Compact RMU 11kV class VCB/SF6 Type (1 OD)			
a	Schenider Make	Per unit	276582	2590
b	ABB Make	Per unit	276581	2627
c	Seimens Make	Per unit	275788	2599
d	MEI	Per unit	275767	2703
35	Providing Compact RMU 11kV class VCB/SF6 Type (1VL)			
a	Schenider Make	Per unit	321429	2590
b	ABB Make	Per unit	321428	2627
c	Seimens Make	Per unit	320635	2599
d	MEI	Per unit	320614	2703
36	Running Single Circuit 11 kV 3 Phase Power line on 9 mtr RCC supports with average span of 30 mtrs using 3x95 Sqmm+1x70Sqmm Aerial Bunched Cables (ABC)	Km	1017179	71989
37	Running Single Circuit 1.1 kV 3 Phase 5 wire Power line on 9 mtr RCC supports with average span of 40 mtrs using 3x95 +1x16 +1x70 Sqmm Aerial Bunched Cables (ABC)	Km	641515	64559

38	Installing RLMU for the existing 15/25 KVA Distribution Transformer Center	Per unit	53459	2466
39	Installing RLMU for the existing 63 KVA Distribution Transformer Center	Per unit	57959	2466
40	Installing RLMU for the existing 100 KVA Distribution Transformer Center	Per unit	65559	2466
41	Erection of Compact Pre-fabricated Packaged Sub-station 11kV / 433 V			
	a) With 100 kVA oil cooled transformer	Per unit	1132904	10580
	b) With 250 kVA oil cooled transformer	Per unit	1491923	
	c) With 500 kVA oil cooled transformer	Per unit	1579163	
	d) With 750 kVA oil cooled transformer	Per unit	1824000	
	e) With 990 kVA oil cooled transformer	Per unit	2280000	
	f) With 100 kVA dry type transformer	Per unit	1182768	
	g) With 250 kVA dry type transformer	Per unit	1611596	
	h) With 500 kVA dry type transformer	Per unit	1997538	
	i) With 750 kVA dry type transformer	Per unit	2507446	
	j) With 990 kVA dry type transformer	Per unit	2908949	
42	providing Electronic Trivector Meters with associated CT's Metering Box etc., on LT side of Distribution Transformer Center			
a)	i) 15/25 kVA (with meter)	Per unit	9390	1014
	ii)15/25 kVA (without meter)		6390	456
b)	i) 50/63 kVA (with meter)	Per unit	8907	1014
	ii) 50/63 kVA (without meter)		5907	456
c)	i) 100 kVA (with meter)	Per unit	8568	1014
	ii) 100 kVA (without meter)		5568	456
d)	i) 250 kVA (with meter)	Per unit	8745	1014
	ii)250 kVA (without meter)		5745	456
e)	i) 500 kVA (with meter)	Per unit	8895	1014
	ii) 500 kVA (without meter)		5895	456
43	providing LT Capacitors to the Distribution Transformers			
	a) 3 kVAr for 15/25KVA DTCs	Per unit	1063	338
	b) 9 kVAr for 63KVA DTCs	Per unit	1469	338
	c) 18 kVAr for 100KVA DTCs	Per unit	2331	398
	d) 27 kVAr for 250KVA DTCs	Per unit	3423	465
	e) 54 kVAr for 300/500KVA DTCs	Per unit	5569	486
44	For carrying out 1 to 2 poles works in respect of Ganga Kalyana and Drinking Water Supply Works only.	Per Work	Material cost as per site requirement	7813
45	For carrying out 3 to 5 poles works in respect of Ganga Kalyana and Drinking Water Supply Works only.	Per Work		12344
46	For carrying out 1 to 4 (One to four) poles works in respect of service main connection and E & I works only			
a	Works involving ONE pole	Per Work		3750
b	Works involving TWO poles	Per Work		5000
c	Works involving THREE poles	Per Work		6250
d	Works involving FOUR poles	Per Work		7500
47	Standard Requirement of Materials for providing LT Wiring for Distribution Transformer Centers of various capacities	Per Work	Quantities as Per site Requirement	

COST DATA SHEET - 1

Running Single Circuit 11kV, 3 Phase Power Line On 9.0 Mtr Supports With An Average Span Of 40 Mtrs Using Rabbit ACSR Conductor

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtrs Long, 145 kg WL	Nos	1	5941	5941	937	937
2	PSC Pole - 9 Mtrs Long, 200 kg WL	Nos	23	3278	75394	937	21551
3	Horizontal cross arms with clamps, HTST supports, bolts, nuts and washers for RCC poles	Set	1	449	449	88	88
4	Horizontal cross arms with clamps, HTST supports, bolts, nuts and washers for PSC poles	Set	23	443	10189	88	2024
5	DP Structure with 9 Mtrs RCC Poles	Set	1	16671	16671	2877	2877
6	11 kV Pin Insulators with GI pins	Nos	72	103	7416	0	0
7	45 kN Disc Insulators	Nos	6	300	1800	0	0
8	Guy Set Complete	Sets	6	855	5130	314	1884
9	Rabbit ACSR Conductor	Kms	3.045	36810	112086	2308	7028
10	PG Clamps for Rabbit Conductor	Nos	6	89	534	0	0
11	Spiral Earth Electrode	Nos	26	238	6188	49	1274
12	EG Stirrups with GI wire lacing	Set of 2 Nos	24	424	10176	88	2112
13	Concreting materials for guy sets without cement	Nos	6	140	840	0	0
14	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/Dt: 24.10.07	Nos	8	120	960	43	344
15	Anti Climbing Device (10mtrs/1 Kg GI Barbed Wire) Lumpsum	Nos	26	73	1898	20	520
	Total				**255672**		**40639**
16	Labour charges						
	a) Casual				40639		
	b) Regular				8128		
	Total Cost/Km in Rs.				**304439**		
Note:	**1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**						
	2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet						

COST DATA SHEET - 2

Running Single Circuit 11 kV, 3-Phase Power Line on 9.0 Mtr Supports with an Average Span of 50 Mtrs Using Rabbit ACSR Conductor

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtrs Long, 145 kg WL	Nos	1	5941	5941	937	937
2	PSC Pole - 9 Mtrs Long, 200 kg WL	Nos	18	3278	59004	937	16866
3	Horizontal cross arms with clamps, HTST supports, bolts, nuts and washers (for RCC poles)	Set	1	449	449	88	88
4	Horizontal cross arms with clamps, HTST supports, bolts, nuts and washers (for PSC poles)	Set	18	443	7974	88	1584
5	DP Structure with 9 Mtrs RCC Poles	Set	1	16671	16671	2877	2877
6	11kV Pin Insulators with GI pins	Nos	57	103	5871	0	0
7	45kN Disc Insulators	Nos	6	300	1800	0	0
8	Guy Set Complete	Sets	6	855	5130	314	1884
9	Rabbit ACSR Conductor	Kms	3.045	36810	112086	2308	7028
10	PG Clamps for Rabbit conductor	Nos	6	89	534	0	0
11	Spiral Earth Electrode	Nos	21	238	4998	49	1029
12	EG Stirrups with GI wire lacing	Set of 2 Nos	19	424	8056	88	1672
13	Concreting materials for guy sets without cement	Nos	6	140	840	0	0
14	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/Dt: 24.10.07	Nos	8	120	960	43	344
15	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kg	21	73	1533	20	420
	Total				**231847**		**34729**
16	Labour charges						
	a) Casual				34729		
	b) Regular				6946		
	Total Cost/Km in Rs.				**273522**		

Note: **1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**

2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet

COST DATA SHEET - 3

Running Single Circuit 11 kV , 3-Phase Power Line on 8.0 Mtr Supports with an Average Span of 50 Mtrs Using RABBIT ACSR Conductor

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 8.0M Long, 145 kg WL	Nos	1	4324	4324	751	751
2	PCC Pole - 8.0M Long, 200 kg WL	Nos	18	2297	41346	751	13518
3	Horizontal cross arms with clamps, HTST supports, bolts, nuts and washers (for RCC poles)	Set	1	449	449	88	88
4	Horizontal cross arms with clamps, HTST supports, bolts, nuts and washers (for PCC poles)	Sets	18	439	7902	88	1584
5	DP Structure with 8 Mtrs RCC Poles	Set	1	13437	13437	2747	2747
6	11kV Pin Insulators with GI pins	Nos	57	103	5871	0	0
7	45kN Disc Insulators	Nos	6	300	1800	0	0
8	Guy Set Complete	Sets	6	855	5130	314	1884
9	Rabbit ACSR Conductor	Kms	3.045	36810	112086	2308	7028
10	PG Clamps for Rabbit Conductor	Nos	6	89	534	0	0
11	Spiral Earth Electrode	Nos	21	238	4998	49	1029
12	EG Stirrups with GI wire lacing	Set of 2 Nos	19	424	8056	88	1672
13	Concreting materials for guy sets without cement	Nos	6	140	840	0	0
14	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/Dt: 24.10.07	Nos	8	120	960	43	344
15	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	21	73	1533	20	420
	Total				**209266**		**31065**
16	Labour charges						
	a) Casual				31065		
	b) Regular				6213		
	Total Cost/Km in Rs.				**246544**		
Note:	**1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**						
	2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet						

COST DATA SHEET - 4

Running Single Circuit 11 kV, 3-Phase Power Line on 9.0 Mtr Supports with an Average Span of 40 Mtrs Using COYOTE ACSR conductor

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtrs Long, 145 kg WL	Nos	1	5941	5941	937	937
2	PSC Pole - 9 Mtrs Long, 200 kg WL	Nos	22	3278	72116	937	20614
3	Horizontal cross arms with clamps, HTST supports, bolts, nuts and washers (for RCC poles)	Set	1	449	449	88	88
4	Horizontal cross arms with clamps, HTST supports, bolts, nuts and washers (for PSC poles)	Sets	22	443	9746	88	1936
5	DP Structure with 9 Mtrs RCC Poles	Sets	2	16671	33342	2877	5754
6	11kV Pin Insulators with GI pins	Nos	69	103	7107	0	0
7	70/90 kN Disc Insulators	Nos	12	506	6072	0	0
8	Strain Clamp 3 bolt type for Disc Insulator	Nos	12	546	6552	0	0
9	Guy Set Complete	Sets	6	855	5130	314	1884
10	Coyote ACSR Conductor	Kms	3.045	93860	285804	4031	12274
11	PG Clamps for Coyote Conductor	Nos	12	276	3312	0	0
12	Spiral Earth Electrode	Nos	27	238	6426	49	1323
13	EG Stirrups with GI wire lacing	Set of 2 Nos	23	424	9752	88	2024
14	Concreting materials for guy sets without cement	Nos	6	140	840	0	0
15	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/Dt: 24.10.07	Nos	10	120	1200	43	430
16	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	27	73	1971	20	540
	Total				**455760**		**47804**
17	Labour charges						
	a) Casual				47804		
	b) Regular				9561		
	Total Cost/Km in Rs.				**513125**		

Note: **1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**

2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet

COST DATA SHEET - 5

Running Single Circuit 11 kV 3 Phase Power Line and 3 Phase - 4 Wire Secondary Line on 9 Mtr Supports with an Average Span of 50 Mtrs using RABBIT Conductor for HT and WEASEL for LT Lines

Sl No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtrs Long, 145 kg WL	Nos	1	5941	5941	937	937
2	PSC Pole - 9 Mtrs Long, 200 kg WL	Nos	18	3278	59004	937	16866
3	11kV Horizontal cross arms with clamps, HTST Supports, bolts, nuts and washers (for RCC poles)	Set	1	449	449	88	88
4	11kV Horizontal cross arms with clamps, HTST Supports, bolts, nuts and washers (for PSC poles)	Sets	18	443	7974	88	1584
5	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for RCC poles)	Set	1	318	318	85	85
6	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for PSC poles)	Sets	19	312	5928	85	1615
7	DP Structure with 9 mtr RCC Poles	Set	1	16671	16671	2877	2877
8	11kV Pin Insulators with GI pins	Nos	57	95	5415	0	0
9	1.1kV Pin Insulators with GI Pins	Nos	76	41	3116	0	0
10	45kN Disc Insulators	Nos	6	300	1800	0	0
11	No.8 Strain Insulators	Nos	8	14	112	0	0
12	Guy Set Complete	Sets	8	855	6840	314	2512
13	Rabbit ACSR for HT Lines	Kms	3.045	36810	112086	2308	7028
14	Weasel ACSR for LT lines	Kms	4.06	21900	88914	1693	6874
15	Spiral Earth Electrode	Nos	21	238	4998	49	1029
16	**Guarding between HT & LT Lines**						
	a) Guarding Materials	Span	20	3150	63000	938	18760
	b) 4 Pin cross arms with clamps,bolts, nuts and washers.	Sets	20	318	6360	0	0
17	PG Clamps for Rabbit conductor	Nos	6	89	534	0	0
18	Concreting Materials for guy sets	Nos	8	140	1120	0	0
19	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/Dt: 24.10.07	Nos	7	120	840	43	301
20	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	21	73	1533	20	420
	Total				**392953**		**60975**
21	Labour charges						
	a) casual				60975		
	b) Regular *				12195		
	Total Cost/Km in Rs				**466124**		
Note:	**1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**						
	2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet						

COST DATA SHEET - 6

Running Single Circuit 11 kV, 3-Phase Power Line & 3 Phase 4 Wire Secondary Line on 9.0 Mtr Supports with an Average Span of 40 Mtrs Using RABBIT ACSR conductor for HT & LT Lines

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtrs Long, 145 kg WL	Nos	1	5941	5941	937	937
2	PSC Pole - 9 Mtrs Long, 200 kg WL	No's	23	3278	75394	937	21551
3	Horizontal cross arms with clamps, HTST supports, bolts, nuts and washers (for RCC poles)	Set	1	449	449	88	88
4	Horizontal cross arms with clamps, HTST supports, bolts, nuts and washers (for PSC poles)	Sets	23	443	10189	88	2024
5	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for RCC poles)	Set	1	318	318	85	85
6	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers(for PSC poles)	Sets	24	312	7488	85	2040
7	DP Structure with 9 mtr RCC Poles	Set	1	16671	16671	2877	2877
8	11kV Pin Insulators with GI pins	Nos	72	95	6840	0	0
9	1.1kV Pin Insulators with GI Pins	Nos	96	41	3936	0	0
10	45kN Disc Insulators	Nos	6	300	1800	0	0
11	No.8 Strain Insulators	Nos	8	14	112	0	0
12	Guy Set Complete	Sets	8	855	6840	314	2512
13	Rabbit ACSR Conductor	Kms	7.105	36810	261535	2308	16398
14	PG Clamps for Rabbit conductor	Nos	6	89	534	0	0
15	Spiral Earth Electrode	Nos	26	238	6188	49	1274
16	**Guarding between HT & LT Lines**						
	a) Guarding Materials	Span	25	2520	63000	533	13325
	b) 4 Pin cross arms with clamps,bolts, nuts and washers.	Sets	25	318	7950	0	0
17	Concreting materials for guy sets without cement	Nos	8	140	1120	0	0
18	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/Dt: 24.10.07	Nos	8	120	960	43	344
19	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	26	73	1898	20	520
	Total				**479163**		**63975**
20	Labour charges						
	a) Casual				63975		
	b) Regular				12795		
	Total Cost/Km in Rs.				**555933**		

Note:

1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports

2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet

COST DATA SHEET - 7

Running LT, 3-Phase 4 Wire Power Line on 8.0 Mtr Supports Using WEASEL ACSR Conductor with an Average Span of 60 Mtrs (IP Installations)

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 8 Mtrs Long, 145 kg WL	Nos	1	4324	4324	751	751
2	PCC Pole - 8 Mtrs Long, 200 kg WL	Nos	17	2297	39049	751	12767
3	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for RCC poles)	Set	1	318	318	85	85
4	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for PCC poles)	Sets	17	308	5236	85	1445
5	1.1 kV Pin Insulators with GI Pins	Nos	64	41	2624	0	0
6	No.8 Strain Insulators	Nos	8	14	112	0	0
7	Guy Set Complete	Sets	8	835	6680	314	2512
8	Weasel ACSR Conductor	Kms	4.06	21900	88914	1693	6874
9	Spiral Earth Electrode	Nos	18	238	4284	49	882
10	Concreting materials for guy sets without cement	Nos	8	140	1120	0	0
11	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	18	73	1314	20	360
	Total				**153975**		**25676**
12	Labour charges						
	a) Casual				25676		
	b) Regular				5135		
	Total Cost/Km in Rs.				**184786**		

Note: **1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**

2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet

COST DATA SHEET - 8

Running LT , 3-Phase 4 Wire Power Line on 8.0 Mtr Supports Using RABBIT ACSR Conductor with an Average Span of 40 Mtrs

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 8 Mtrs Long, 145 kg WL	Nos	1	4324	4324	751	751
2	PCC Pole - 8 Mtrs Long, 200 kg WL	Nos	24	2297	55128	751	18024
3	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for RCC poles)	Set	1	318	318	85	85
4	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for PCC poles)	Sets	24	308	7392	85	2040
5	1.1kV Pin Insulators with GI Pins	Nos	96	41	3936	0	0
6	No.8 Strain Insulators	Nos	8	14	112	0	0
7	Guy Set Complete	Sets	8	835	6680	314	2512
8	Rabbit ACSR Conductor	Kms	4.06	36810	149449	2308	9370
9	Spiral Earth Electrode	Nos	25	238	5950	49	1225
10	Concreting materials for guy sets without cement	Nos	8	140	1120	0	0
11	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	25	73	1825	20	500
	Total				**236234**		**34507**
12	Labour charges						
	a) Casual				34507		
	b) Regular				6901		
	Total Cost/Km in Rs.				**277643**		

Note: **1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**

2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet

COST DATA SHEET - 9

Running LT, 3-Phase 4 Wire Power Line on 9.0 Mtr Supports Using RABBIT ACSR Conductor with an Average Span of 40 Mtrs

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtrs Long, 145 kg WL	Nos	1	5941	5941	937	937
2	PSC Pole - 9 Mtrs Long, 200 kg WL	Nos	24	3278	78672	937	22488
3	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for RCC poles)	Set	1	449	449	88	88
4	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for PSC poles)	Sets	24	318	7632	88	2112
5	1.1kV Pin Insulators with GI Pins	Nos	96	41	3936	0	0
6	No.8 Strain Insulators	Nos	8	14	112	0	0
7	Guy Set Complete	Sets	8	835	6680	314	2512
8	Rabbit ACSR Conductor	Kms	4.06	36810	149449	2308	9370
9	Spiral Earth Electrode	Nos	25	238	5950	49	1225
10	Concreting materials for guy sets without cement	Nos	8	140	1120	0	0
11	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	25	73	1825	20	500
	Total				**261766**		**39232**
12	Labour charges						
	a) Casual				39232		
	b) Regular				7846		
	Total Cost/Km in Rs.				**308845**		

Note: **1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**

2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet

COST DATA SHEET - 10

Running LT, 3-Phase 5 Wire for Power Line on 9.0 Mtr Supports Using RABBIT ACSR Conductor for Phase and Neutral, and WEASEL Conductor or Street Light with an Average Span of 40 Mtrs (For Cities, Towns and Residential Layouts)

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtrs Long, 145 kg WL (for Deadend, Anchor points)	Nos	6	5941	35646	931	5586
2	PSC Pole - 9 Mtrs Long, 200 kg WL (for Intermediate Poles)	Nos	19	3278	62282	931	17689
3	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for RCC poles)	Sets	7	449	3143	88	616
4	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for PSC poles)	Sets	22	318	6996	88	1936
5	LT 2 Pin cross arms, with pole clamps, bolts, nuts (for RCC poles)	Sets	7	200	1400	85	595
6	LT 2 Pin cross arms, with pole clamps, bolts, nuts (for PSC poles)	Sets	18	194	3492	85	1530
7	1.1kV Pin Insulators with GI Pins	Nos	95	41	3895	0	0
8	No.8 Strain Insulators	Nos	50	14	700	0	0
9	Guy Set Complete	Sets	10	835	8350	314	3140
10	Rabbit ACSR Conductor	Kms	4.06	36810	149449	2308	9370
11	Weasel ACSR Conductor	Kms	1.015	21900	22229	1693	1718
12	Spiral Earth Electrode	Nos	25	238	5950	49	1225
13	Concreting Materials for guy sets (without Cement)	No's	8	140	1120	0	0
14	SMC Street Lighting Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps meter & 50/5A CT including wiring	No's	1	6500	6500	500	500
15	PVC Pipe 40 mm Dia	Mtrs	6	50	300	0	0
16	PVC Insulated wire 25 Sqmm Single Core Multi stranded	Mtrs	25	32	800	0	0
17	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	25	73	1825	20	500
	Total				**314076**		**44406**
18	Labour charges						
	a) Casual				44406		
	b) Regular				8881		
	Total Cost/Km in Rs.				**367363**		

Note:

1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports

2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet

COST DATA SHEET - 11

Running LT, 3 Phase 5 Wire for Power Line on 8.0 Mtr Supports Using RABBIT ACSR Conductor for Phase and Neutral, and WEASEL Conductor for Street Light with an Average Span of 50 mtrs

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 8 Mtrs Long, 115 kg WL (for Deadend, Anchor points.)	Nos	5	4324	21620	751	3755
2	PCC Pole - 8 Mtrs Long, 200 kg WL (for Intermediate Poles)	Nos	15	2297	34455	751	11265
3	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for RCC poles)	Set	1	318	318	85	85
4	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for PCC poles)	Sets	24	308	7392	85	2040
5	LT 2 Pin cross arms, with pole clamps, bolts, nuts (for RCC poles)	Set	1	200	200	85	85
6	LT 2 Pin cross arms, with pole clamps, bolts, nuts (for PCC poles)	Sets	24	190	4560	85	2040
7	1.1kV Pin Insulators with GI Pins	Nos	95	41	3895	0	0
8	No.8 Strain Insulators	Nos	50	14	700	0	0
9	Guy Set Complete	Sets	8	835	6680	314	2512
10	Rabbit ACSR Conductor	Kms	4.06	36810	149449	2308	9370
11	Weasel ACSR Conductor	Kms	1.015	21900	22229	1693	1718
12	Spiral Earth Electrode	Nos	20	238	4760	49	980
13	Concreting Materials for guy sets (Without Cement)	Nos	8	140	1120	0	0
14	SMC Street Lighting Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps meter & 50/5A CT including wiring	Nos	1	6500	6500	500	500
15	PVC Pipe 40 mm Dia	Mtrs	6	50	300	0	0
16	PVC Insulated wire 25 Sqmm Single Core Multi Stranded	Mtrs	25	32	800	0	0
17	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	20	73	1460	20	400
	Total				**266437**		**34751**
	Note: The no. of RCC poles and PCC poles have to be used as per field conditions and hence estimates have to be prepared accordingly.						
18	Labour charges						
	a) Casual				34751		
	b) Regular				6950		
	Total Cost/Km in Rs.				**308138**		
Note:	**1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**						
	2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet						

COST DATA SHEET - 12

Running LT, Single Phase 3 Wire Power Line on 8.0 Mtr Supports with an Average Span of 40 Mtrs Using WEASEL ACSR Conductor

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 8 Mtrs Long, 115 kg WL (for Deadend, Anchor points)	Nos	5	4324	21620	751	3755
2	PCC Pole - 8 Mtrs Long, 200 kg WL (for Intermediate Poles)	Nos	15	2297	34455	751	11265
3	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for RCC poles)	Set	1	318	318	85	85
4	LT 4 Pin cross arms, with pole clamps, bolts, nuts and washers (for PCC poles)	Sets	24	308	7392	85	2040
5	LT 2 Pin cross arms, with pole clamps, bolts, nuts (for RCC poles)	Set	1	200	200	85	85
6	LT 2 Pin cross arms, with pole clamps, bolts, nuts (for PCC poles)	Sets	19	190	3610	85	1615
7	1.1kV Pin Insulators with GI Pins	Nos	48	41	1968	0	0
8	No.8 Strain Insulators	Nos	21	14	294	0	0
9	Guy Set Complete	Sets	8	835	6680	314	2512
10	Weasel ACSR Conductor	Kms	3.045	21900	66686	1693	5155
11	Spiral Earth Electrode	Nos	20	238	4760	49	980
12	Concreting Materials for guy sets (without cement)	Nos	8	140	1120	0	0
13	SMC Street Lighting Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps meter & 50/5A CT including wiring	Nos	1	6500	6500	500	500
14	PVC Pipe 40 mm Dia	Mtrs	6	50	300	0	0
15	PVC Insulated wire 25 Sqmm Single Core Multi Stranded	Mtrs	25	32	800	0	0
16	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	20	73	1460	20	400
	Total				**158163**		**28392**
17	Labour charges						
	a) Casual				28392		
	b) Regular				5678		
	Total Cost/Km in Rs.				**192233**		

Note:

1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports

2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet

COST DATA SHEET - 13

Running LT, 3-Phase 5 Wire Power Line with Continuous Earth Wire on 9.0 Mtr Supports Using RABBIT ACSR for Phase and Neutral, and WEASEL Conductor for Street Light and 8 SWG GI Wire for Continuous Earth Wire with an Average Span of 40 Mtrs in Vertical Configuration

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtrs Long, 145 kg WL (for Deadend, Anchor points)	Nos	6	5941	35646	931	5586
2	PSC Pole -9 Mtrs Long, 200 kg WL (for Intermediate Poles)	Nos	19	3278	62282	931	17689
3	Fabricated Vertical Cross Arms with pole, clamps, bolts, nuts and washers	Sets	30	720	21600	254	7612.5
4	1.1kV Pin Insulators with GI Pins	Nos	100	41	4100	0	0
5	No.8 Strain Insulators	Nos	50	14	700	0	0
6	Guy Set Complete	Sets	12	835	10020	251	3012
7	Rabbit ACSR Conductor	Kms	4.06	36810	149449	2308	9370
8	Weasel ACSR Conductor	Kms	1.015	21900	22229	1693	1718
9	No.8 SWG GI wire for continuous earth wire	Kms	1.015 (103 kgs)	62.8	6417	1693	1718
10	8 SWG GI wire for guard loops	Kgs	26	62.8	1633	0	0
11	Spiral Earth Electrode	Nos	25	238	5950	49	1225
12	Concreting Materials for guy sets (Without Cement)	Nos	8	140	1120	0	0
13	SMC Street Lighting Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps meter & 50/5A CT including wiring	Nos	1	6500	6500	500	500
14	PVC Pipe 40 mm Dia	Mtrs	6	50	300	0	0
15	PVC Insulated wire 25 Sqmm Single Core Multi Stranded	Mtrs	25	32	800	0	0
16	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	25	73	1825	20	500
	Total				**330570**		**48932**
17	Labour charges						
	a) Casual				48932		
	b) Regular				9786		
	Total Cost/Km in Rs.				**389288**		

Note:

1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports

2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet

COST DATA SHEET - 14

Running Single Circuit 11 kV, 3-phase Power Line on 9.0 Mtr Supports Using RABBIT ACSR Conductor With an Average Span of 40 Mtrs in Vertical Configuration in Congested Areas

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtrs Long, 145 kg WL (for Deadend, Anchor points)	Nos	1	5941	5941	931	931
2	PSC Pole -9 Mtrs Long, 200 kg WL (for Intermediate Poles)	Nos	23	3278	75394	931	21413
3	DP Structure using 9 Mtrs RCC poles	Set	1	16671	16671	2877	2877
4	Special cross arm with cross arm for EG Stirrups, braces, clamps, bolts nuts and washers complete	Sets	23	1290	29670	280	6440
5	11kV Pin Insulators with GI Pins	Nos	69	103	7107	0	0
6	45kN Disc Insulators	Nos	6	300	1800	0	0
7	Guy Set Complete	Sets	9	855	7695	314	2826
8	Rabbit ACSR Conductor	Kms	3.045	36810	112086	2308	7028
9	Spiral Earth Electrode	Nos	26	238	6188	49	1274
10	EG Stirrups with GI wire lacing	Set of 2 No's	25	424	10600	88	2200
11	Concreting Materials for guy sets (Without Cement)	Nos	9	140	1260	0	0
12	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	26	73	1898	20	520
	Total				**276310**		**45509**
13	Labour charges						
	a) Casual				45509		
	b) Regular				9102		
	Total Cost/Km in Rs.				**330921**		

Note:	**Item 4 includes, the following**
	a) Special cross arms 50x50x6 mm MS 0.715 mtr long 3-Nos
	b) Support piece for fixing EG stirrup 50x50x6 mm MS Angle 0.865 mtr long - 1 No
	c) Brace 50x50x6 mm MS Angle 0.850 mtr long - 1 No
	d) 50x6 mm Flat 1.8 mtr, long - 1No
	e) RCC Pole Clamps - 5 Nos
	f) Cross Arm for fixing EG Stirrup - 1 No
	1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports
	2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet

COST DATA SHEET -15

Providing 2 Pole Structrue at the Tapping Point Using RCC Poles

SL. No	Paritculars	Unit	Qty	Material cost		Labour Cost	
	Part-A: LINES			**Rate**	**Amt**	**Rate**	**Amt**
1	RCC DP Structure using 9 Mtrs RCC Pole with WL 145 kg	Set	1	16671	16671	2877	2877
2	RCC DP Structure using 8 Mtrs RCC Pole with WL 115 kg	Set	1	13437	13437	2747	2747
3	45kN Disc Insulators	Nos	6	300	1800	C	C
4	Guy Set Complete	Sets	2	855	1710	314	628
5	Spiral Earth Electrode	Nos	2	238	476	49	98
6	Concrete for Guy Set (without Cement)	Nos	2	140	280	C	C
7	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/Dt: 24.10.07	No	1	120	120	43	43
8	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	2	73	146	20	40
	Total Part A						
	Using 8 Mtrs RCC Pole				17969		3556
	Using 9 Mtrs RCC Pole				21203		3686
	Part-B: SWITCH GEAR						
10	11kV 400A D/B GOS	Set	1	16467	16467	625	625
11	H-Frame for mounting GOS	No	1	3330	3330	169	169
12	DOLO Cut Out	Set/3 Nos	1	4288	4288	375	375
	Total Part B				**24085**		**1169**
13	**Material Cost using 8 Mtrs RCC Pole (A+B)**				**42054**		
	Labour Charges						
	a) Casual						4725
	b) Regular						945
14	**Material cost using 9 Mtrs RCC Pole (A+B)**				**45288**		
	Labour Charges						
	a) Casual						4855
	b) Regular						971
15	**Total Cost of Estimate using 8 Mtrs RCC Pole**				**47724**		**5670**
	Total Cost of Estimate using 9 Mtrs RCC Pole				**51114**		**5826**
Note:	**1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**						
	2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet						

COST DATA SHEET -16

Erection of 3 Pole Structure With 9 Mtr RCC Pole

SL. No	Paritculars	Unit	Qty	Material cost		Labour Cost	
	Part-A: LINES			**Rate**	**Amt**	**Rate**	**Amt**
1	3 Pole Structure complete using 9 Mtrs RCC Poles	Set	1	28892	28892	5548	5548
2	Spiral Earth Electrode	Nos	3	238	714	49	147
3	Guy Set Complete	Sets	3	855	2565	314	942
4	45kN Disc Insulators	Nos	6	300	1800	0	0
5	11kV Pin Insulators with GI Pins	Nos	3	103	309	0	0
6	Concrete for Guy set (without cement)	Nos	3	140	420	0	0
7	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/Dt: 24.10.07	Nos	2	120	240	43	86
8	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	3	73	219	20	60
9	Labour Charges						
	a) Casual						6783
	b) Regular						1357
	Total Cost/Unit in Rs.				**43299**		
Note:	**1) RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports**						
	2) Other charges such as service tax, ESI, PF and other applicable charges shall be loaded as per typical cost data sheet						

COST DATA SHEET -17

Estimate for Providing Metering to IP Set Installations Using SMC Box

SL. No	Paritculars	Unit	Qty	Material cost	
				Rate	Amt
1	Whole Current Meter 10-60A 3 Phase (Static Meter) Class-1 Accuracy	Nos	1	3000	3000
2	SMC Meter Housing box with 6 mm hylam sheet	Nos	1	2100	2100
4	16 Sqmm Alluminium Single Core/Multi Core of Grade 650/1100V (16 Mts)	Set	1	368	368
5	PVC Pipe of 2 mm Thick 40mm Dia	Mtrs	4	50	200
6	3 Nos Porcelain Cutouts 60A with Wooden Plank	Set	1	474	474
7	Misc materials such as water tight bends and aluminium pins/bullets	LS	LS	-	150
8	Labour Charges (Lump sum)	LS	LS	-	700
	Total				**6992**

COST DATA SHEET - 18

For laying of 1 Km Length of 11kV, 3 Core 95 Sqmm XLPE UG Cable
Using Horizontal Drilling

SL. No	Particulars	Unit	Qty	Material cost	
				Rate	Amt
	Material Cost				
1	11kV Class 3x95 Sqmm XLPE UG Cable (Flat Armoured)	Km	1	548860	548860
2	11kV Class 3x95 Sqmm XLPE UG Cable (Round Armoured)	Km	1	675110	675110
3	Straight Through Jointing Kits HS Type suitable for 95 Sqmm Cable	Nos	3	5375	16125
4	Cable Termination Kit Outdoor/Indoor HS Type suitable for 95 Sqmm Cable	Per Kit	2	2990	5980
5	RCC Hume Pipe, 2000 mm Long, 150 mm Dia	Nos	3	300	900
6	Collars for RCC Hume Pipe	Nos	2	80	160
7	GI Pipe, 100 mm Dia for drain crossing, cable raising etc.,	Mtrs	8	1143	9144
8	Route and Joint Indicating Stones	Nos	10	120	1200
	Total (Flat Armoured)				**582369**
	Total (Round Armoured)				**708619**
9	**Labour charges**				
	a) Laying of cable in trench in wherever necessary	Mtrs	50	31679	1584
	b) Labour chargers for horizontal drilling with 6 inches bore size				
	i) Without HDPE Pipe	Rmtr	50	625	31250
	ii) With HDPE pipe	Rmtr	900	913	821700
	c) Making of straight through joints	Nos	3	1500	4500
	d) Making of cable terminations	Nos	2	1375	2750
	e) Laying of RCC Hume pipes	Nos	3	35	105
	f) Laying of GI Pipe	Mtrs	8	40	320
	g) Laying of Route and Joint indicating stones	Nos	10	60	600
	Total Labour Charges				**862809**
	a) Casual				**862809**
	b) Regular				**172562**
	Total Cost/Km in Rs. (Flat Armoured)				**1617740**
	Total Cost/Km in Rs. (Round Armoured)				**1743990**
10	Add Rates for Reinstatements of Roads	As per prevailing rates prescribed by local bodies (Corporations/Municipalities/ VPS as applicable)			
Note:					
1)	**While preparing estimates for turnkey/total tunkey projects please refer to Sl. No. ..... of General Guidelines vide a to .... in Page No. .....**				
2)	**When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtrs x 1 Mtrs for 2 cables. b) 1 Mtr x 1 Mtr for 3 cables. c) 1.25 Mtr x 1 Mtr for 4 nos. of cables and so on (As per Ltr No. BESCOM/BC-14/F-45**				
3)	**Where cables are laid using trenchless technology, there may be a necessity to lay the cable in open trench excavation. Hence provision shall be made for both in the estimate and the bills shall be paid as per actual inventory taken.**				

COST DATA SHEET - 19

For Laying of 1 Km Length of 11kV, 3 Core, 95 Sqmm XLPE UG Cable
Using Conventional Laying with Excavation of Soil

SL. No	Particulars	Unit	Qty	Material cost	
				Rate	Amt
	Material Cost				
1	11kV Class 3x95 Sqmm XLPE UG Cable (Flat Armoured)	Km	1	548860	548860
2	11kV Class 3x95 Sqmm XLPE UG Cable (Round Armoured)	Km	1	675110	675110
3	Straight Through Jointing Kits HS Type suitable for 95 Sqmm Cable	Nos	3	5375	16125
4	Cable Termination Kit Outdoor/Indoor HS Type suitable for 95 Sqmm Cable	Per Kit	2	2990	5980
5	Cable covering tiles 250x125x40 mm or 125x125x40 mm	Nos	4000/ 8000	10/5	40000
6	Sand	Cmt	60	2000	120000
7	RCC Hume Pipe, 2000 mm Long, 150 mm Dia	Nos	30	300	9000
8	Collars for RCC Hume Pipe	Nos	30	80	2400
9	GI Pipe, 100 mm Dia for drain crossing, cable raising etc.,	Mtrs	8	1143	9144
10	Route and Joint Indicating Stones	Nos	20	120	2400
	Total (Flat Armoured)				**753909**
	Total (Round Armoured)				**880159**
11	**Labour charges**				
	a) Cable trench excavation, 1000x0.6x1=600, Ordinary soil	Cmt	600	181	108600
	b) Laying of cable in trench	km	1	31679	31679
	c) Refilling and consolidation	Cmt	550	40	22000
	d) Making of straight through joints	No	3	1500	4500
	e) Making of cable terminations	No	2	1375	2750
	f) Covering the cable with tiles	km	1	2304	2304
	g) Spreading Sand and forming with Sand round the cable	km	1	8094	8094
	h) Laying of RCC Hume pipes	mtr	60	35	2100
	i) Laying of GI Pipe	mtr	8	40	320
	j) Laying of Route and Joint indicating stones	No	20	60	1200
	Total Labour Charges				**183547**
	a) Casual				**183547**
	b) Regular				**36709**
	Total Cost/Km in Rs. (Flat Armoured)				**974165**
	Total Cost/Km in Rs. (Round Armoured)				**1100415**
12	Add Rates for Reinstatements of Roads	As per prevailing rates prescribed by local bodies (Corporations/Municipalities/ VPS as applicable)			
	NOTE				
1)	**While preparing estimates for turnkey / total tunkey projects please refer to Sl. No. ..... of General Guidelines vide a to .... in Page No. .....**				
2)	**When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtrs x 1 Mtrs for 2 cables. b) 1 Mtr x 1 Mtr for 3 cables. c) 1.25 Mtr x 1 Mtr for 4 nos. of cables and so on (As per Ltr No. BESCOM/BC-14/F-45**				
3)	**Where cables are laid using trenchless technology, there may be a necessity to lay the cable in open trench excavation. Hence provision shall be made for both in the estimate and the bills shall be paid as per actual inventory taken.**				

COST DATA SHEET - 20

For Laying of 1 Km Length of 11kV, 3 Core, 240 Sqmm XLPE UG Cable Using Horizontal Drilling

SL. No	Particulars	Unit	Qty	Material cost	
				Rate	Amt
	Material Cost				
1	11kV Class 3x240 Sqmm XLPE UG Cable (Flat Armoured)	Km	1	1038890	1038890
2	11kV Class 3x240 Sqmm XLPE UG Cable (Round Armoured)	Km	1	1279950	1279950
3	Straight Through Jointing Kits HS Type suitable for 240 Sqmm Cable	Nos	3	6555	19665
4	Cable Termination Kit Outdoor/Indoor HS Type Suitable for 240 Sqmm Cable	Per Kit	2	3910	7820
5	RCC Hume Pipe, 2000 mm Long, 150 mm Dia	Nos	3	300	900
6	Collars for RCC Hume pipe	Nos	2	80	160
7	GI Pipe, 100 mm Dia for drain crossing, cable raising etc.,	Mtrs	8	1143	9144
8	Route and Joint Indicating Stones	Nos	10	120	1200
	Total (Flat Armoured)				**1077779**
	Total (Round Armoured)				**1318839**
9	**Labour charges**				
	a) Laying of cable in trench in wherever necessary	Mtrs	50	33439	1672
	b) Labour chargers for horizontal drilling with 6 inches bore size				
	i) Without HDPE Pipe	Rmtr	50	625	31250
	ii) With HDPE pipe	Rmtr	900	913	821700
	c) Making of straight through joints	Nos	3	1500	4500
	d) Making of cable terminations	Nos	2	1375	2750
	e) Laying of RCC Hume pipes	Nos	3	35	105
	f) Laying of GI Pipe	Mtrs	8	40	320
	g) Laying of Route and Joint indicating stones	Nos	10	60	600
	Total Labour Charges				**862897**
	a) Casual				**862897**
	b) Regular				**172579**
	Total Cost/Km in Rs. (Flat Armoured)				**2113255**
	Total Cost/Km in Rs. (Round Armoured)				**2354315**
10	Add Rates for Reinstatements of Roads	As per prevailing rates prescribed by local bodies (Corporations/Municipalities/ VPS as applicable)			
	NOTE				
1)	**While preparing estimates for turnkey / total tunkey projects please refer to Sl. No. ..... of General Guidelines vide a to .... in Page No. .....**				
2)	**When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtrs x 1 Mtrs for 2 cables. b) 1 Mtr x 1 Mtr for 3 cables. c) 1.25 Mtr x 1 Mtr for 4 nos. of cables and so on (As per Ltr No. BESCOM/BC-14/F-45**				
3)	**Where cables are laid using trenchless technology, there may be a necessity to lay the cable in open trench excavation. Hence provision shall be made for both in the estimate and the bills shall be paid as per actual inventory taken.**				

COST DATA SHEET - 21

For Laying of 1 Km Length of 11kV, 3 Core, 240 Sqmm XLPE UG Cable Using Conventional Laying with Excavation in Soil

SL. No	Particulars	Unit	Qty	Material cost	
				Rate	Amt
1	11kV Class 3x240 Sqmm XLPE UG Cable (Flat Armoured)	Km	1	1038890	1038890
2	11kV Class 3x240 Sqmm XLPE UG Cable (Round Armoured)	Km	1	1279950	1279950
2	Straight Through Jointing Kits HS Type suitable for 3x240 Sqmm Cable	Nos	3	6555	19665
3	Cable termination kit Outdoor/Indoor HS Type Suitable for 3x240 Sqmm Cable	Per Kit	2	3910	7820
4	Cable covering tiles 250x125x40 mm or 125x125x40 mm	Nos	4000/ 8000	10/5	40000
5	Sand	Cmt	60	2000	120000
6	RCC Hume pipe, 2000 mm Long, 150 mm Dia	Nos	30	300	9000
7	Collars for RCC Hume Pipe	Nos	30	80	2400
8	GI Pipe, 100 mm Dia for drain crossing, cable raising etc.,	Mtrs	8	1143	9144
9	Route and Joint Indicating Stones	Nos	20	120	2400
	Total (Flat Armoured)				**1249319**
	Total (Round Armoured)				**1490379**
10	**Labour charges**				
	a) Cable trench excavation, 1000x0.6x1=600, Ordinary soil	Cmt	600	181	108600
	b) Laying of cable in trench	Km	1	33439	33439
	c) Refilling and consolidation	Cmt	550	40	22000
	d) Making of straight through joints	Nos	3	1500	4500
	e) Making of cable terminations	Nos	2	1375	2750
	f) Covering the cable with tiles	Km	1	2304	2304
	g) Spreading Sand and forming with Sand round the cable	Km	1	8094	8094
	h) Laying of RCC Hume pipes	Mtr	60	35	2100
	i) Laying of GI Pipe	Mtr	8	40	320
	j) Laying of Route and Joint indicating stones	Nos	20	60	1200
	Total Labour Charges				
	a) Casual				**185307**
	b) Regular				**37061**
	Total Cost/Km in Rs. (Flat Armoured)				**1471687**
	Total Cost/Km in Rs. (Round Armoured)				**1712747**
11	Add Rates for Reinstatements of Roads	As per prevailing rates prescribed by local bodies (Corporations/Municipalities/VPS as applicable)			
	NOTE				
1)	**While preparing estimates for turnkey / total tunkey projects please refer to Sl. No. ..... of General Guidelines vide a to .... in Page No. .....**				
2)	**When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtrs x 1 Mtrs for 2 cables. b) 1 Mtr x 1 Mtr for 3 cables. c) 1.25 Mtr x 1 Mtr for 4 nos. of cables and so on (As per Ltr No. BESCOM/BC-14/F-45**				
3)	**Where cables are laid using trenchless technology, there may be a necessity to lay the cable in open trench excavation. Hence provisionshall be made for both in the estimate and the bills shall be paid as per actual inventory taken.**				

COST DATA SHEET - 22

For laying of 1 Km Length of 11kV, 3 Core, 400 Sqmm XLPE UG Cable Using Horizontal Drilling

SL. No	Particulars	Unit	Qty	Material cost	
				Rate	Amt
	Material Cost				
1	11kV Class 3x400 Sqmm XLPE UG Cable (Flat Armoured)	Km	1	1632500	1632500
2	11kV Class 3x400 Sqmm XLPE UG Cable (Round Armoured)	Km	1	2015220	2015220
2	Straight Through Jointing Kits HS Type suitable for 400 Sqmm Cable	Nos	3	8050	24150
3	Cable Termination Kit Outdoor/Indoor HS Type Suitable for 400 Sqmm Cable	Per Kit	2	3940	7880
6	RCC Hume Pipe, 2000 mm Long, 150 mm Dia	Nos	3	300	900
7	Collars for RCC Hume pipe	Nos	2	80	160
8	GI Pipe, 150 mm Dia for drain crossing, cable raising etc.,	Mtrs	8	1144	9152
9	Route and Joint Indicating Stones	Nos	10	120	1200
	Total (Flat Armoured)				**1675942**
	Total (Round Armoured)				**2058662**
10	**Labour charges**				
	a) Laying of cable in trench in wherever necessary	Mtrs	50	35198	1760
	b) Labour chargers for horizontal drilling with 6 inches bore size				
	i) Without HDPE Pipe	Rmtr	50	625	31250
	ii) With HDPE pipe	Rmtr	900	913	821700
	c) Making of straight through joints	Nos	3	1500	4500
	d) Making of cable terminations	Nos	2	1375	2750
	e) Laying of RCC Hume pipes	Nos	3	35	105
	f) Laying of GI Pipe	Mtr	8	40	320
	gj) Laying of Route and Joint indicating stones	Nos	10	60	600
	Total Labour Charges				**862985**
	a) Casual				**862985**
	b) Regular				**172597**
	Total Cost/Km in Rs. (Flat Armoured)				**2711524**
	Total Cost/Km in Rs. (Round Armoured)				**3094244**
11	Add rates for Reinstatements of Roads	As per prevailing rates prescribed by local bodies (Corporations/Municipalities/VPs)			
	NOTE				
1)	**While preparing estimates for turnkey / total tunkey projects please refer to Sl. No. ..... of General Guidelines vide a to .... in Page No. .....**				
2)	**When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtrs x 1 Mtrs for 2 cables. b) 1 Mtr x 1 Mtr for 3 cables. c) 1.25 Mtr x 1 Mtr for 4 nos. of cables and so on (As per Ltr No. BESCOM/BC-14/F-45**				
3)	**Where cables are laid using trenchless technology, there may be a necessity to lay the cable in open trench excavation. Hence provisionshall be made for both in the estimate and the bills shall be paid as per actual inventory taken.**				

COST DATA SHEET - 23

For laying of 1 Km Length of 11kV, 3 Core, 400 Sqmm XLPE UG Cable
Using Conventional Laying with Excavation in Soil

SL. No	Particulars	Unit	Qty	Material cost	
				Rate	Amt
1	11kV Class 3x400 Sqmm XLPE UG Cable (Flat Armoured)	Km	1	1632500	1632500
2	11kV Class 3x400 Sqmm XLPE UG Cable (Round Armoured)	Km	1	2015220	2015220
2	Straight Through Jointing Kits HS Type suitable for 3x400 Sqmm Cable	Nos	3	8050	24150
3	Cable Termination Kit Outdoor/Indoor HS Type Suitable for 3x400 Sqmm Cable	Per Kit	2	3940	7880
4	Cable Covering Tiles 250x125x40 mm or 125x125x40 mm	Nos	4000 / 8000	10/5	40000
5	Sand	Cmt	60	2000	120000
6	RCC Hume Pipe, 2000mm Long, 150mm Dia	Nos	30	300	9000
7	Collars for RCC Hume Pipe	Nos	30	80	2400
8	GI Pipe, 150 mm Dia for drain crossing, cable raising etc.,	Mtrs	8	1144	9152
9	Route and Joint indicating stones	Nos	20	120	2400
	Total (Flat Armoured)				**1847482**
	Total (Round Armoured)				**2230202**
10	**Labour charges**				
	a) Cable trench excavation, 1000x0.6x1=600, Ordinary soil	Cmt	600	181	108600
	b) Laying of cable in trench	Km	1	35198	35198
	c) Refilling and consolidation	Cmt	550	40	22000
	d) Making of straight through joints	Nos	3	1500	4500
	e) Making of cable terminations	Nos	2	1375	2750
	f) Covering the cable with tiles	Km	1	2304	2304
	g) Spreading Sand and forming with Sand round the cable	Km	1	8094	8094
	h) Laying of RCC Hume pipes	Mtrs	60	35	2100
	i) Laying of GI Pipe	Mtrs	8	40	320
	j) Laying of Route and Joint indicating stones	Nos	20	60	1200
	Total Labour Charges				
	a) Casual				**187066**
	b) Regular				**37413**
	Total Cost/Km in Rs. (Flat Armoured)				**2071961**
	Total Cost/Km in Rs. (Round Armoured)				**2454681**
11	Add rates for Reinstatements of Roads	As per prevailing rates prescribed by local bodies (Corporations/ Municipalities/VPs)			
	NOTE				
1)	**While preparing estimates for turnkey / total tunkey projects please refer to Sl. No. ..... of General Guidelines vide a to .... in Page No. .....**				
2)	**When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtrs x 1 Mtrs for 2 cables. b) 1 Mtr x 1 Mtr for 3 cables. c) 1.25 Mtr x 1 Mtr for 4 nos. of cables and so on (As per Ltr No. BESCOM/BC-14/F-45**				
3)	**Where cables are laid using trenchless technology, there may be a necessity to lay the cable in open trench excavation. Hence provisionshall be made for both in the estimate and the bills shall be paid as per actual inventory taken.**				

COST DATA SHEET - 24

Erection of 3 Phase, 11kV/433V, 25kVA BEE – 3 Star Rated Distribution Transformer Centre Using DPTS							
Sl No	**Particulars**	**Unit**	**Qty**	**25 KVA**			
				Material Cost		**Labour Cost**	
				Rate	**Amt**	**Rate**	**Amt**
1	**Part-A: TRANSFORMER**						
	a) 9 Mtr RCC DP Transformer Structure (Using 9 Mtr RCC Poles)	No	1	24132	24132	3641	3641
	b) 8 Mtr RCC DP Transformer Structure (Using 8 Mtr RCC Poles)	No	1	20898	20898	3150	3150
2	11kV Pin Insulators	Sets	3	103	309	0	0
3	45kN Disc Insulators	Sets	3	300	900	0	0
4	Guy Set Complete	Nos	4	855	3420	314	1256
5	11kV/433V, 25KVA, 3 Phase, 50 Cys Distribution Transformer BEE-3 Star Rated with Oil	No	1	64455	64455	603	603
6	Earthing materials pipe type for grounding as per Drawing No. BESCOM/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1355	4065	507	1521
7	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/ Dt: 24.10.07	No	1	120	120	43	43
8	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	2	73	146	20	40
9	Concreting for Guy sets without cement	Nos	4	140	560	0	0
10	GI Wire 8 SWG	Kgs	5	62.8	314	0	0
11	Guy wire 7/10 SWG	Kgs	10	66.72	667	0	0
	Total using 9 mtr Poles				**99088**		**7104**
	Total using 8 mtr Poles				**95854**		**6613**
12	Labour Charges						
	i) using 9 mtr Poles						
	a) Casual						**7104**
	b) Regular						**1421**
	ii) using 8 mtr Poles						
	a) Casual						**6613**
	b) Regular						**1323**
13	**Total for Part-A**						
	I) Using 9 mtr Poles				**107613**		
	ii) using 8 mtr Poles				**103790**		
	Part-B:						
14	11kV Lightning Arester, Metal oxide, 9kV, 5kA	Set of 3 Nos	1	2283	2283	63	63
15	Labour Charges						
	a) Casual						**63**
	b) Regular						**13**
16	**Total for Part-B**				**2359**		

	Part-C: SWITCH GEAR						
17	a) LT Protection Kit for 25 kVA	No	1	1679	1679	181	181
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) **SINGLE CIRCUIT**	No	1				
	i. Al Lead Wire - 50 Sqmm	Mtrs	25	44	1100	503	503
	ii. Copper Lugs - 50 Sqmm	Nos	4	34	136		
	iii. PG Clamps - Rabbit to 50 Sqmm	Nos	4	64	256		
	iv. Spacers for DTC Wiring	Nos	8	24	192		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	188	376		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	6390	6390	456	456
	d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1	3000	3000	558	558
18	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1	871	871	375	375
19	11kV, 200Amps, Single Break GOS	No	1	7320	7320	563	563
	Total Cost (Material) for Part-C				**21320**		
20	Labour Charges						
	a) Casual						**2636**
	b) Regular						**527**
21	**Total for Part-C**				**24483**		
22	**Total (A+B+C)**						
	1) Using 9 mtr Poles				**134455**		
	Labour Charges:						
	a) Casual						**9803**
	b) Regular						**1961**
	2) Using 8 mtr Poles				**130632**		
	Labour Charges:						
	a) Casual						**9312**
	b) Regular						**1862**

Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate separately for

COST DATA SHEET -25

Erection of 3 Phase, 11kV/433V, 63kVA BEE – 3 Star Rated Distribution Transformer Centre Using DPTS

Sl No	Particulars	Unit	Qty	63 KVA			
				Material Cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	**Part-A: TRANSFORMER**						
	a) 9 Mtr RCC DP Transformer Structure (Using 9 Mtr RCC Poles)	No	1	24312	24312	3641	3641
	b) 8 Mtr RCC DP Transformer Structure (Using 8 Mtr RCC Poles)	No	1	20898	20898	3150	3150
2	11kV Pin Insulators	Sets	3	103	309	0	0
3	45kN Disc Insulators	Sets	3	300	900	0	0
4	Guy Set Complete	Nos	4	855	3420	314	1256
5	11kV/433V, 63kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 3 Star Rated with Oil	No	1	109635	109635	603	603
6	Earthing materials pipe type for grounding as per Drawing No. BESCOM/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1355	4065	507	1521
7	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/ Dt: 24.10.07	No	1	120	120	43	43
8	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	2	73	146	20	40
9	Concreting for Guy sets without cement	Nos	4	140	560	0	0
10	GI Wire 8 SWG	Kgs	5	62.8	314	0	0
11	Guy wire 7/10 SWG	Kgs	10	66.72	667	0	0
	Total using 9 mtr Poles				**144448**		**7104**
	Total using 8 mtr Poles				**141034**		**6613**
12	Labour Charges						
	i) using 9 mtr Poles						
	a) Casual						**7104**
	b) Regular						**1421**
	ii) using 8 mtr Poles						
	a) Casual						**6613**
	b) Regular						**1323**
13	**Total for Part-A**						
	I) Using 9 mtr Poles				**152973**		
	ii) using 8 mtr Poles				**148970**		
	Part-B:						
14	11kV Lightning Arester, Metal Oxide 9kV, 5kA	Set of 3 Nos	1	2283	2283	63	63
15	Labour Charges						
	a) Casual						**63**
	b) Regular						**13**
16	**Total for Part-B**				**2359**		
	Part-C: SWITCH GEAR						

	a) LT Protection Kit for 63 kVA	Nos	2	1679	3358	181	362
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) **SINGLE CIRCUIT**	No	1				
	i. Al Lead Wire - 95 Sqmm	Mtrs	40	81	3240		
	ii. Copper Lugs - 95 Sqmm	Nos	4	79	316		
17	iii. PG Clamps - Rabbit to 95 Sqmm	Nos	4	122	488	503	503
	iv. Spacers for DTC Wiring	Nos	8	24	192		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	188	376		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	5907	5907	456	456
	d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1	3000	3000	588	588
18	11kV Solid Core Type HG Fuse Unit	Set/ 3 nos	1	871	871	375	375
19	11kV, 200Amps, Single Break GOS	No	1	7320	7320	563	563
	Total Cost (Material) for Part-C				**25068**		
20	Labour Charges						
	a) Casual						**2847**
	b) Regular						**569**
21	**Total for Part-C**				**28484**		
22	**Total (A+B+C)**						
	1) Using 9 mtr Poles				**183816**		
	Labour Charges:						
	a) Casual						**10014**
	b) Regular						**2003**
	2) Using 8 mtr Poles				**179813**		
	Labour Charges:						
	a) Casual						**9523**
	b) Regular						**1905**

Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate separately for

COST DATA SHEET -26

Erection of 3 Phase, 11kV/433 V, 100kVA BEE – 3 Star Rated Distribution Transformer Centre Using DPTS

Sl No	Particulars	Unit	Qty	100 KVA			
				Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	**Part-A: TRANSFORMER**						
	a) 9 Mtr RCC DP Transformer Structure (Using 9 Mtr RCC Poles)	No	1	26482	26482	3749	3749
	b) 8 Mtr RCC DP Transformer Structure (Using 8 Mtr RCC Poles)	No	1	23248	23248	3377	3377
2	11kV Pin Insulators	Sets	3	103	309	0	0
3	45kN Disc Insulators	Sets	3	300	900	0	0
4	Guy Set Complete	Nos	4	855	3420	314	1256
5	11kV/433V, 100kVA, 3 Phase 50 Cys Distribution Transformer BEE - 3 Star Rated with Oil	No	1	146408	146408	805	805
6	Earthing materials pipe type for grounding as per Drawing No. BESCOM/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1355	4065	507	1521
7	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/ Dt: 24.10.07	No	1	120	120	43	43
8	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	2	73	146	20	40
9	Concreting for Guy sets without cement	Nos	4	140	560	0	0
10	GI Wire 8 SWG	Kgs	5	62.8	314	0	0
11	Guy wire 7/10 SWG	Kgs	10	66.72	667	0	0
	Total using 9 mtr Poles				**183391**		**7414**
	Total using 8 mtr Poles				**180157**		**7042**
12	Labour Charges						
	I) using 9 mtr Poles						
	a) Casual						**7414**
	b) Regular						**1483**
	ii) using 8 mtr poles						
	a) Casual						**7042**
	b) Regular						**1408**
13	**Total for Part-A**						
	I) Using 9 mtr Poles				**192288**		
	ii) using 8 mtr poles				**188608**		
	Part-B:						
14	11kV Lightning Arester, Metal Oxide 9kV, 5kA	Set of 3 Nos	1	2283	2283	63	63
15	Labour Charges						
	a) Casual						**63**
	b) Regular						**13**
16	**Total for Part-B**				**2359**		
	Part-C: SWITCH GEAR						

17	a) LT Protection Kit	Nos	2	1679	3358	181	362
	b) LT Distribution box for 100 kVA with MCB	No	1	16705	16705	403	403
	c) LT Wiring (From DTC to LT Line Through Merering Box & LT Protection Kit/LT Distribution Box) **SINGLE CIRCUIT**	No	1				
	i. Al Lead Wire - 120 Sqmm	Mtrs	45	106	4770	503	503
	ii. Copper lugs - 120 Sqmm	Nos	12	86	1032		
	iii. PG Clamps - Rabbit to 120 Sqmm	Nos	4	238	952		
	iv. Spacers for DTC Wiring	Nos	8	24	192		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	188	376		
	d) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	5568	5568	456	456
	e) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	Nos	1	3000	3000	588	588
18	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1	871	871	375	375
19	11kV, 200Amps, Single Break GOS	No	1	7320	7320	563	563
		With LT Protection kit		**With Distribution Box**			
	Total Cost (Material)		**27439**		**40786**		
20	Labour Charges						
	a) Casual		**2847**		**2888**		
	b) Regular		**569**		**578**		
21	**Total for Part-C**		**30855**		**44252**		
22	**Total (A+B+C)**						
	1) Using 9 mtr Poles		**225502**		**238898**		
	Labour Charges:						
	a) Casual		**10324**		**10365**		
	b) Regular		**2065**		**2073**		
	2) Using 8 mtr Poles		**221822**		**235218**		
	Labour Charges:						
	a) Casual		**9952**		**9993**		
	b) Regular		**1990**		**1999**		

Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate separately for

COST DATA SHEET - 27

Erection of 3 Phase, 11kV/433V, 250kVA Distribution Transformer Centre Using DPTS

Sl.No	Particulars	Unit	Qty	250 KVA			
				Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	**Part-A: TRANSFORMER**						
	a) 9 Mtr RCC DP Transformer Structure (Using 9 Mtr RCC Poles)	No	1	26482	26482	3749	2999
	b) 8 Mtr RCC DP Transformer Structure (Using 8 Mtr RCC Poles)	No	1	26482	26482	3377	2703
2	11kV Pin Insulators	Sets	3	103	309	0	0
3	45kN Disc Insulators	Sets	3	300	900	0	0
4	Guy Set Complete	Nos	4	855	3420	314	1256
5	11kV/433V, 250kVA, 3 Phase, 50 Cys Distribution Transformer with oil	No	1	237696	237696	1208	1208
6	Earthing materials pipe type for grounding as per Drawing No. BESCOM/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1355	4065	507	1521
7	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/ Dt: 24.10.07	No	1	120	120	43	43
8	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kgs	2	73	146	20	40
9	Concreting for Guy sets without cement	Nos	4	140	560	0	0
10	GI Wire 8 SWG	Kgs	5	62.8	314	0	0
11	Guy wire 7/10 SWG	Kgs	10	66.72	667	0	0
	Total using 9 mtr Poles				**274679**		**7067**
	Total using 8 mtr Poles				**274679**		**6771**
12	Labour Charges						
	i) using 9 mtr Poles						
	a) Casual						**7067**
	b) Regular						**1413**
	ii) using 8 mtr poles						
	a) Casual						**6771**
	b) Regular						**1354**
13	**Total for Part-A**						
	I) Using 9 mtr Poles				**283160**		
	ii) using 8 mtr poles				**282804**		

	Part-B:						
14	11kV Lightning Arester, Metal Oxide 9kV, 5kA	Set of 3 Nos	1	2283	2283	63	63
15	Labour Charges						
	a) Casual						**63**
	b) Regular						**13**
16	**Total for Part-B**				**2359**		
	Part-C: SWITCH GEAR						
17	a) LT Distribution box for 250kVA with MCCB	No	1	16705	16705	403	403
	b) LT Wiring (From DTC to LT Line via Metering Box & LT Protection Kit) **SINGLE CIRCUIT**	No	1				
	i. Al Lead Wire - 240 Sqmm	Mtrs	45	194	8730	644	644
	ii. Copper lugs - 240 Sqmm	Nos	12	207	2484		
	iii. PG Clamps - Rabbit to 240 Sqmm	Nos	4	357	1428		
	iv. Spacers for DTC Wiring	Nos	8	24	192		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	188	376		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	5895	5895	456	456
	d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	Nos.	1	3000	3000	558	558
18	11kV Solid Core Type HG Fuse Unit	Set/ 3 nos	1	832	832	375	375
19	11kV, 200Amps, Single Break GOS	No	1	7320	7320	563	563
	Total Cost (Material)				**46962**		
20	Labour Charges						
	a) Casual						**2999**
	b) Regular						**600**
21	**Total for Part-C**				**50561**		
22	**Total (A+B+C)**						
	1) Using 9 mtr Poles				**336079**		
	Labour Charges:						
	a) Casual						**10129**
	b) Regular						**2026**
	2) Using 8 mtr Poles				**335724**		
	Labour Charges:						
	a) Casual						**9833**
	b) Regular						**1967**

Note: Provision for actual quantity of additional materials viz 45kN Disc Insulator, 11 kV Pin Insulators ACSR/AAA Conductor, Transparent Alkathine Tube, PG Clamps and Terminal Connectors etc. Whenever required may be made in the estimate separately for

1 While preparing estimates for turnkey / total tunkey projects please refer to Sl. No. ..... of General Guidelines vide a to .... in Page No. .....

COST DATA SHEET - 28

Erection of 3 Phase, 11kV/433V, 25kVA BEE 3 Star Rated Single Pole Mounted Transformer Centre on 9 Mtrs RCC Pole (Square Section)

Sl. No	Materials	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	9 Mtr long RCC pole (Square Section)	No	1	7210	7210	937	937
2	11kV Pin Insulators with pins	Nos	3	103	309	0	0
3	45kN Disc Insulator	Nos	3	300	900	0	0
4	Guy Set Complete	Set	1	855	855	314	314
5	Single pole TC set suitable for 25 kVA Transformer	Set	1	4703	4703	899	899
5	11kV/433V, 25kVA, 3 Phase, 50 Cys Distribution Transformer BEE-3 Star Rated with Oil	No	1	64455	64455	603	603
7	Earthing materials pipe type for grounding as per Drawing No. BESCOM/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1355	4065	507	1521
8	**Concreting materials for 9 mtr RCC Pole**						
	a) Base concreting 1:4:8, 650x650x150 mm	Each	1	252	252	0	0
	b) Pole concreting 1:2:4, 500x500x1650	Each	1	2731	2731	0	0
	c) Coping 1:2:4 (as per actuals)	Each	1	403	403	0	0
9	Concreting materials for Guy sets (without cement)	No	1	140	140	0	0
10	GI Wire 8 SWG	Kgs	5	62.8	314	0	0
11	Guy Wire 7/10 SWG	Kgs	10	66.7	667	0	0
12	11kV Lightning Arester, Metal Oxide 9kV, 5kA	Set/3 Nos	1	2283	2283	63	63
13	a) LT Protection Kit for 25 kVA	No	1	1679	1679	181	181
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) **SINGLE CIRCUIT**	No	1				
	i. Al Lead Wire - 50 Sqmm	Mtrs	25	44	1100	503	503
	ii. Copper lugs - 50 Sqmm	Nos	4	34	136		
	iii. PG Clamps - Rabbit to 50 Sqmm	Nos	4	64	256		
	iv. Spacers for DTC Wiring	Nos	8	24	192		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	188	376		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	6390	6390	456	456
	d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1	3000	3000	558	558
14	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1	871	871	375	375
15	11kV, 200Amps, Single Break GOS	Nos	1	7320	7320	563	563
16	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/ Dt: 24.10.07	No	1	120	120	43	43
17	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kg	1	70	70	20	20
18	**Total Material Cost**				**110797**		
	Labour Charges						
	a) Casual						**7036**
	b) Regular						**1407**
	Total cost for erection of a single pole mounted 25kVA Transformer in Rs				**119240**		

COST DATA SHEET - 29

Erection of 3 Phase, 11kV/433V, 63kVA BEE 3 Star Rated Single Pole Mounted Transformer Centre on 9 Mtrs RCC Pole (Square Section)

Sl. No	Materials	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	9 Mtr long RCC pole (Square Section)	No	1	7210	7210	937	937
2	11kV Pin Insulators with pins	Nos	3	103	309	0	0
3	45kN Disc Insulator	Nos	3	300	900	0	0
4	Guy Set Complete	Set	1	855	855	314	314
5	Single pole TC set suitable for 63 kVA Transformer	Set	1	4703	4703	899	899
6	11kV/433V, 63kVA, 3 Phase, 50 Cys Distribution Transformer BEE-3 Star Rated with Oil	No	1	109635	109635	603	603
7	Earthing materials pipe type for grounding as per Drawing No. BESCOM/GM/CP/15 & 34/ Dt: 24.10.07	Single Electrode with accessories	3	1355	4065	507	1521
8	**Concreting materials for 9 mtr RCC Pole**						
	a) Base concreting 1:4:8, 650x650x150 mm	Each	1	252	252	0	0
	b) Pole concreting 1:2:4, 500x500x1650	Each	1	2731	2731	0	0
	c) Coping 1:2:4 (as per actuals)	Each	1	403	403	0	0
9	Concreting materials for Guy sets (without cement)	No	1	140	140	0	0
10	GI Wire 8 SWG	Kgs	5	62.8	314	0	0
11	Guy Wire 7/10 SWG	Kgs	10	66.7	667	0	0
12	11kV Lightning Arester, Metal Oxide 9kV, 5kA	Set/3 Nos	1	2283	2283	63	63
13	a) LT Protection Kit for 63 kVA	Nos	2	1679	3358	181	362
	b) LT Wiring (From DTC to LT Line Through Merering Box & LT Protection Kit) **SINGLE CIRCUIT**	No	1				
	i. Al Lead Wire - 95 Sqmm	Mtrs	40	81	3240	503	503
	ii. Copper lugs - 95 Sqmm	Nos	4	79	316		
	iii. PG Clamps - Rabbit to 95 Sqmm	Nos	4	122	488		
	iv. Spacers for DTC Wiring	Nos	8	24	192		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	188	376		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	5907	5907	456	456
	d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1	3000	3000	588	588
14	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1	871	871	375	375
15	11kV, 200Amps, Single Break GOS	Nos	1	7320	7320	563	563
16	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/ Dt: 24.10.07	No	1	120	120	43	43
17	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kg	1	70	70	20	20
18	**Total material cost**				**159725**		
19	Labour Charges						
	a) Casual						**7247**
	b) Regular						**1449**
	Total cost for Erection of a Single Pole Mounted 63kVA Transformer in Rs				**168422**		

COST DATA SHEET - 30

Erection of 3 Phase, 11kV/433V, 100kVA BEE 3 Star Rated Single Pole Mounted Transformer Centre on 9 Mtrs RCC Pole (Square Section)

Sl. No	Materials	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	9 Mtr long RCC pole (Square Section)	No	1	7210	7210	937	937
2	11kV Pin Insulators with pins	Nos	3	103	309	0	0
3	45kN Disc Insulator	Nos	3	300	900	0	0
4	Guy Set Complete	Set	1	855	855	251	251
5	Single pole TC set suitable for 100 kVA Transformer	Set	1	7050	7050	899	899
6	11kV/433V, 100kVA, 3 Phase, 50 Cys Distribution Transformer BEE-3 Star Rated with Oil	No	1	146408	146408	805	805
7	Earthing materials pipe type for grounding as per Drawing No. BESCOM/GM/CP/15 & 34/Dt: 24.10.07.	Nos	3	1355	4065	507	1521
8	**Concreting materials for 9 mtr RCC Pole**				0		
	a) Base concreting 1:4:8, 500x650x150 mm	Each	1	252	252	0	0
	b) Pole concreting 1:2:4, 500x500x1700	Each	1	2731	2731	0	0
	c) Coping 1:2:4 (as per actuals)	Each	1	403	403	0	0
9	Concreting materials for Guy sets (without cement)	No	1	140	140	0	0
10	GI Wire 8 SWG	Kgs	5	62.8	314	0	0
11	Guy Wire 7/10 SWG	Kgs	10	66.7	667	0	0
12	11kV Lightning Arester, Metal Oxide 9kV, 5kA	Set/3 Nos	1	2283	2283	63	63
13	a) LT Protection Kit	No	2	1679	3358	181	362
	b) LT Distribution Box for 100kVA with MCB	No	1	16705	16705	403	403
	c) LT Wiring (From DTC to LT Line Through Merering Box & LT Protection Kit/LT Distribution Box) **SINGLE CIRCUIT**	No	1				
	i. Al Lead Wire - 120 Sqmm	Mtrs	45	106	4770	503	503
	ii. Copper lugs - 120 Sqmm	Nos	12	86	1032		
	iii. PG Clamps - Rabbit to 120 Sqmm	Nos	4	238	952		
	iv. Spacers for DTC Wiring	Nos	8	24	192		
	v. Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	Nos	2	188	376		
	d) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	5568	5568	456	456
	e) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1	3000	3000	588	588
14	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1	871	871	375	375
15	11kV, 200Amps, Single Break GOS	Nos	1	7320	7320	563	563
16	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/ Dt: 24.10.07	No	1	120	120	43	43
17	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kg	1	73	73	20	20
18	**Total Material Cost**						
	a) With LT Distribution Box				**214566**		
	b) With LT Protection Kit				**201219**		
19	Labour Charges	**for LT Distribution Box**			**for LT Protection Kit**		
	a) Casual		**7427**			**7386**	
	b) Regular		**1485**			**1477**	
	Total						
	Total Cost for Erection of a Single Pole Mounted 100kVA Transformer with LT Distribution Box in Rs				**223479**		
	Total Cost for Erection of a Single Pole Mounted 100kVA Transformer with LT Protection KIT in Rs				**210082**		

COST DATA SHEET-31

Erection of 3 Phase, 11kV/433V, 250 kVA Single Pole Mounted Distribution Transformer on 11.0 Mtr Spun Pole With 3 GOS System

Sl No	Materials	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	Spun pole 11.0 Mtr Long	No	1	15800	15800	2084	2084
2	Single Pole Transformer Structure Kit for 250kVA	Set	1	26496	26496	1799	1799
3	HT Single Top Support with bolts, nuts & washers	Sets	9	98	882	56	504
4	11kV Pin Insulator with pins	Nos	9	103	927	0	0
5	Rabbit ACSR Conductor for jumps	Mtrs	50	36.81	1841	0	0
6	Alkathene Tube 19mm Dia and in coils of 30 Mtrs	Coils	2	500	1000	0	0
7	**Concreting materials for 11 Mtrs Spun Pole**						
	a) Base concreting 1:4:8, 1000x1000x150mm	Each	1	596	596	0	0
	b) Pole concreting 1:2:4, 1000x1000x2500 mm	Each	1	9668	9668	0	0
	c) Coping 1:2:4 (as per actuals)	Each	1	906	906	0	0
8	GI Wire 10 SWG	Kgs	5	62.8	314	0	0
9	Guy Wire 7/10 SWG	Kgs	10	66.72	667	0	0
10	GI Pipe 100 mm Dia	Mtrs	10	1143	11430	0	0
11	PVC Pipe 150 mm Dia	Mtrs	20	291	5820	0	0
12	PVC Bend 150 mm Dia	Nos	8	200	1600	0	0
13	PVC Pipe 25mm Dia	Mtrs	40	27	1080	0	0
14	11kV/433V, 250kVA, 3 Phase, 50 Cys Distribution Transformer with oil	No	1	237696	237696	1208	1208
15	11kV Solid Core Type HG Fuse Unit	Set/3 Nos	1	871	871	375	375
16	11kV, 200Amps, Single Break GOS	Nos	3	7320	21960	563	1689
17	Earthing materials pipe type for grounding as per Drawing No. BESCOM/GM/CP/15 & 34/Dt: 24.10.07.	Single Electrode with accessories	3	1355	4065	507	1521
18	a) LT Distribution Box for 250kVA with MCCB	No	1	16705	16705	403	403
	b) LT Wiring (From DTC to LT Line via Metering Box & LT Protection Kit) **SINGLE CIRCUIT**	No	1				
	i. Al Lead Wire - 240 Sqmm	Mtrs	45	194	8730	644	644
	ii. Copper lugs - 240 Sqmm	Nos	12	207	2484		
	iii. PG Clamps - Rabbit to 240 Sqmm	Nos	4	357	1428		
	iv. Spacers for DTC Wiring	Nos	8	24	192		
	v. Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	2	188	376		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS-42)	No	1	5895	5895	456	456
	d) LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	No	1	3000	3000	558	558
19	11kV Lightning Arester, Metal Oxide, 9kV, 5kA	Set/3 Nos	1	2283	2283	63	63
20	PVC Insulation Tape in rolls of 10 mtrs	Roll	3	10	30	0	0
21	Horizontal Cross Arms	nos	4	381	1524	72	288
22	MS Fish plate	Nos	9	59	531	18	158
23	Caution/Danger Board as per Drawing No. BESCOM/GM/CP/40/Dt: 24.10.07	No	1	120	120	43	43
24	Anti Climbing Device (12mtrs/1Kg GI Barbed Wire) Lumpsum	Kg	2	73	146	20	40
	Total cost of Material				**387063**		
25	Labour Charges						
	a) Casual						**11833**
	b) Regular						**2367**
	Total Cost in Rs				**401262**		

COST DATA SHEET-32

Providing Compact RMU 11kV Class SF6/VCB Type (1 Incomer + 2 Breaker + 1 Outgoing)

Sl. No	Materials	Unit	Rate	Schenider Make		ABB Make		Siemens Make		MEI	
				Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
1	RMU (3 Way), One Incomer + Two Breakers + One out going (2OD + 2VL), 350 MVA, 630Amps	No	**1050370**	1	1050370	1	1050370	1	1050370	1	1050370
2	Bed Conceting with CC 1:2:4 as per Labour Charges Item No.28.9	Cmt	**4425**	0.15	663.75	0.37	1637.25	0.53	2345.25	0.64	2832
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges Item No. 28.9	Cmt	**4425**	0.65	2876.25	1.44	6372	0.56	2478	0	0
4	Providing Reinforcement as per Labour Charges Item No. 28.1	Kgs	**68.3**	40	2732	14	956.2	23	1570.9	0	0
5	Providing Plinth on the Stone Masonary as per Labour Charges Item No. 28.9	Cmt	**4425**	0	0	0	0	0	0	0.08	354
6	Construction of Stone Masonary was per labour charges Item No. 28.11	Cmt	**3776**	0	0	0	0	0	0	0.57	2152.32
7	Supplying of Frame of MS Channel 100x50mm and MS angle 40x40x5mm welding etc., complete.	Kgs	**50**	50	2500	50	2500	50	2500	50	2500
8	Rod type earthing with 40 mm Dia, 3 Mtrs long MS rod as per specification & drawing (enclosed)	No	**2000**	2	4000	2	4000	2	4000	2	4000
9	Lettering the RMU with enamel paint and also writing single line diagram of each panel, caution Board, Danger Board etc., including cost of Paint, Brush etc.,	No	**528**	1	528	1	528	1	528	1	528
	Total cost of material.				**1063670**		**1066363**		**1063792**		**1062736.3**
	Labour Charges										
1	Earth Excavation for RMU Foundation depositing of earth on bank up to a lead of 50 mtrs and with a lift up to 1.5 mtrs	cmt	**141**	1.29	181.89	3.33	469.53	2.63	370.83	5.72	806.52
2	Labour charges for Fixing foundation frame of MS channel 100x50mm and MS angle 40x40x5mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel etc., complete.	No	**2510**	4	10040	4	10040	4	10040	4	10040
	Labour Charges				**10222**		**10510**		**10411**		**10847**
	a) Casual				10222		10510		10411		10847
	b) Regular				2044		2102		2082		2169
	Total cost				**1075936**		**1078975**		**1076285**		**1075752**

Note:-

1. **The measurements for Earth work and concreting works have been provision as per the dimensions of the equipments of makes which are in use at present in BESCOM. Detail for the measurement are furnished in the data sheet furnished in Page No. .....**

2. **While preparing estimates for turnkey / total turnkey projects please refere to Sl. No. ..... To general guidelines vide a to .... page No. ..... To .....**

COST DATA SHEET-33

Providing Compact RMU 11kV Class SF6/VCB Type (1 Incomer +1 Breaker +1 Outgoing)

Sl. No	Materials	Unit	Rate	Schenider Make		ABB Make		Siemens Make		MEI	
				Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
1	RMU (3 Way), One Incomer + Two Breakers + One outgoing (2OD + 1VL), 350 MVA, 630Amps	No	**739453**	1	739453	1	739453	1	739453	1	739453
2	Bed Conceting with CC 1:2:4 as per Labour Charges Item No.28.9	Cmt	**4425**	0.08	354	0.28	1239	0.43	1902.75	0.48	2124
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges Item No. 28.9	Cmt	**4425**	0.36	1593	1.08	4779	0.42	1858.5	0	0
4	Providing Reinforcement as per Labour Charges Item No. 28.1	Kgs	**68.3**	30	2049	10	683	17	1161.1	0	0
5	Providing Plinth on the Stone Masonary as per Labour Charges Item No. 28.9	Cmt	**4425**	0	0	0	0	0	0	0.06	265.5
6	Construction of Stone Masonary was per labour charges Item No. 28.11	Cmt	**3776**	0	0	0	0	0	0	0.43	1623.68
7	Supplying of Frame of MS Channel 100x50mm and MS angle 40x40x5mm welding etc., complete.	Kgs	**50**	40	2000	40	2000	40	2000	40	2000
8	Rod type earthing with 40 mm Dia, 3 Mtrs long MS rod as per specification & drawing (enclosed)	No	**2000**	2	4000	2	4000	2	4000	2	4000
9	Lettering the RMU with enamel paint and also writing single line diagram of each panel, caution Board, Danger Board etc., including cost of Paint, Brush etc.,	No	**528**	1	528	1	528	1	528	1	528
	Total cost of material.				**749977**		**752682**		**750903**		**749994.2**
	Labour Charges										
1	Earth Excavation for RMU Foundation depositing of earth on bank up to a lead of 50 mtrs and with a lift up to 1.5 mtrs	cmt	**141**	0.72	101.52	2.5	352.5	2	282	4.35	613.35
2	Labour charges for Fixing foundation frame of MS channel 100X50mm and MS angle 40X40X5mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel etc., complete.	No.	**2510**	3	7530	3	7530	3	7530	3	7530
	Labour Charges				**7631.5**		**7882.5**		**7812**		**8143.35**
	a) Casual				7632		7883		7812		8143
	b) Regular				1526		1577		1562		1629
	Total cost				**759135**		**762141**		**760278**		**759766**

Note:-

1. **The measurements for Earth work and concreting works have been provision as per the dimensions of the equipments of makes which are in use at present in BESCOM. Detail for the measurement are furnished in the data sheet furnished in Page No. .....**
2. **While preparing estimates for turnkey / total turnkey projects please refere to Sl. No. ..... To general guidelines vide a to .... page No. ..... To .....**

COST DATA SHEET-34

Providing Compact RMU 11kV Class SF6/VCB Type (1OD)

Sl. No	Materials	Unit	Rate	Schenider Make		ABB Make		Siemens Make		MEI	
				Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
1	RMU 1 OD , 350 MVA, 630Amps	No	**266070**	1	266070	1	266070	1	266070	1	266070
2	Bed Conceting with CC 1:2:4 as per Labour Charges Item No.28.9	Cmt	**4425**	0.07	309.75	0.09	398.25	0.1	442.5	0.16	708
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges Item No. 28.9	Cmt	**4425**	0.29	1283.3	0.36	1593	0.14	619.5	0	0
4	Providing Reinforcement as per Labour Charges Item No. 28.1	Kgs	**68.3**	10	683	3.5	239.05	6	409.8	0	0
5	Providing Plinth on the Stone Masonary as per Labour Charges Item No. 28.9	Cmt	**4425**	0	0	0	0	0	0	0.02	88.5
6	Construction of Stone Masonary was per labour charges Item No. 28.11	Cmt	**3776**	0	0	0	0	0	0	0.14	528.64
7	Supplying of Frame of MS Channel 100x50mm and MS angle 40x40x5mm welding etc., complete.	Kgs	**50**	12	600	12	600	12	600	12	600
8	Rod type earthing with 40 mm Dia, 3 Mtrs long MS rod as per specification & drawing (enclosed)	No	**2000**	2	4000	2	4000	2	4000	2	4000
9	Lettering the RMU with enamel paint and also writing single line diagram of each panel, caution Board, Danger Board etc., including cost of Paint, Brush etc.,	No	**528**	1	528	1	528	1	528	1	528
	Total cost of material.				**273474**		**273428**		**272670**		**272523**
	Labour Charges										
1	Earth Excavation for R.M.U. Foundation depositing of earth on bank up to a lead of 50 mtrs and with a lift up to 1.5 mtrs	cmt	**141**	0.57	80.37	0.83	117.03	0.63	88.83	1.37	193.17
2	Labour charges for Fixing foundation frame of MS channel 100X50mm and MS angle 40X40X5mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel etc., complete.	No.	**2510**	1	2510	1	2510	1	2510	1	2510
	Labour Charges				**2590.4**		**2627**		**2598.83**		**2703.17**
	a) Casual				2590		2627		2599		2703
	b) Regular				518		525		520		541
	Total cost				**276582**		**276581**		**275788**		**275767**

Note:-

1. **The measurements for Earth work and concreting works have been provision as per the dimensions of the equipments of makes which are in use at present in BESCOM. Detail for the measurement are furnished in the data sheet furnished in Page No. ……..**
2. **While preparing estimates for turnkey / total turnkey projects please refere to Sl. No. …….. To general guidelines vide a to …. page No. ……. To ……..**

COST DATA SHEET-35

Providing Compact RMU 11kV Class SF6/VCB Type (1VL)

Sl. No	Materials	Unit	Rate	Schenider Make		ABB Make		Siemens Make		MEI	
				Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
1	RMU 1 VL, 350 MVA, 630Amps	No	**310917**	1	310917	1	310917	1	310917	1	310917
2	Bed Conceting with CC 1:2:4 as per Labour Charges Item No.28.9	Cmt	**4425**	0.07	309.75	0.09	398.25	0.1	442.5	0.16	708
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges Item No. 28.9	Cmt	**4425**	0.29	1283.25	0.36	1593	0.14	619.5	0	0
4	Providing Reinforcement as per Labour Charges Item No. 28.1	Kgs	**68.3**	10	683	3.5	239.05	6	409.8	0	0
5	Providing Plinth on the Stone Masonary as per Labour Charges Item No. 28.9	Cmt	**4425**	0	0	0	0	0	0	0.02	88.5
6	Construction of Stone Masonary was per labour charges Item No. 28.11	Cmt	**3776**	0	0	0	0	0	0	0.14	528.64
7	Supplying of Frame of MS Channel 100x50mm and MS angle 40x40x5mm welding etc., complete.	Kgs	**50**	12	600	12	600	12	600	12	600
8	Rod type earthing with 40 mm Dia, 3 Mtrs long MS rod as per specification & drawing (enclosed)	No	**2000**	2	4000	2	4000	2	4000	2	4000
9	Lettering the RMU with enamel paint and also writing single line diagram of each panel, caution Board, Danger Board etc., including cost of Paint, Brush etc.,	No	**528**	1	528	1	528	1	528	1	528
	Total cost of material.				**318321**		**318275**		**317517**		**317370**
	Labour Charges										
1	Earth Excavation for R.M.U. Foundation depositing of earth on bank up to a lead of 50 mtrs and with a lift up to 1.5 mtrs	cmt	**141**	0.57	80.37	0.83	117.03	0.63	88.83	1.37	193.17
2	Labour charges for Fixing foundation frame of MS channel 100X50mm and MS angle 40X40X5mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel etc., complete.	No.	**2510**	1	2510	1	2510	1	2510	1	2510
	Labour Charges				**2590.37**		**2627**		**2598.83**		**2703.17**
	a) Casual				2590		2627		2599		2703
	b) Regular				518		525		520		541
	Total cost				**321429**		**321428**		**320635**		**320614**

Note:-

1. **The measurements for Earth work and concreting works have been provision as per the dimensions of the equipments of makes which are in use at present in BESCOM. Detail for the measurement are furnished in the data sheet furnished in Page No. .....**
2. **While preparing estimates for turnkey / total turnkey projects please refere to Sl. No. ..... To general guidelines vide a to .... page No. ..... To .....**

COST DATA SHEET - 36

Running Single Circuit 11kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 30 Mtrs Using 3x95 Sqmm + 1x70 Sqmm Aerial Bunched Cables (ABC)

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Poles 9 Mtr long with 145 Kg WL	Nos	10	5941	59410	937	9370
2	PSC Poles 9 Mtr long with 200 Kg WL	Nos	24	3278	78672	937	22488
Note:	**RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports and hence the quantity of RCC and PSC poles may be revised as per field condition.**						
3	11kV Class 3 phase Aerial Bunched Cable 3x95 + 70 Sqmm	Kms	1.015	700820	711332	18076	18347
4	Cable Straight thru' joint kits suitable for 95 Sqmm	Nos	6	2963	17778	733	4396
5	T-Jointing Kits	Nos	6	3757	22542	916	5494
6	Termination Kits	Nos	6	1879	11274	620	3718
7	Suspension clamp assembly including pole clamps	Sets	30	289	8670	102	3060
8	Dead End Clamp/Anchor Clamp Assembly including brackets, pole clamps	Sets	12	145	1740	136	1632
9	End Caps	Nos	10	19	190	4	40
10	11kV Lightning Arrester, Metal Oxide 9kV, 5kA	Set (3Nos)	2	2283	4566	63	126
11	Guy Set Complete	Sets	6	855	5130	314	1884
12	Concreting for Guy sets (without cement)	Sets	6	140	840	0	0
13	Grounding connection for messenger wire	Nos	4	117	468	23	92
14	Anchor sleeve for messenger wire	Nos	4	22	88	4	16
15	Spiral Earth Electrodes	Nos	34	238	8092	39	1326
	Total Cost of Material				**930792**		
16	Labour Charges						
	a) Casual						**71989.1**
	b) Regular						**14397.8**
17	**Total Cost/Km in Rs.**				**1017179**		

While preparing estimates for turnkey / total turnkey projects please refere to Sl. No. ..... To general guidelines vide a to .... page No. ..... To .....

COST DATA SHEET - 37

Running Single Circuit 1.1 kV 3 Phase 5 Wire Power Line on 9 Mtr Supports with Average Span of 40 Mtrs Using 3x95 + 1x16 + 1x70 Sqmm Aerial Bunched Cables (ABC)

SL. No	Particulars	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	RCC Poles 9 Mtr long with 145 Kg WL	Nos	10	5941	59410	937	9370
2	PSC Poles 9 Mtr long with 200 Kg WL	Nos	15	3278	49170	937	14055
Note:	**RCC Poles shall be used for dead ends, DP structure and PSC poles for intermediate supports and hence the quantity of RCC and PSC poles may be revised as per field condition.**						
3	1.1kV Class 3 Phase Aerial Bunched Cable of size 3x95+1x16+1x70 Sqmm	kms	1.015	345902	351091	13441	13643
4	Three Phase Distribution box for 6 Connections	Nos	20	1987	39740	476	9520
5	Piercing connector suitable for 16 Sqmm - 95 Sqmm AB Cable - Service Connections	Nos	60	217	13020	68	4080
6	Piercing connector suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connections	Nos	25	152	3800	48	1200
7	Suspension Clamp Assembly including pole clamps	Sets	20	289	5780	102	2040
8	Dead End Clamp/Anchor Clamp Assembly including brackets, pole clamps	Sets	16	145	2320	136	2176
9	Universal Hook, Bolts & nuts	Nos	16	289	4624	102	1632
10	T-connector KZ3 95	Nos	8	372	2976	115	920
11	Cable Straight thru' joint kits suitable for 95 Sqmm	Sets	5	310	1550	170	850
12	Pre-Insulated lugs-CPTAU for 95 Sqmm	Nos	8	372	2976	142	1136
13	End cap for 50/70 Sqmm	Nos	50	19	950	4	200
14	Guy Set Complete	Sets	8	855	6840	314	2512
15	Concreting for Guy sets (without cement)	Sets	8	140	1120		
16	PVC Insulated wire 16/25 Sqmm	Mtrs	400	31.82	12728		
17	Spiral Earth Electrodes	Nos	25	238	5950	49	1225
	Total Cost of Materials				**564045**		
18	Labour Charges						
	a) Casual						**64559**
	b) Regular						**12912**
	Total Cost/Km in Rs.				**641515**		
1	**While preparing estimates for turnkey / total turnkey projects please refere to Sl. No. ..... To general guidelines vide a to .... page No. ..... To .....**						

COST DATA SHEET - 38

Installing RLMU for the Existing 15/25kVA Distribution Transformer Center

Sl No	Particulars	Unit	Qty	Material cost	
				Rate	Amt
1	Metallic Enclosure with Busbars	No	1	10752	10752
2	Programmable Logic Controllers with communication ports	No	1	19339	19339
3	GSM Modem	No	1	7642	7642
4	MCCB - 40 Amps for 15/25 kVA DTC	No	1	1485	1485
5	MCB 6 amps	No	1	210	210
6	Contactors - 40 Amps for 15/25 kVA DTC	No	2	2010	4020
7	Current Transformers 50/5 amps for 15/25 kVA DTC	No	3	615	1845
8	Energy Meter ETV type	No	1	3000	3000
9	Transformer wiring kit to Connect RLM Unit box to the transformer using PVC sheathed aluminium lead wire, Lugs etc.,	Kit	1	2060	2060
10	Miscellaneous materials	LS	LS	147	147
	Total Cost of Material				**50500**
11	Labour Charges				
	a) Casual				2466
	b) Regular				493
	Total Cost			**53459**	
Note:	**(1) For 15 /25 kVA Transformer feeding to individual IP sets, use only one contactor & without MCCB .**				
1)	**While preparing estimates for turnkey / total tunkey projects please refer to Sl. No. ..... of General Guidelines vide a to .... in Page No. .....**				

COST DATA SHEET - 39

Installing RLMU for the Existing 63 kVA Distribution Transformer Center

Sl No	Particulars	Unit	Qty	Material cost	
				Rate	Amt
1	Metallic Enclosure with Busbars	No	1	10752	10752
2	Programmable Logic Controllers with communication ports	No	1	19339	19339
3	GSM Modem	No	1	7642	7642
4	MCCB - 100 Amps for 63 kVA DTC	No	1	1500	1500
5	MCB 6 amps	No	1	210	210
6	Contactors - 100 Amps for 63 kVA DTC	No	2	3280	6560
7	Current Transformers 100/5 amps for 63 kVA DTC	No	3	454	1362
8	Energy Meter ETV type	No	1	3000	3000
9	Transformer wiring kit to Connect RLM Unit box to the transformer using PVC sheathed aluminium lead wire, Lugs etc.,	Kit	1	4612	4612
10	Miscellaneous materials	LS	LS	23	23
	Total Cost (Material)				**55000**
11	Labour Charges				
	a) Casual				2466
	b) Regular				493
	Total Cost			**57959**	
1)	**While preparing estimates for turnkey/total tunkey projects please refer to Sl. No. ..... of General Guidelines vide a to .... in Page No. .....**				

COST DATA SHEET - 40

Installing RLMU for the Existing 100kVA Distribution Transformer Center

Sl No	Particulars	Unit	Qty	Material cost	
				Rate	Amt
1	Metallic Enclosure with Busbars	No	1	10752	10752
2	Programmable Logic Controllers with communication ports	No	1	19339	19339
3	GSM Modem	No	1	7642	7642
4	MCCB - 150 Amps for 100 kVA DTC	No	1	1700	1700
5	MCB 6 amps	No	1	210	210
6	Contactors - 160 Amps for 100 kVA DTC	No	2	5775	11550
7	Current Transformers 150/5 amps for 100 kVA DTC	No	3	341	1023
8	Energy Meter ETV type	No	1	3000	3000
9	Transformer wiring kit to Connect RLM Unit box to the transformer using PVC sheathed aluminium lead wire, Lugs etc.,	Kit	1	7322	7322
10	Miscellaneous materials	LS	LS	62	62
	Total Cost (Material)				**62600**
11	Labour Charges				
	a) Casual				2466
	b) Regular				493
12	**Total Cost**			**65559**	
1)	**While preparing estimates for turnkey / total tunkey projects please refer to Sl. No. ..... of General Guidelines vide a to .... in Page No. .....**				

COST DATA SHEET - 41

Providing Compact Pre-fabricated Packaged Sub-station 11kV/433V

Sl No	Particulars	Unit	Total Cost
1	Packaged Sub-station 11kV/433V consisting of 3 Way SF6/VCB insulated Compact RMU, Oil cooled type Copper Wound Transformer and LT section with one ACB as incoming and 7 Nos outgoing MCCB feeders and with enclosure made of electronically Galvanized sheet		
	(i) With 100kVA oil cooled Transformer	Set	1132904
	(ii) With 250kVA oil cooled Transformer	Set	1491923
	(iii) With 500kVA oil cooled Transformer	Set	1579163
	(iv) With 750kVA oil cooled Transformer	Set	1824000
	(v) With 990kVA oil cooled Transformer	Set	2280000
	(vi) With 100kVA Dry Type Transformer	Set	1182768
	(vii) With 250kVA Dry Type Transformer	Set	1611596
	(viii) With 500kVA Dry Type Transformer	Set	1997538
	(ix) With 750kVA Dry Type Transformer	Set	2507446
	(x) With 990kVA Dry Type Transformer	Set	2908949
2	Installing & fixing the compact pre-fabricated packaged sub-station 100/250/500/750/ 990 kVA transformer on the existing concrete plinth.(This does not include the cost of plinth, cable duct,laying & termination of cable etc. provision for the same shall be made		8467
1	**While preparing estimates for turnkey/total turnkey projects please refere to Sl. No. ..... To general guidelines vide a to .... page No. ..... To .....**		

COST DATA SHEET - 42

For Providing Electronic Trivector Meters with Associated CT's Metering Box etc., on LT Side of Distribution Transformer Center

Sl. No	Materials	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	LT CT's Class - 1 Accuracy Ring Type Ratio 50/5 for 15/25kVA DTC	Nos	3	615	1845	56	168
2	LT CT's Class - 0.5 Accuracy Ring Type Ratio 100/5 for 50/63kVA DTC	Nos	3	454	1362	56	168
3	LT CT's Class - 0.5 Accuracy Ring Type Ratio 150/5 for 100kVA DTC	Nos	3	341	1023	56	168
4	LT CT's Class - 0.5 Accuracy Ring Type Ratio 400/5 for 250kVA DTC	Nos	3	400	1200	56	168
5	LT CT's Class - 0.5 Accuracy Ring Type Ratio 800/5 for 500 kVA DTC	Nos	3	450	1350	56	168
6	Electronic Trivector Meter 3 Phase, 4 Wire, Accuracy 0.5 Cl	No	1	3000	3000	558	558
7	Weather Proof, Verming Proof LT Metering Box with clamping arrangement for mounting on the Transformer structure with necessary terminal strip and CT mounting arrangement for housing the ETV Meters and connecting to the existing ground.	No	1	4545	4545	288	288
	Total Cost in Rs.	**With Meter**			**Without Meter**		
	a) 15/25kVA DTC	**9390**		**1014**	**6390**		**456**
	b) 63kVA DTC	**8907**		**1014**	**5907**		**456**
	c) 100kVA DTC	**8568**		**1014**	**5568**		**456**
	d) 250kVA DTC	**8745**		**1014**	**5745**		**456**
	e) 500kVA DTC	**8895**		**1014**	**5895**		**456**
1	**While preparing estimates for turnkey/total turnkey projects please refere to Sl. No. ..... To general guidelines vide a to .... page No. ..... To .....**						

COST DATA SHEET - 43

For providing LT Capacitor to the Distribution Transformer

Sl. No	Materials	Unit	Qty	Material cost		Labour Cost	
				Rate	Amt	Rate	Amt
1	Fixing 3 kVAr, 3 Phase, LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for 15/25kVA DTC (including connection to transformer, grounding etc., complete)	Set	1	525	525	338	338
2	Fixing 9 kVAr, 3 Phase, LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for 63kVA DTC (including connection to transformer, grounding etc., complete)	Set	1	931	931	338	338
3	Fixing 18 kVAr, 3 Phase, LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for 100kVA DTC (including connection to transformer, grounding etc., complete)	Set	1	1733	1733	398	398
4	Fixing 27 kVAr, 3 Phase, LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for 250kVA DTC (including connection to transformer, grounding etc., complete)	Set	1	2758	2758	465	465
5	Fixing 54 kVAr, 3 Phase, LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for 300/500 kVA DTC (including connection to transformer, grounding etc., complete)	Set	1	4883	4883	486	486
6	Wiring Materials for connecting the Capacitors to the Transformer (16 Sqmm Single Core PVC insulated sheathed aluminium wire, aluminium lugs, 2mm thick 40mm dia PVC pipe with Bend) and connecting the capacitor box to existing grounding	Set	1	200	200	0	0
	Total				**Material + Labour**	**Material**	**Labour**
	a) For 25KVA Transformer				**1063**	**725**	**338**
	b) For 63KVA Transformer				**1469**	**1131**	**338**
	c) For 100KVA Transformer				**2331**	**1933**	**398**
	d) For 250KVA Transformer				**3423**	**7641**	**465**
	e) For 300/500 KVA Transformer				**5569**	**5083**	**486**
1	**While preparing estimates for turnkey / total turnkey projects please refere to Sl. No. ..... To general guidelines vide a to .... page No. ..... To .....**						

COST DATA SHEET - 44

Estimate for Carrying Out 1 to 2 (One to Two) Poles Works in respect of Ganga Kalyana and Drinking Water Supply Works only

(Not applicaple for any other type of work)

SL. No	Paritculars	Unit	Qty	Consolidated Amount in Rs.
	PART-A (Materials)			
1	Material cost Estimate shall be prepared as per site requirement			
	PART-B (Labour)			
2	Consolidated labour charges involving 1 to 2 (ONE to TWO) pole works for Ganga Kalyana and Drinking Water supply works only.	Nos	1	7813

Note:-

1 **The labour charges includes all works such as digging of pits, Erection of Poles, Fixing of Cross Arms, insulators, Strining of wire, providing guy sets.**

2 **No other labour charges or any other charges towards special locality allowance LC Charges, additional labour charges, transportation charges etc., are payable.**

3 **Estimates coverig more than 2 pole works shall not split to bring them into this catageory.**

4 **Certificate has to be furnished by the section officer who prepares the estimate that the estimates are not split to claim the above labour charges**

COST DATA SHEET - 45

Estimate for Carrying Out 3 to 5 (THREE to FIVE) Poles Works in respect of Ganga Kalyana and Drinking Water Supply Works only

(Not applicaple for any other type of work)

SL. No	Paritculars	Unit	Qty	Consolidated Amount in Rs.	
	PART-A (Materials)				
1	Material cost Estimate shall be prepared as per site requirement				
	PART-B (Labour)				
2	Consolidated labour charges involving 3 to 5 (THREE to FIVE) pole works for Ganga Kalyana and Drinking Water supply works only.	Nos	1	12344	

Note:-

1 **The labour charges includes all works such as digging of pits, Errection of Poles, Fixing of Cross Arms, insulators, Strining of wire, providing guy sets.**

2 **No other labour charges or any other charges towards special locality allowance LC Charges, additional labour charges, transportation charges etc., are payable.**

3 **Estimates coverig more than 3 pole works shall not split to bring them into this catageory.**

4 **Certificate has to be furnished by the section officer who prepares the estimate that the estimates are not split to claim the above labour charges**

COST DATA SHEET - 46

Estimate for carrying out 1 to 4 (ONE to FOUR) poles works in respect of Service Main Connection and E&I Works only

(Not applicaple for any other type of work)

SL. No	Paritculars	Unit	Qty	Consolidated Amount in Rs.
	PART-A (Materials)			
1	Material cost Estimate shall be prepared as per site requirement			
	PART-B (Labour)			
2	Consolidated labour charges for works 1 to 4 (ONE to FOUR) poles including excavation of pit, pole erection, fixing of cross arms, stringing of conductor, fixing of conductor accessories, fixing guy sets, fixing of anti climbing device, spiral earth electrode, danger board etc if any (Applicable for both HT & LT Line)	Nos	1	3750
		Nos	2	5000
		Nos	3	6250
		Nos	4	7500
			5 & Above	as per Common SR 2012-13

Note:-

1 **The labour charges includes all works such as digging of pits, Erection of Poles, Fixing of Cross Arms, Strining of conductor, fixing of Conductore accessories, insulators, Fixing guy sets, Anti climbing device, spiral earth electrode and danger board etc complete**

2 **No other labour charges or any other charges towards special locality allowance LC Charges, additional labour charges, transportation charges etc., are payable.**

3 **Estimate shall not split to bring them into this category**

4 **Certificate has to be furnished by the section officer who prepares the estimate that the estimates are not split to claim the above labour charges**

COST DATA SHEET - 47

Standard Requirement of Materials for providing LT Wiring for Distribution Transformer Centers of various capacities

LT Wiring for - 250/500 KVA			
Sl No	**Material**	**Unit**	**Rate/Unit (in Rs)**
1	Al Lead Wire - 240 Sqmm	Mtrs	194
2	Copper lugs - 240 Sqmm	Nos	207
3	PG Clamps - Rabbit to 240 Sqmm	Nos	357
4	Spacers for DTC Wiring	Nos	24
5	4 Pin Cross Arm with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	399
6	Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	188

LT Wiring for - 100 KVA			
Sl No	**Material**	**Unit**	**Rate/Unit (in Rs)**
1	Al Lead Wire - 120 Sqmm	Mtrs	106
2	Copper lugs - 120 Sqmm	Nos	86
3	PG Clamps - Rabbit to 120 Sqmm	Nos	238
4	Spacers for DTC Wiring	Nos	24
5	4 Pin Cross Arm with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	399
6	Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	188

LT Wiring for - 63 KVA			
Sl No	**Material**	**Unit**	**Rate/Unit (in Rs)**
1	Al Lead Wire - 95 Sqmm	Mtrs	81
2	Copper lugs - 95 Sqmm	Nos	79
3	PG Clamps - Rabbit to 95 Sqmm	Nos	122
4	Spacers for DTC Wiring	Nos	24
5	4 Pin Cross Arm with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	399
	Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	188

LT Wiring for - 25 KVA			
Sl No	**Material**	**Unit**	**Rate/Unit (in Rs)**
1	Al Lead Wire - 50 Sqmm	Mtrs	44
2	Copper lugs - 50 Sqmm	Nos	33
3	PG Clamps - Rabbit to 50 Sqmm	Nos	32
4	Spacers for DTC Wiring	Nos	24
5	4 Pin Cross Arm with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	399

6	Fish Plate with necessary Clamps,bolts & nuts etc complete (Galvanised)	Nos	188

The size of the lead wire provisioned are as per Standard requirement depending on the Ampere rating of the transformer.
The Size of the cable mabe modified to suite field requirement where ever necessary.

Schedule of Rate for Standard Stock Materials
Common SR 2014-15 (11kV System)

Sl No	Item No	Name of the Material	Material Code	UoM	Common SR 2012-13 in ` FORD Rates inclusive of duties taxes & F&I	Common SR 2014-15 in ` FORD Rates inclusive of duties taxes & F&I
	1	**Line Supports (POLES)**				
1	1.1	RCC Pole - 9 Mtr Long, 145 Kg WL	200105	No	5941	5941
2	1.2	RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section	200106	No	7210	7210
3	1.3	RCC Pole - 8 Mtr Long, 115 Kg WL	200103	No	4438	4324
4	1.4	PCC Pole - 8 Mtr Long, 140 Kg WL	200003	No	2613	2297
5	1.5	PSC Pole - 8 Mtr Long, 200 Kg WL	200004	No	3077	2814
6	1.6	PSC Pole - 9 Mtr Long, 200 Kg WL	200006	No	3607	3278
7	1.7	PSCC Pole - 9 Mtr Long, 160 Kg WL in Transverse Direction & 136 Kg WL in Longitudinal Direction	200007	No	New Item	3558
8	1.8	Pre - Stressed Tubular Spun Pole 11 Mtr Long - 500Kg WL	200120	No	14989	15800
9	1.9	RCC Pole - 9.5 Mtr Long, 350 Kg WL for 33kV Lines	200107	No	7675	7675
10	1.10	11Mtrs Long PSC pole of working Load 365 Kg for intermediate poles only	200010	No	7924	7924
11	1.11	Strut pole made of released MS Rail pole or Tubular pole along with clamp fish plate, bolts & nuts	200514	No	2310	2310
12	1.12	11Mtrs Long pole made of I Beam (MS) section size 200x100mm 25.9 Kg/mtr	200621	No	17510	18009
13	1.13	11Mtrs Long pole made of I Beam (MS) section size 175x85mm 19.5 Kg/mtr	200610	No	11980	12321
	2	**Cross Arms (MS & GI)**				
14	2.1	11kV Horizontal X Arms - Mild Steel (MS)	279020	No	300	281
15	2.2	11kV Horizontal X Arms - Galvanised (GI)			New Item	359
16	2.3	11kV Special 3 Pin X Arm - MS	279013	No	710	664
17	2.4	11kV Special 3 Pin X Arm - GI			New Item	848
18	2.5	LT 4 Pin X Arms - MS	279014	No	233	218
19	2.6	LT 4 Pin X Arms - GI			New Item	278
20	2.7	LT 2 Pin X Arms - MS	279012	No	107	100
21	2.8	LT 2 Pin X Arms - GI			New Item	127
22	2.9	2 Pin Cross Arm with pole clamp, bolt & nuts & washers for RCC Pole - MS	-	No	187	200
23	2.10	2 Pin Cross Arm with pole clamp, bolt & nuts & washers for RCC Pole - GI			New Item	248
24	2.11	2 Pin Cross Arm with pole clamp, bolt & nuts & washers for PSC Pole - MS	-	No	180	194
25	2.12	2 Pin Cross Arm with pole clamp, bolt & nuts & washers for PSC Pole - GI			New Item	240
26	2.13	4 Pin Cross Arm with pole clamp, bolt & nuts & washers for RCC Pole - MS	-	No	313	318
27	2.14	4 Pin Cross Arm with pole clamp, bolt & nuts & washers for RCC Pole - GI			New Item	399
28	2.15	4 Pin Cross Arm with pole clamp, bolt & nuts & washers for PSC Pole - MS	-	No	306	312
29	2.16	4 Pin Cross Arm with pole clamp, bolt & nuts & washers for PSC Pole - GI			New Item	391
30	2.17	11 kV Horizontal Cross Arm with single top support, clamp, Bolt & Nuts with washers for RCC Poles - MS	-	No	475	449
31	2.18	11 kV Horizontal Cross Arm with single top support, clamp, Bolt & Nuts with washers for RCC Poles - GI			New Item	567
32	2.19	11 kV Horizontal Cross Arm with single top support, clamp, Bolt & Nuts with washers for PSC Poles - MS	-	No	468	443
33	2.20	11 kV Horizontal Cross Arm with single top support, clamp, Bolt & Nuts with washers for PSC Poles - GI			New Item	559
34	2.21	Special 3 Pin Cross Arm, clamp and Bolt & Nuts for RCC Poles - MS	-	No	774	764
35	2.22	Special 3 Pin Cross Arm, clamp and Bolt & Nuts for RCC Poles - GI			New Item	969
36	2.23	LT ST Support 50x6mm Flat - MS	279091	No	53	50
37	2.24	LT ST Support 50x6mm Flat - GI			New Item	64
38	2.25	HT ST Support 50x6mm Flat - MS	279092	No	73	68
39	2.26	HT ST Support 50x6mm Flat - GI			New Item	87
40	2.27	Brace for LT 4pin X arm (600mm long) - MS	279082	No	230	215
41	2.28	Brace for LT 4pin X arm (600mm long) - GI			New Item	269
42	2.29	Brace for 11 kV special 3pin X arm (900mm long) - MS	279083	No	320	299
43	2.30	Brace for 11 kV special 3pin X arm (900mm long) - GI			New Item	374
44	2.31	LT Cross arms for vertical Configuration - MS	279017	No	770	720
45	2.32	LT Cross arms for vertical Configuration - GI			New Item	901
46	2.33	EG Stirrups (MS) with GI wire lacing	279130	No	206	212
47	2.34	Spiral Earth Electrode	281683	No	228	238
	3	**SMC Line Materials**				
48	3.1	11KV Cross arm with HT top support (glass reinforced hot pressed SMC compound)	279090		750	750

Sl No	Item No	Name of the Material	Material Code	UoM	Common SR 2012-13 in ` FORD Rates inclusive of duties taxes & F&I	Common SR 2014-15 in ` FORD Rates inclusive of duties taxes & F&I
	4	**Anticlimbing Device**				
49	4.1	Spike type GI About 3.0 Kg in weight	278910	No	145	151
50	4.2	GI Barbed wire (12mtrs/Kg)	278911	Each	70	73
	5	**Clamps (MS & GI)**				
51	5.1	RCC Pole clamp - MS	279523	No	64	60
52	5.2	RCC Pole clamp - GI			New Item	76
53	5.3	PCC Pole clamp - MS	279503	No	53	50
54	5.4	PCC Pole clamp - GI			New Item	63
55	5.5	PSC Pole clamp - MS	279510	No	57	54
56	5.6	PSC Pole clamp - GI			New Item	68
57	5.7	PCC Pole clamp type A for LT X arm - MS	279502	No	56	53
58	5.8	PCC Pole clamp type A for LT X arm - GI			New Item	66
59	5.9	PCC Pole clamp type A for X arm upto 1M from pole top - MS	279522	No	56	53
60	5.10	PCC Pole clamp type A for X arm upto 1M from pole top - GI			New Item	66
61	5.11	Clamps for fixing MV Lamp control box, fuse box/St light fixture on rail pole - MS	279550	No	65	61
62	5.12	Guy clamp - MS	279650	No	63	59
63	5.13	Guy clamp - GI				75
64	5.14	Turn buckle (GI)	279146	No	176	183
65	5.15	Anchor Rod using 12mm rounds/Guy Rod - MS	279140	No	204	191
66	5.16	Anchor Rod using 12mm rounds/Guy Rod - GI				244
67	5.17	RCC pole type C clamp for GOS Operating Handle	279524	No	65	61
68	5.18	MS Fish Plate	279800	No	57	59
69	5.19	GI Fish Plate			New Item	67
70	5.20	Strain Clamps, 3 Bolt type for 70/90 kN Disc Insulator	285076	No	518	546
	6	**Insulators**				
71	6.1	11kV Ceramic Pin Insulator (Shell only)	283005	No	40	49
72	6.2	11kV GI Pin for 11kV Ceramic Shell Insulators	283055	No	55	54
73	6.3	1.1kV Ceramic Pin Insulator (Shell only)	283003	No	12	15
74	6.4	1.1kV GI Pin FOR 11kV Cermaic shell Insulator	283053	No	25	26
75	6.5	11kV, 5KN Composite/Polymeric Pin Insulator	283007	No	173	169
76	6.6	No.8 Strain Insulator	283158	No	12	14
77	6.7	No.15 Strain Insulator	283166	No	30	34
78	6.8	DISC Insulator 45kN	283040	No	400	300
79	6.9	DISC Insulator 70kN, Ball & Socket type	283017	No	450	506
80	6.10	DISC Insulator 90kN, Ball & Socket type	283018	No	450	506
81	6.11	DISC Insulator 120kN, Ball & Socket type	283021	No	450	506
82	6.12	11kV Solid Core Insulator	283315	No	140	157
83	6.13	11kV Post Insulator	283101	No	330	371
84	6.14	Silcon Rubber Composite Insulator/11kV 45kN Polymeric Insulator	283320	No	177	170
85	6.15	11kV, 70kN Composite/Polymeric Insulator	283045	No	287	287
	7	**Accessories for composite insulator**				
86	7.1	Cross Arm Strap (MS)	279030	No	78	80
87	7.2	Strain Clamp up to Rabbit ACSR	285058	No	180	190
88	7.3	Strain Clamp for Coyote ACSR	285066	No	390	411
	8	**Conductor**				
89	8.1	Weasel ACSR	284105	Km	23000	21900
90	8.2	Rabbit ACSR	284108	Km	38500	36810
91	8.3	Coyote ACSR	284116	Km	96000	93860
92	8.4	Lynx ACSR	284120	Km	147000	139000
	9	**Guy Wire & GI Wire**				
93	9.1	7/10 SWG Guy Wire	281110	MT	64000	64630
94	9.2	8 SWG GI Wire	281008	MT	62300	62800
95	9.3	10 SWG GI Wire	281010	MT	65600	66256
96	9.4	GI Barbed Wire 12 SWG	281205	MT	77200	77972
	10	**PG Clamps**				
97	10.1	PG clamps for Lynx ACSR	285518	No	288	304
98	10.2	Coyote to Coyote	285515	No	262	276
99	10.3	Rabbit to Rabbit	285508	No	84	89
100	10.4	Weasel to Rabbit	285549	No	73	77
101	10.5	Weasel to Weasel	285509	No	57	60
102	10.6	Squirrel to Weasel	285548	No	53	56
	11	**PG Clamps Rabbit to Insulated Wire**				
103	11.1	95 Sqmm	285555	No	116	122
104	11.2	120 Sqmm	285557	No	226	238
105	11.3	150 Sqmm	285559	No	266	280
106	11.4	185 Sqmm	285562	No	292	308
107	11.5	240 Sqmm	285565	No	339	357
108	11.6	T - Clamps for Rabbit conductor with hot dipped galvanized bolts, Nuts and Washers	285600	Set	262	276
109	11.7	T - Clamps for Coyote conductor with hot dipped galvanized bolts, Nuts and Washers	285605	Set	347	366

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110	11.8	T - Clamps for Lynx to Lynx with hot dipped galvanized bolts, Nuts and Washers	285610		363	383
111	11.9	Single Tension Clamp Suitable for Rabbit	285068	No	538	567
112	11.10	Single Tension Clamp Suitable for Coyote	285079	No	758	799
113	11.11	Pad clamps for suitable for Rabbit ACSR	282723	No	416	439
114	11.12	Pad clamps for lynx ACSR	282726	No	575	606
115	11.13	Pad clamps for Coyote ACSR	282720	No	516	544
116	11.14	C - Type wedge connector + 2 hole pad for Rabbit ACSR	285661	No	391	412
117	11.15	C - Type wedge connector + 2 hole padle for Coyote ACSR	285662	No	1624	1712
118	11.16	C - Type wedge connector + 4hole padle for Coyote ACSR	285663	No	1865	1966
119	11.17	C - Type wedge connector +2 hole padle for Lynx ACSR	285654	No	2467	2600
120	11.18	C - Type wedge connector +4 hole padle for Lynx ACSR	285665	No	2707	2853
	12	**C - Type wedge connector**				
121	12.1	Rabbit to Rabbit ACSR	285670	No	135	142
122	12.2	Rabbit to Coyote ACSR	285671	No	702	740
123	12.3	Rabbit to Lynx ACSR	285673	No	702	740
124	12.4	Coyote To Coyote ACSR	285676	No	702	740
125	12.5	Rabbit to 240 Sqmm Lead Wire	285694	No	702	740
126	12.6	Coyote to 240 Sqmm Lead Wire	285695	No	702	740
127	12.7	Coyote to Lynx ACSR	285678	No	1238	1305
128	12.8	Lynx to Lynx ACSR	285680	No	1238	1305
129	12.9	C wedge connector for connecting main wire of size 2.5/4/6/10 Sqmm from OH Squirrel/Weasel line to AFB/Cutouts	285691	No	74	78
130	12.10	C wedge connector for connecting main wire of size 16/25 Sqmm from OH Rabbit line to AFB/Cutouts	285692	No	94	99
	13	**Distribution Transformers - 3 Phase, 11kV/433V - Stacked Core with Oil**				
	A	**OPEN BUSHING TYPE**				
131	13.1	15kVA, Copper Winding	321301	No	50000	53003
132	13.2	25kVA, Aluminum Wdg (Conventional)	321304	No	50330	58794
133	13.3	25kVA, Aluminum Wdg, BEE 3 Star Rated	321433	No	72640	64455
134	13.4	63kVA, Aluminum Wdg	321306	No	78100	84780
135	13.5	63kVA, Aluminum Wdg, BEE 3 Star Rated	321434	No	114660	109635
136	13.6	100kVA, Aluminum Wdg	321310	No	97400	105730
137	13.7	100kVA, Aluminium Wdg, BEE 3 Star Rated	321435	No	178480	146408
138	13.8	250kVA, Aluminum Wdg	321325	No	233000	237696
139	13.9	250kVA, BEE 3 Star Rated/Energy Efficient	321436	No	292467	292467
140	13.10	500kVA, Aluminum Wdg	321350	No	470800	376532
141	13.11	Special Design Transformer 354kVA for Niranthara Jyothi Works (11KV AUTO Transformer)	321400	No	157555	171030
	B	**CABLE ENTRY TYPE**				
142	13.11	25kVA, Aluminum Wdg, BEE 3 Star Rated			New Item	71455
143	13.12	63kVA, Aluminum Wdg, BEE 3 Star Rated			New Item	117635
144	13.13	100kVA, Aluminium Wdg, BEE 3 Star Rated			New Item	156408
145	13.14	250kVA, Aluminum Wdg			New Item	249696
146	13.15	500kVA, Aluminum Wdg			New Item	391532
	14	**Distribution Transformer - 3 Phase, 11kV/433V - Amorphous Core with Oil**				
	A	**OPEN BUSHING TYPE**				
147	14.1	25kVA, BEE 3 Star Rated	321376	No	102414	62536
148	14.2	63kVA, BEE 3 Star Rated	321377	No	157121	105071
149	14.3	100kVA, BEE 3 Star Rated	321380	No	157121	136410
150	14.4	200kVA, BEE 3 Star Rated			New Item	251888
151	14.5	500kVA, BEE 3 Star Rated			New Item	751584
	B	**CABLE ENTRY TYPE**				
152	14.6	25kVA, BEE 3 Star Rated			New Item	69536
153	14.7	63kVA, BEE 3 Star Rated			New Item	113071
154	14.8	100kVA, BEE 3 Star Rated			New Item	146410
155	14.9	200kVA, BEE 3 Star Rated			New Item	263888
156	14.10	500kVA, BEE 3 Star Rated			New Item	766584
	15	**Distribution Transformer Self Protected 11kV/433V, 3 Phase**				
157	15.1	100 kVA	321365	No	127430	121059
158	15.2	250 kVA	321370	No	253882	241188
	16	**DTs - Single Phase, 11kV/250V**				
159	16.1	15kVA, Copper Wound with MCCB	321302	No	66200	62890
160	16.2	15kVA, Amorphous Core Copper Winding with MCCB	321303	No	76600	72770
161	16.3	10kVA, Copper winding with MCCB	321300	No	46860	44517
	17	**11kV/433V, 3 Phase, Dry Type Transformers**				
162	17.1	25KVA	321483	No	226641	221400
163	17.2	63KVA	321484	No	317917	274420
164	17.3	100KVA	321485	No	417380	360150

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165	17.4	250KVA	321486	No	742750	614200
166	17.5	500KVA	321487	No	1110409	891540
	18	**Transformer Oil**				
167	18.1	EHV Grade Transformer oil - New	601400	kLtr	74000	77820
168	18.2	Reclaimed oil	601410	kLtr	40700	42801
169	18.3	Contaminated oil	601420	kLtr	26640	28015
	19	**LT Protection**				
170	19.1	LT Protection kit	301107	No	2360	1679
	20	**LT Distribution Box**				
171	20.1	LT Distribution Box for 100/250 kVA DTC with MCCB's (Sheet Metal)	301230	No	15625	16705
172	20.2	LT Distribution Box for 100/250 kVA DTC with MCCB's (SMC)	301060	No	23742	24715
	21	**LT Wiring kit for LT protection kit**				
173	21.1	For 25 kVA DTC single circuit	301151	Set	1478	Deleted
174	21.2	For 63 kVA DTC single circuit	301207	Set	3841	Deleted
175	21.3	For 63 kVA DTC double circuit	301152	Set	7681	Deleted
	22	**LT Wiring kit through Distribution Box**				
176	22.1	For 100 kVA DTC Single Circuit	301163		6041	Deleted
177	22.2	For 100 kVA DTC Double Circuit	301153	Set	12082	Deleted
178	22.3	For 250 kVA DTC Single Circuit	301154	Set	11279	Deleted
179	22.4	For 250KVA DTC Double Circuit	3001154	Set	22558	Deleted
180	22.5	LT Wiring kit for 63kVA Transformers (MESCOM Specification)	301155	Set	2839	Deleted
181	22.6	LT Wiring kit for 25kVA Transformers (MESCOM Specification)	301156	Set	1139	Deleted
	23	**Lightning Aresters**				
182	23.1	LA 9kV, 5kA, Metal Oxide	303200	No	653	761
183	23.2	LA 9kV, 5kA, Polymeric Type	303205	No	1164	1164
	24	**HG Fuse Unit**				
184	24.1	11kV Class, HG Fuse Unit with Solid Core Insulators	302122	Set/3 Nos	832	871
	25	**Double Pole TC Sets**				
185	25.1	For 25/63kVA Transformer - MS	279110	Set	9040	8500
186	25.2	For 25/63kVA Transformer - GI			New Item	10780
187	25.3	For 25/63kVA Star Rated Transformer - MS	279111	set	13035	12250
188	25.4	For 25/63kVA Star Rated Transformer - GI			New Item	15545
189	25.5	For 100/300kVA Transformer - MS	279120	Set	15565	14600
190	25.6	For 100/300kVA Transformer - GI			New Item	18562
	26	**Single Pole Mounted Transformer Kit for 250kVA on 11 Mtr Spun Poles**				
191	26.1	Single H Frame with Transformer Seating and Seating angle support X arm for 11 mtr Spun Pole for 25kVA (OH Line) - MS			New Item	19534
192	26.2	Single H Frame with Transformer Seating and Seating angle support X arm for 11 mtr Spun Pole for 25kVA (OH Line) - GI			New Item	24799
193	26.3	Three H Frame with Transformer Seating and Seating angle support X arm for 11 mtr Spun Pole for 25kVA (UG Cable) - MS	279128	Set	25050	26496
194	26.4	Three H Frame with Transformer Seating and Seating angle support X arm for 11 mtr Spun Pole for 25kVA (UG Cable) - GI			New Item	33669
195	26.5	Single H Frame with Transformer Seating and Seating angle support X arm for 11 mtr Spun Pole for 63/100/250/500kVA (OH Line) - MS			New Item	10106
196	26.6	Single H Frame with Transformer Seating and Seating angle support X arm for 11 mtr Spun Pole for 63/100/250/500kVA (OH Line) - GI			New Item	12809
197	26.7	Three H Frame with Transformer Seating and Seating angle support X arm for 11 mtr Spun Pole for 63/100/250/500kVA (UG Cable) - MS			New Item	16204
198	26.8	Three H Frame with Transformer Seating and Seating angle support X arm for 11 mtr Spun Pole for 63/100/250/500kVA (UG Cable) - GI			New Item	20594
	27	**SPMT Materials**				
199	27.1	Single Pole Mounted Transformer kit for 25/63 kVA on 9 mtr RCC Poles (Square Section) - MS	279115	Set	5000	4703
200	27.2	Single Pole Mounted Transformer kit for 25/63 kVA on 9 mtr RCC Poles (Square Section) - GI			New Item	5967
201	27.3	Single Pole Mounted Transformer kit for 100 kVA on 9 mtr RCC Poles - MS	279125	Set	7505	7050
202	27.4	Single Pole Mounted Transformer kit for 100 kVA on 9 mtr RCC Poles - GI			New Item	8954
	28	**GOS**				

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203	28.1	11kV, 200Amps Single Break GOS	304212	Set	7580	7320
204	28.2	11kV, 200Amps Single Break GOS, Vertically Operated	304213	Set	10157	10632
205	28.3	11kV, 400Amps Double Break GOS	304224	Set	15732	16467
206	28.4	H - Frame Set for 11kV, 200Amps Single Break GOS Mounting - MS	279149	Set	3600	3330
207	28.5	H - Frame Set for 11kV, 200Amps Single Break GOS Mounting - GI			New Item	4220
208	28.6	Male and Female contacts with B&N for 11kV 200A GOS (3 Male & 3 Female contacts each)	503000	Set	2518	2518
209	28.7	11kV 400Amps Special Roaster GOS	304204	Set	12050	12613
210	28.8	Insulated GOS Rods	503211	No	342	342
	29	**DOLO Cutouts**				
211	29.1	11kV DOLO Cutouts Conventional to Erstwhile KEB Specification	302011	Set/3 Nos	4446	4288
212	29.2	11kV DOLO Cutouts REC Specification	302021	Set/3 Nos	3176	3396
	30	**DP Sets (2 Pole Strucrure Kit)**				
213	30.1	DP Sets - MS	279100	Set	4755	4475
214	30.2	DP Sets - GI			New Item	5669
	31	**3 Pole Structure Kit**				
215	31.1	3 Pole Structure Material - MS	279015	Set	11420	10755
216	31.2	3 Pole Structure Material - GI			New Item	13617
	32	**C - Type Wedge Connectors (Fired)**				
217	32.1	Rabbit to Rabbit ACSR	285570	set	371	391
218	32.2	Coyote to Coyote ACSR	285575	set	919	969
219	32.3	Rabbit to Coyote ACSR	285571	set	926	976
	33	**H - Clamps**				
220	33.1	Rabbit to Rabbit ACSR	285585	No	76	80
221	33.2	Coyote to Coyote ACSR	285587	No	378	398
222	33.3	Rabbit to Coyote ACSR	285586	No	357	377
223	33.4	Two Hole Paddle (Rabbit ACSR)	285590	No	295	311
224	33.5	Microwedge Connector	285594	No	96	101
	34	**LT Feeder Piller Box**				
225	34.1	LT Feeder Piller Box 8 Way with Cutouts	300308	No	37880	40000
226	34.2	LT Feeder Piller Box 12 Way with Cutouts	300312	No	44025	48000
227	34.3	Low Voltage Link Box - 2 Way		No	New Item	Will be intimated
228	34.4	Low Voltage Link Box - 4 Way		No	New Item	146025
	35	**LT Spacers**				
229	35.1	LT Line Spacers (4 Wire)	284502	No	41	41
230	35.2	LT Line Spacers (2 Wire)			New Item	25
231	35.3	LT Spacer for TC Wiring	284503	No	24	24
	36	**Armoured LT UG Cable 1.1kV Class**				
232	36.1	6 Sqmm, 2 Core	287054	Km	39094	43057
233	36.2	10 Sqmm, 2 Core	287055	Km	49244	54334
234	36.3	10 Sqmm, 4 Core	287205	Km	64585	71551
235	36.4	16 Sqmm, 2 Core	287056	Km	50994	56956
236	36.5	16 Sqmm, 4 Core	287206	Km	81465	90529
237	36.6	25 Sqmm, 2 Core	287057	Km	74075	81930
238	36.7	25 Sqmm, 4 Core	287207	Km	97300	109778
239	36.8	50 Sqmm, 4 Core	287209	Km	130262	144591
240	36.9	70 Sqmm, 3.5 Core	287210	Km	218430	241512
241	36.10	95 Sqmm, 3.5 Core	287211	Km	309456	339689
242	36.11	120 Sqmm, 3.5 Core	287212	Km	343060	378559
243	36.12	150 Sqmm, 3.5 Core	287213	Km	387670	430906
244	36.13	185 Sqmm, 3.5 Core	287214	Km	494188	546711
245	36.14	240 Sqmm, 3.5 Core	287216	Km	683665	751939
246	36.15	400 Sqmm, 3.5 Core	287218	Km	941077	1040069
	37	**Compression type Aluminium Tubular in Line Connector for Aluminum Conductor**				
247	37.1	10 Sqmm	288605	No	2	3
248	37.2	16 Sqmm	288606	No	2	3
249	37.3	25 Sqmm	288607	No	4	4
250	37.4	35 Sqmm	288608	No	4	4
251	37.5	50 Sqmm	288609	No	6	6
252	37.6	70 Sqmm	288610	No	10	10
253	37.7	95 Sqmm	288611	No	11	11
254	37.8	120 Sqmm	288612	No	16	16
255	37.9	150 Sqmm	288613	No	23	24
256	37.10	185 Sqmm	288614	No	28	29
257	37.11	240 Sqmm	288616	No	46	48
258	37.12	400 Sqmm	288617	No	95	100
	38	**Straight Through Jointing Kits Suitable for 1.1kV Class LT UG Cables**				
		Epoxy				
259	38.1	10 Sqmm, 2 Core	288170	Set	553	553

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260	38.2	10 Sqmm, 4 Core	288174	Set	553	553
261	38.3	16 Sqmm, 2 Core	288171	Set	553	553
262	38.4	16 Sqmm, 4 Core	288175	Set	553	553
263	38.5	25 Sqmm, 2 Core	288172	Set	553	553
264	38.6	25 Sqmm, 4 Core	288176	Set	595	595
265	38.7	50 Sqmm, 4 Core	288178	Set	678	678
266	38.8	70 Sqmm, 3.5/4 Core	288179	Set	836	836
267	38.9	95 Sqmm, 3.5/4 Core	288180	Set	836	836
268	38.10	120 Sqmm, 3.5/4 Core	288181	Set	1319	1319
269	38.11	185 Sqmm, 3.5/4 Core	288183	Set	1362	1362
270	38.12	240 Sqmm,3.5/4 Core	288185	Set	1737	1737
271	38.13	400 Sqmm 3.5/4 Core	288187	Set	2573	2573
		HS Type				
272	38.14	up to 6 Sqmm		Kit	New Item	500
273	38.15	10 to 16 Sqmm		Kit	New Item	500
274	38.16	25 to 35 Sqmm		Kit	New Item	650
275	38.17	50 to 95 Sqmm		Kit	New Item	1000
276	38.18	120 to 225 Sqmm		Kit	New Item	1200
277	38.19	240 to 300 Sqmm		Kit	New Item	1400
278	38.20	400 Sqmm		Kit	New Item	2000
	39	**Epoxy Terminating Kit (Pothead) suitable for 1.1kV Class LT UG Cables**				
279	39.1	Up to 4C x 50 Sqmm	288150	Set	307	307
280	39.2	3.5 x 70/95/120 Sqmm	288159	Set	362	362
281	39.3	3.5 x 150/185 Sqmm	288163	Set	455	455
282	39.4	3.5 x 225/240/300 Sqmm	288165	Set	557	557
283	39.5	3.5 x 400/500 Sqmm	288166	Set	678	678
	40	**Cast Iron Terminating Kit (Pothead) Suitable for 1.1kV Class LT UG Cables**				
284	40.1	2.5 to 25 Sqmm	288168	Set	186	186
285	40.2	35 to 95 Sqmm	288169	Set	289	289
	41	**11kV, 3 Core, XLPE HTUG Cable (FLAT Armoured)**				
286	41.1	95 Sqmm	287340	Km	494000	548860
287	41.2	120 Sqmm	287342	Km	775500	843170
288	41.3	240 Sqmm	287345	Km	945000	1038890
289	41.4	400 Sqmm	287350	Km	1500000	1632500
	42	**11kV, 3 Core, XLPE HTUG Cable (ROUND Armoured)**				
290	42.1	95 Sqmm	287400	Km	617500	675110
291	42.2	120 Sqmm	287402	Km	969375	1040920
292	42.3	240 Sqmm	287405	Km	1181250	1279950
293	42.4	400 Sqmm	287410	Km	1876250	2015220
294	42.5	11 kV Cables faulty locating equipments		No	4222800	4222800
	43	**1.1kV, XLPE LTUG Cable**				
295	43.1	3.5C x 25 Sqmm	287257	Km	96140	138000
296	43.2	3.5C x 95 Sqmm	287261	Km	238057	371000
297	43.3	3.5C x 150 Sqmm			New Item	548000
298	43.4	3.5C x 185 Sqmm			New Item	680000
299	43.5	3.5C x 240 Sqmm			New Item	849000
	44	**11kV Auto Reclosures and Sectionalizers with Remote Communication Facility**				
300	44.1	11KV, 630A, 12.5KA Auto reclosures with control pannel including necessary hardware structure protection system etc., as per specification (MESCOM)	302510	Set	918356	918356
301	44.2	11kV, 12.5KA Sectionalizer with control box having control logic with necessary hardware etc., as per specification (MESCOM)	312550	Set	677499	677499
302	44.3	11kV, 230V, 2 Phase, 300VA control transformer for providing auxillary power	312551	Set	12945	12945
303	44.4	11kV/√3/110V/√3, 1 Phase metering PT class - 1, 100VA per Phase for measurement of voltage	312552	Set	35303	35303
304	44.5	GSM modem with connecting cable for remote communicating capabilities	312553	Set	14121	14121
305	44.6	Fabrication & supply of structrual steel including painting etc.,	312554	Set	7825	7825
306	44.7	9.6 kV, 200A long duration porcelien housed Surge arrestors	312555	Each	1569	1569
	45	**Conventional RMUs (VCB Type) DAS Compatable**				
307	45.1	**3 Way** RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing) with DAS Specification	302480	Set	1255150	1341910
308	45.2	**4 Way** RMU, 2OD + 2VL (One Incomer + Two Breakers + One Outgoing) with DAS Specification	302481	Set	1642550	1756090

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309	45.3	**5 Way** RMU, 2OD + 3VL (One Incomer + Three Breakers + One Outgoing) with DAS Specification	302482	Set	2029960	2170280
310	45.4	**6 Way** RMU, 2OD + 4VL (One Incomer + Four Breakers + One Outgoing) with DAS Specification	302483	Set	2417360	2584460
311	45.5	Single I/C Panel with DAS Specification	302484	Set	340660	364210
312	45.6	**5 Way** RMU, 2OD + 3VL (One Incomer + Three Breakers + One Outgoing), 350MVA, 800Amps with **Cu Busbar**	302310	Set	1544045	1638232
313	45.7	**5 Way** RMU, 2OD + 3VL (One Incomer + Three Breakers + One Outgoing), 350MVA, 800Amps with **Al Busbar**	302311	Set	1482283	1584750
314	45.8	**4 Way** RMU, 2OD + 2VL (One Incomer + Two Breakers + One Outgoing)	302312	Set	1231830	1316970
315	45.9	**3 Way** RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing)	302313	Set	580000	620090
	46	**Conventional RMUs OD**				
316	46.1	One Breaker (VL) Panel with **Cu Busbar**	302315	No	312215	333789
317	46.2	One Breaker (VL) Panel with **Al Busbar**	302316	No	299727	320445
318	46.3	**3 Way** RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing), **350MVA**, 800Amps with **Cu Busbar**	302320	Set	919615	983160
319	46.4	**3 Way** RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing), **350MVA**, 800Amps with **Al Busbar**	302321	Set	882830	943860
320	46.5	**3 Way** RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing), **250MVA**, 400Amps, VCB Type with **Cu Busbar**	302325	Set	849761	908480
321	46.6	**3 Way** RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing), **250MVA**, 400Amps, VCB Type with **Al Busbar**	302326	Set	819658	876297
322	46.7	Retrofitting of MEI make oil switch type OD with VCB	302470	No	160497	171590
	47	**Conventional RMU Spares (VCB Type)**				
323	47.1	Bus Support Insulator with Stem	506505	No	1095	1095
324	47.2	CTs Trom Bone Type, 11kV Class, 200 - 100/5A, VA - 15, Class 5P - 10	506520	No	18755	18755
325	47.3	CTs resin cast, 11kV Class,400 - 200/5A, UA15, Class 5P - 10	506525	No	18755	18755
326	47.4	Spout Grid Insulator Assembly (Back)	506530	No	4247	4247
327	47.5	Spout Grid Insulator Assembly (Front)	506535	No	4247	4247
328	47.6	PT Insulator (Spout) 3 Nos	506540	No	448	448
329	47.7	Shunt Trip Coil	506545	No	757	757
330	47.8	Closing Coil	506550	No	757	757
331	47.9	Plug Assembly for grid 800A, 6 Nos	506555	No	1579	1579
332	47.10	Para Plast Compound	506560	No	750	750
333	47.11	PT Fuse(NT) 11kV/V3 Amps without Stem, VTF Type - 11	506565	No	2837	2837
334	47.12	Insulated Housing	506510	No	27386	27386
335	47.13	Switch Insulators Left/Right/Centre	506515	No	5963	5963
336	47.14	Vacuum Interruptor 20kA	506570	No	23958	23958
337	47.15	Flower Contact	506580	No	1065	1065
	48	**For Schneider make RMU**				
338	48.1	Tripping Coil	506445	No	9345	9345
339	48.2	VIP Relay	506481	No	51398	51398
340	48.3	Live Cable Indicator	440615	No	3894	3894
341	48.4	11KV Fault Passage Indicator for Overhead Line	302580	No	14810	14810
	49	**Compact RMUs, (VCB/SF6 Type) with Al Busbar**				
342	49.1	**3 Way** RMU, 2OD + 1VL, One Incomer + One Breaker + One Outgoing, 350MVA, 650Amps	302340	Unit	542587	739453
343	49.2	**4 Way** RMU, 2OD + 2VL (One Incomer + Two Breakers + One Outgoing), 350MVA, 650Amps	302345	Unit	918076	1050370
344	49.3	**5 Way** RMU, 2OD + 3VL (One Incomer + Three Breakers + One Outgoing), 350MVA, 650Amps	302350	Unit	1269282	1355749
345	49.4	**6 Way** RMU, 2OD + 4 VL (One Incomer + Four Breakers + One Outgoing), 350MVA, 650Amps	302355	Unit	1559825	1661128
346	49.5	1OD for RMU	302335	Unit	152109	266070
347	49.6	1VL for 350MVA, 650Amps RMU	302358	Unit	306898	310917
	50	**Load Break Switches**				
348	50.1	Load Break Switches Only Without Panel	506491	Unit	38549	41210
349	50.2	Load Break Switches with Panel	506492	Unit	84017	89830
350	50.3	3 Way Load Break Switch	506493	Unit	271820	290610
		Aerial Bunched Cable (ABC)				
	51	**11kV, HT Aerial Bunched Cable**				
351	51.1	3x95+1x70 Sqmm (Bare/Insulated messenger wire)	284791	Km	639788	700820
352	51.2	3x120+1x95 Sqmm (Bare/Insulated messenger wire)	284792	Km	756250	811368
	52	**LT Aerial Bunched Cable**				
353	52.1	3x95+1x70+1x16 Sqmm Street light (Insulated messenger cum Neutral)	284819	Km	292270	345902

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354	52.2	3x95+1x70+1x25 Sqmm Street light (Insulated messenger cum Neutral)	284811	Km	299735	356375
355	52.3	3x95+1x70+1x35 Sqmm Street light (Insulated messenger cum Neutral)	284812	Km	300992	365685
	53	**Covered Conducor**				
356	53.1	Covered Conductor		Km	New Item	Will be intimated
	54	**Accessories for ABC Cables**				
357	54.1	11kV, AB Cable Straight thru' joint kit suitable for 95 - 120 Sqmm	284853	No's	2963	2963
358	54.2	11kV ABC - T Jointing kit 95 - 120 Sqmm	284863	No's	3757	3757
359	54.3	11kV ABC Termination kit 95 - 120 Sqmm	284873	No's	1879	1879
360	54.4	Surge Arester	303100	No	692	803
361	54.5	Ground Connection for Messenger Wire	284880	No	117	122
362	54.6	Anchor Sleeve for Messenger Wire	284885	No	22	23
363	54.7	Single Phase Distribution Box for 20 Connections	284820	No	1806	1806
364	54.8	Three Phase Distribution Box for 6 Connections	284821	No	1987	1987
365	54.9	Single Phase Distribution Box for 10 Connections	284818	No	2065	2065
366	54.10	Three Phase Distribution Box for 5 Connections	284815	No	2065	2065
367	54.11	Piercing Connector Suitable for 16 Sqmm - 95 Sqmm AB Cable - Service Connections	284822	No	217	228
368	54.12	Piercing Connector Suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connections	284223	No	152	160
369	54.13	Piercing Connector Suitable for 25 Sqmm - 95 Sqmm AB Cable - Main to Main Connections	284855	No	253	267
370	54.14	Piercing Connector Suitable for 50 Sqmm - 150 Sqmm AB Cable - Main to Main Connections	284865	No	253	267
371	54.15	Universal Hook and Bolts & Nuts	284284	No	289	305
372	54.16	Dead End Clamp/Anchor Clamp Assembly 25 to 95 Sqmm Bare Messenger	284825	No	145	152
373	54.17	Suspension Clamp Assembly 25 to 95 Sqmm Bare Messenger	284826	No	289	305
374	54.18	Pre - Insulated lugs - CPTAU for 120 Sqmm	284836	No	423	446
375	54.19	Pre - Insulated Lugs - CPTAU for 95 Sqmm	284837	No	372	392
376	54.20	Pre - Insulated Lugs - CPTAU for 70 Sqmm	284827	No	325	343
377	54.21	Pre - Insulated Lugs - CPTAU for 50 Sqmm	284828	No	289	305
378	54.22	Pre - Insulated Lugs - CPTAU for 25 Sqmm	284834	No	271	286
379	54.23	Pre - Insulated Lugs - CPTAU for 16 Sqmm	284835	No	134	141
380	54.24	Tee - Connectors - KZ3 95	284829	No	372	392
381	54.25	Straight Joints Suitable for 95 Sqmm, LT ABC - MJPT Type	284832	No	310	310
382	54.26	Straight Joints Suitable for 70 Sqmm, LT ABC - MJPT Type	284830	No	289	289
383	54.27	Straight Joints Suitable for50 Sqmm, LT ABC - MJPT Type	284831	No	271	271
384	54.28	Straight Joints Suitable for 16 Sqmm, LT, ABC - MJPT Type	284840	No	181	181
385	54.29	End Cap for 50/70 Sqmm	284833	No	19	19
	55	**11kV Jointing and Cable Termination Kits**				
	55.1	**Heat Shrinkable Type Transition Jointing Kit for XLPE Cable**				
386	55.1.1	3x95 Sqmm	288312	Set	7666	8815
387	55.1.2	3x240 Sqmm	288314	Set	9473	10894
388	55.1.3	3x400 Sqmm	288315	Set	9648	11095
	55.2	**Heat Shrinkable Indoor Type Cable Termination Kit for XLPE Cable**				
389	55.2.1	3x95 Sqmm	288332	Set	2394	2753
390	55.2.2	3x240 Sqmm	288334	Set	3000	3450
391	55.2.3	3x400 Sqmm	288336	Set	3078	3540
	55.3	**Heat Shrinkable Outdoor Type Cable Termination Kit for XLPE Cable**				
392	55.3.1	3x95 Sqmm	288302	Set	2600	2990
393	55.3.2	3x240 Sqmm	288304	Set	3400	3910
394	55.3.3	3x400 Sqmm	288305	Set	3426	3940
	55.4	**Heat Shrinkable Indoor Type Cable Termination Kit for PILC Cable**				
395	55.4.1	3x95 Sqmm	288462	Set	2006	2307
396	55.4.2	3x240 Sqmm	288464	Set	2155	2478
397	55.4.3	3x400 Sqmm	288465	Set	2200	2530
	55.5	**Heat Shrinkable Outdoor Type Cable Termination Kit for PILC Cable**				
398	55.5.1	3x95 Sqmm	288456	Set	2543	2924
399	55.5.2	3x240 Sqmm	288458	Set	3191	3669
400	55.5.3	3x400 Sqmm	288460	Set	3204	3685

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	55.6	**Heat Shrinkable Straight Through Jointing Kits for XLPE Cable with Copper Lugs & Al Ferrules**				
401	55.6.1	3x95 Sqmm	288322	Set	4674	5375
402	55.6.2	3x240 Sqmm	288324	Set	5700	6555
403	55.6.3	3x400 Sqmm	288329	Set	7000	8050
	55.7	**Heat Shrinkable Straight Through Jointing Kits for PILC Cable with Copper Lugs & Al Ferrules**				
404	55.7.1	3x95 Sqmm	288450	Set	4986	5734
405	55.7.2	3x240 Sqmm	288452	Set	5634	6479
406	55.7.3	3x400 Sqmm	288453	Set	6806	7827
	56	**Service Connection accessories**				
407	56.1	Pole Mounted Fibre Glass Reinforced Aerial Fuse Board 60Amps - 3 Way	612614	No	1022	1022
408	56.2	Pole Mounted Fibre Glass Reinforced Aerial Fuse Board 30Amps - 3 Way	612615	No	730	730
409	56.3	FGRP Aerial Fuse Boards 30Amps - 4 Way	612617	No	952	952
410	56.4	FGRP Aerial Fuse Boards 30Amps - 5 Way	612618	No	1077	1077
411	56.5	FGRP Aerial Fuse Boards 30Amps - 6 Way	612616	No	1180	1180
	57	**LT Service Connector**				
412	57.1	For Weasel	288502	No	31	33
413	57.2	For Rabbit	288503	No	31	33
	58	**PVC Pipes**				
	A	**Pipes**				
414	58.1	PVC Pipe - 20 mm Dia	778020	Mtr	15	21
415	58.2	PVC Pipe - 25 mm Dia	778025	Mtr	22	27
416	58.3	PVC Pipe - 32 mm Dia	778032	Mtr	30	45
417	58.4	PVC Pipe - 40 mm Dia	778040	Mtr	36	50
418	58.5	PVC Pipe - 50 mm Dia	778050	Mtr	45	56
419	58.6	PVC Pipe - 63 mm Dia	778063	Mtr	59	74
420	58.7	PVC Pipe - 75 mm Dia	778075	Mtr	70	88
421	58.8	PVC Pipe - 80 mm Dia	778080	Mtr	98	123
422	58.9	PVC Pipe - 100 mm Dia	778100	Mtr	112	140
423	58.10	PVC Pipe - 150 mm Dia	778105	Mtr	233	291
424	58.11	PVC Pipe - 200 mm Dia	778110	Mtr	352	440
	B	**Bends**				
425	58.12	PVC Bend - 20 mm Dia			New Item	7
426	58.13	PVC Bend - 25 mm Dia			New Item	10
427	58.14	PVC Bend - 32 mm Dia			New Item	22
428	58.15	PVC Bend - 40 mm Dia			New Item	35
429	58.16	PVC Bend - 50 mm Dia			New Item	54
430	58.17	PVC Bend - 63 mm Dia			New Item	65
431	58.18	PVC Bend - 75 mm Dia			New Item	71
432	58.19	PVC Bend - 80 mm Dia			New Item	100
433	58.20	PVC Bend - 100 mm Dia			New Item	151
434	58.21	PVC Bend - 150 mm Dia			New Item	200
435	58.22	PVC Bend - 200 mm Dia			New Item	254
	59	**GI Pipes B - Class**				
436	59.1	GI Pipe - 20 mm Dia	768040	Mtr	105	110
437	59.2	GI Pipe - 25 mm Dia	768042	Mtr	148	155
438	59.3	GI Pipe - 32 mm Dia	768043	Mtr	200	209
439	59.4	GI Pipe - 40 mm Dia	768044	Mtr	211	220
440	59.5	GI Pipe - 50 mm Dia	768046	Mtr	275	286
441	59.6	GI Pipe - 63 mm Dia	768047	Mtr	298	310
442	59.7	GI Pipe - 65 mm Dia	768048	Mtr	393	409
443	59.8	GI Pipe - 100 mm Dia	768052	Mtr	1097	1143
444	59.9	GI Pipe - 150 mm Dia	768058	Mtr	1098	1144
	60	**PVC Insulated & Sheathed Aluminium Wires, Single Core Multistrand 1.1 kV Class**				
445	60.1	PVC Wire - 2.5 Sqmm	289022	100 Mtr	710	863
446	60.2	PVC Wire - 4 Sqmm	289023	100 Mtr	860	1045
447	60.3	PVC Wire - 6 Sqmm	289024	100 Mtr	1058	1264
448	60.4	PVC Wire - 10 Sqmm	289025	100 Mtr	1467	1713
	61	**PVC Insulated & Un-Sheathed Aluminium Wires, Single Core Multistrand 1.1 kV class**				
449	61.1	PVC Wire - 16 Sqmm	289026	100 Mtr	1987	2306
450	61.2	PVC Wire - 25 Sqmm	289027	100 Mtr	2775	3182
451	61.3	PVC Wire - 35 Sqmm	289028	100 Mtr	3082	3552
452	61.4	PVC Wire - 50 Sqmm	289029	100 Mtr	3809	4364
453	61.5	PVC Wire - 70 Sqmm	289030	100 Mtr	5851	6548
454	61.6	PVC Wire - 95 Sqmm	289031	100 Mtr	7191	8059
455	61.7	PVC Wire - 120 Sqmm	289032	100 Mtr	9489	10558
456	61.8	PVC Wire - 150 Sqmm	289033	100 Mtr	11716	12981
457	61.9	PVC Wire - 185 Sqmm	289034	100 Mtr	13472	14978

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458	61.10	PVC Wire - 240 Sqmm	289036	Coil	17543	19424
	62	**Fuse wires**				
459	62.1	Tinned Copper Fuse Wire, 5A	625020	Kg	773	780
460	62.2	Tinned Copper Fuse Wire, 10A	625230	Kg	773	780
461	62.3	Tinned Copper Fuse Wire, 20A	625250	Kg	773	780
462	62.4	Tinned Copper Fuse Wire, 100A	625075	Kg	773	780
	63	**Porcelain cut outs (500 Volts)**				
463	63.1	15A	300003	No	38	38
464	63.2	30A	300005	No	53	53
465	63.3	60A	300007	No	158	158
466	63.4	100A	300010	No	283	283
467	63.5	200A	300020	No	450	450
468	63.6	300A	300030	No	825	825
	64	**Grounding Materials for RMUs & Transformers**				
	64.1	**Pipe Grounding**				
469	64.1.1	GI Grounding pipe, B - Class, 40mm dia, 2.5mtrs long, 2.9mm thick with bolts nuts,GI Strips and washers complete	281674	No	599	605
470	64.1.2	Good Quality well burnt Charcoal for grounding purposes packed in non returnable gunny bags of 30kg each	600095	No	400	450
471	64.1.3	Good Quality Salt for grounding purposes packed in 50kg gunny bags	607054	Bag	300	300
	64.2	**Rod Earthing**				
472	64.2.1	Rod type of earthing using 40mm dia, 3mtr long MS rod as ground rod, in earth pit of 300mm width and 3300mm depth and using 50x6mm flat welded to ground rod as terminal & connected to equipment ground terminal using pvc Al wire as specified	281685	No	2000	2000
473	64.2.2	Bentonite clay slurry for earthing in 50 kg bags	607220	50 kg Bag	400	400
	65	**Alkathine tube**				
474	65.1	Transparent Alkathine tube 19mm dia, 2mm thick in coils of 30 mtrs	821900	Coil	500	500
	66	**Measuring Equipments**				
475	66.1	High precision Single phase Electromechanical meters with magnetic suspension 2.5 - 10A, Class-2 accuracy	357001	No	836	Deleted
476	66.2	High precision 3 phase Electromechanical meters with magnetic suspension 5-20A, Class-2 accuracy	357021	No	3933	Deleted
477	66.3	LT Electronic Tri - Vector Meter 5A, Class-0.5/1.0 accuracy	357511	No	4245	Deleted
478	66.4	LT Electronic Tri - Vector Meter 5A, Class-0.5 accuracy			New Item	3000
479	66.5	HT Electronic Tri - Vector Meter 5A, Class-0.5 accuracy	357512	No	6891	3463
480	66.6	HT Electronic Tri - Vector Meter 5A, Class-0.2 accuracy with ABT features	357500	No	15750	15750
481	66.7	Electronic Meter, 5-10A/5-20A, SPh Class-1 Accuracy	357003	No	1190	Deleted
482	66.8	Static Meter, 5-30A, S Ph Class-1 Accuracy			New Item	905
483	66.9	Electronic Meter, 2.5-10A/5-20A, 3 Ph Class-1 Accuracy	357205	No	3820	Deleted
484	66.10	Whole Current Meter, 5-30A, 3 Ph Class-1 Accuracy			New Item	2499
485	66.11	Electronic Meter, 10-40A, 3 Ph Class-1 Accuracy	357201	No	4275	Deleted
486	66.12	CT Operated Meter, 10-60A, 3 Ph Class - 1 Accuracy			New Item	3000
487	66.13	Electronic Meter, 5-20/30A, 3 Ph 4 wire Class - 1 Accuracy (whole current)	357200	No	4075	Deleted
488	66.14	Electronic Meter, 10-40/60A, 3 Ph Class-1, 4 wire Accuracy (whole current)	357206	No	4275	Deleted
489	66.15	Electromechanical Energy Meter - 3 Ph, 5-20A, Class-2 Accuracy, for IP Sets	357122	No	1200	Deleted
490	66.16	LT, S.Ph, 5-30 A Static Energy Meter of Accuracy Class in retail out lets of BESCOM	357015	No	4075	Deleted
491	66.17	Pre - paid Energy meter single phase, 10-60A	357580	No	4100	10733
492	66.18	Pre - paid Energy meter three phase, 10-60A	357585	No	12750	13532
493	66.19	3 phase 4 wire static meter (CT, PT operated) 3 x 63.5 V, 5 phase or 1 Amps class 0.2s with Rs - 485 & ABT features	357514	No	14745	14745
494	66.20	LT Three phase Four Wire 5-30A Thread through type composite Meter Housing Box consisting of ETV Meter with AMR complice and LTCT with built in GSM/GPRS modem (as per technical specification) upto 100kVA Distribution Transformer.			New Item	19135
495	66.21	Numerical Over Current & Earth Fault Protecion Relay with Accessories		No	New Item	10126
	67	**Meter Protection/Tamper Proof Boxes (MS) for LT Installations above 40 HP**				
496	67.1	Meter Protection/Tamper Proof box with busbar, for LT 3 Ph with CT Ratio 50/5A, Class-1 Accuracy	358040	No	6720	6720

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497	67.2	Meter Protection/Tamper Proof box with busbar, for LT 3 Ph with CT Ratio 75/5A, Class-1 Accuracy	358023	No	6240	6240
498	67.3	Meter Protection/Tamper Proof box with busbar, for LT 3 Ph with CT Ratio 100/5A, Class-1 Accuracy	358030	No	5952	5952
499	67.4	LT Metering Box for housing the ETV Meters without CT's busbar wiring etc;	358050	No	4000	4000
500	67.5	Pillfer proof box for below 40HP Installations	612655	No	322	322
501	67.6	SMC Meter protection box	358005	No	317	480
502	67.7	SMC Metering Box for housing the ETV Meters without CT's busbar wiring etc for DTC	358076	No	4545	4545
503	67.8	SMC Street Lighting Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps meter & 50/5A CT		No	New Item	6500
504	67.9	Numerical Poly Carbonate Seals	626234	No	10	8
505	67.10	Meter Sealing Wire	626500	Kg	160	167
506	67.11	High security lable seal	357590	No	6	6
507	67.12	Poly carbonate sealing bits with out number	626233	No	3	6
	68	**LT Current Transformers**				
508	68.1	CT Ratio - 25/5A, Class-1 Accuracy, 3.75 VA Ring type	336005	No	613	619
509	68.2	CT Ratio - 30/5A, Class-1 Accuracy, 3.75 VA Ring type	336006	No	613	619
510	68.3	CT Ratio - 50/5A, Class-1 Accuracy, 3.75 VA Ring type	336010	No	609	615
511	68.4	CT Ratio - 75/5A, Class-1 Accuracy, 3.75 VA,Ring type	336015	No	507	512
512	68.5	CT Ratio - 100/5A, Class-0.5 Accuracy, 3.75 VA, Ring type	336020	No	449	454
513	68.6	CT Ratio - 150/5A, Class-0.5 Accuracy, 3.75 VA, Ring type	336025	No	337	341
514	68.7	CT Ratio - 200/5A, Class-0.5 Accuracy, 3.75 VA, Ring type	336030	No	337	400
515	68.8	CT Ratio - 300/5A, Class-0.5 Accuracy, 3.75VA, Ring type	336035	No	337	400
516	68.9	CT Ratio - 400/5A, Class-0.5 Accuracy, 3.75 VA, Ring type	336040	No	337	400
517	68.10	CT Ratio - 600/5A, Class-0.5 Accuracy, 3.75VA, Ring type	336046	No	337	450
518	68.11	CT Ratio - 800/5A, Class-0.5 Accuracy, 3.75 VA, Ring type	336050	No	337	450
	69	**Instrument Transformers (P.Ts & C.Ts)**				
	69.1	**11KV P.Ts**				
519	69.1.1	PT 11kV/110V, 50VA, Insulation level 15/35/95 kV as per IS 3156, Accuracy class 0.5	335230	No	7658	8631
520	69.1.2	PT 11kV Station Type	335220	No	21393	24110
	69.2	**11KV CTs**				
521	69.2.1	CT - 11kV, 2.5/5A, Accuracy Class 0.5	336292	No	3510	4000
522	69.2.2	CT - 11kV, 5/5A, Accuracy Class 0.5	336294	No	3510	4000
523	69.2.3	CT - 11kV, 7.5/5A, Accuracy Class 0.5	336296	No	3510	4000
524	69.2.4	CT - 11kV, 10/5A, Accuracy Class 0.5	336302	No	3510	4000
525	69.2.5	CT - 11kV, 12.5/5A, Accuracy Class 0.5	336303	No	3510	4000
526	69.2.6	CT - 11kV, 15/5A, Accuracy Class 0.5	336304	No	3510	4000
527	69.2.7	CT - 11kV, 20/5A, Accuracy Class 0.5	336306	No	3510	4250
528	69.2.8	CT - 11kV, 25/5A, Accuracy Class 0.5	336308	No	3510	4250
529	69.2.9	CT - 11kV, 30/5A, Accuracy Class 0.5	336310	No	3510	4250
530	69.2.10	CT - 11kV, 40/5A, Accuracy Class 0.5	336341	No	3510	4250
531	69.2.11	CT - 11kV, 50/5A, Accuracy Class 0.5	336309	No	3510	4250
532	69.2.12	CT - 11kV, 60/5A, Accuracy Class 0.5	336342	No	3510	4250
533	69.2.13	CT - 11kV, 75/5A, Accuracy Class 0.5	336315	No	3510	4500
534	69.2.14	CT - 11kV, 100/5A, Accuracy Class 0.5	336321	No	3510	4500
535	69.2.15	CT - 11kV, 150/5A, Accuracy Class 0.5	336375	No	3510	4500
536	69.2.16	CT - 11kV, 200/5A, Accuracy Class 0.5	336325	No	3510	4500
537	69.2.17	CT - 11kV, 400/5A, Accuracy Class 0.5	336335	No	3510	4750
	70	**HT Metering Equipments**				
	70.1	**HT Metering cubicle, 11kV Class, All single ratio CTs including ETV Meter (2CT 2PT)**				
538	70.1.1	Without Load Break Switch	358350	No	63840	63840
539	70.1.2	With Load Break Switch	358320	No	124500	124500
540	70.2	11kV HT Metering Panel 3 CT 3 PT for 3 Phase 4 Wire Metering With Transparent Cover TTB, with 30x8mm Cu Bus bars (HT Metering Box Fabricated out of 3mm MS Sheet duly epoxy powder coated, **Without Meter**)			New Item	135585
541	70.3	0.2 S Class ETV Meter with ABT Feature & DLMS Protocal with ToD for above			New Item	20000
	71	**UPS on Line**				
542	71.1	1KVA	344901	Set	24821	24821
543	71.2	5KVA	344905	Set	91050	91050
	72	**Heavy Duty Copper Terminals**				
544	72.1	25 Sqmm Copper Terminals	288507	No	22	22

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545	72.2	35 Sqmm Copper Terminals	288508	No	23	23
546	72.3	50 Sqmm Copper Terminals	288509	No	34	34
547	72.4	70 Sqmm Copper Terminals	288510	No	54	55
548	72.5	95 Sqmm Copper Terminals	288511	No	79	79
549	72.6	120 Sqmm Copper Terminals	288512	No	85	86
550	72.7	150 Sqmm Copper Terminals	288513	No	112	114
551	72.8	185 Sqmm Copper Terminals	288514	No	157	159
552	72.9	225 Sqmm Copper Terminals	288515	No	202	204
553	72.10	240 Sqmm Copper Terminals	288516	No	204	207
554	72.11	300 Sqmm Copper Terminals	288517	No	295	298
555	72.12	400 Sqmm Copper Terminals	288518	No	496	501
	73	**Heavy Duty Copper Terminals Long Barrel**				
556	73.1	25 Sqmm Copper Terminals	288527	No	22	22
557	73.2	35 Sqmm Copper Terminals	288528	No	34	30
558	73.3	50 Sqmm Copper Terminals	288529	No	53	45
559	73.4	70 Sqmm Copper Terminals	288530	No	81	70
560	73.5	95 Sqmm Copper Terminals	288531	No	123	100
561	73.6	120 Sqmm Copper Terminals	288532	No	169	110
562	73.7	150 Sqmm Copper Terminals	288533	No	213	145
563	73.8	185 Sqmm Copper Terminals	288534	No	305	215
564	73.9	225 Sqmm Copper Terminals	288535	No	425	275
565	73.10	240 Sqmm Copper Terminals	288536	No	448	280
566	73.11	300 Sqmm Copper Terminals	288537	No	496	405
567	73.12	400 Sqmm Copper Terminals	288538	No	1009	680
	74	**Al End Terminals (Lugs)**				
568	74.1	10 Sqmm	288630	No	2	3
569	74.2	16 Sqmm	288631	No	2	3
570	74.3	25 Sqmm	288632	No	4	4
571	74.4	32 Sqmm	288633	No	5	5
572	74.5	50 Sqmm	288634	No	9	9
573	74.6	70 Sqmm	288635	No	12	13
574	74.7	95 Sqmm	288636	No	16	17
575	74.8	120 Sqmm	288637	No	21	22
576	74.9	150 Sqmm	288638	No	25	26
577	74.10	185 Sqmm	288639	No	38	40
578	74.11	225 Sqmm	288640	No	42	44
579	74.12	240 Sqmm	288641	No	62	65
580	74.13	300 Sqmm	288642	No	73	77
581	74.14	400 Sqmm	288643	No	95	100
	75	**TOOLS AND PLANT**				
582	75.1	Battery Hydrometer	429810	No	100	100
583	75.2	Multimeter Electronic Type	359215	No	900	900
584	75.3	Multimeter Electromechanical Type	359210	No	1619	1619
585	75.4	Rubber Hand gloves 15kV, SEAMLESS Confirming to ISS (Sample to be verified for seamless before approval)	427252	Pair	985	985
586	75.5	Thermometer (Wall Mounted)	430395	No	231	231
587	75.6	Portable Drilling Machine	410020	No	2150	2150
588	75.7	Megger 500 V	359400	No	2250	2250
589	75.8	Megger 2.5kV - 5kV	359450	No	4500	4500
590	75.9	Silica Gel	607056	Kg	170	170
591	75.10	Grounding Sticks/Rods (Earthing Rods)	427210	Set	1710	1710
592	75.11	Telescopic Earthing Rods	427215	Nos	1254	1254
593	75.12	Panel Indication Lamps	611972	No	12	12
594	75.13	Ring Spanners	424000	Set	1577	1577
595	75.14	Tube Spanners	424150	Set	600	600
596	75.15	Pipe Wrench 24 Inches Size	424410	No	788	788
597	75.16	Pipe Wrench 18 Inches Size	424408	No	300	300
598	75.17	Double End Spanner	424300	Set	283	283
599	75.18	Hack Saw Frames + B185	418170	No	100	100
600	75.19	Hand Torch 5 Celled	427405	No	120	120
601	75.20	Hand Torch 3 Celled	427403	No	60	60
602	75.21	Rechargable LED Hand Torch	427408	No	681	681
603	75.22	Portable Inflatable Emergency Lighting System	427435	No	1898135	1898135
604	75.23	Insulated cutting pilers 12 inches size	425040	No	200	200
605	75.24	Insulated cutting pilers 8 inches size	425041	No	152	152
606	75.25	Live Line Tester (HT)	440000	No	70	70
607	75.26	LT Line Tester	440005	No	38	38
608	75.27	High Voltage Detector	440008	No	15863	15863
609	75.28	Screw driver 18 Inches Size	425522	No	80	80
610	75.29	Screw driver 12 Inches Size	425521	No	69	69
611	75.30	Screw driver 8 Inches Size	425518	No	72	72
612	75.31	Hammer 8 Lbs	418141	No	200	200
613	75.32	Hammer 2 Lbs	418100	No	150	150
614	75.33	Allen Keys	424260	No	192	192
615	75.34	Adjustabale Screw Spanner 8 Inches	424264	No	142	142

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616	75.35	Adjustabale Screw Spanner 12 Inches	424365	No	227	227
617	75.36	Box Spanners	424120	Set	2000	2000
618	75.37	Transil Oil Dielectric Breakdown Test Kit	440060	No	63000	63000
619	75.38	SF6 Gas Leak Detector	440830	No	31539	31539
620	75.39	DC Volt Meter Range - 3V to +5V	359180	No	450	450
621	75.40	Hydrometer syrings suitable for vent holes	422811	No	150	150
622	75.41	Specific Gravity Correction Chart	620172	No	150	150
623	75.42	Wall Mounting Type Holder for Hydrometer	430311	No	100	100
624	75.43	Earth Resistance Tester	359481	No	5400	5400
625	75.44	Rubber Appron	427341	No	185	185
626	75.45	Pippette	430140	No	350	350
627	75.46	Protective Goggle	427330	No	350	350
628	75.47	Acid Resisting jars (4 Pint capacity)	429814	No	375	375
629	75.48	Rain Coats with Hoods	427300	No	439	439
630	75.49	Rubber Shoes Knee Height	427360	No	504	504
631	75.50	Glass Funnel	430200	No	105	105
632	75.51	Hickery Rods	427120	No	957	957
633	75.52	Manilla Rope 1"	406226	Mtr (100)	2200	2200
634	75.53	Manilla Rope 3/4"	406220	Mtr (100)	1800	1800
635	75.54	Polypropyline Rope of 26mm dia	406351	Kg	211	211
636	75.55	Files of sizes	426000	Set	250	250
637	75.56	Safety Belts	427320	No	610	610
638	75.57	Safety Helmets	427310	No	112	112
639	75.58	Safety Helmets attached with electronic induction tester	427311		811	811
640	75.59	Hand Operated Crimping tool 25 Sqmm to 400 Sqmm	425320	No	7870	7870
641	75.60	Common Meter Reading Instrument	358361	No	25925	25925
642	75.61	Thermal Imaging Camera		No	357000	357000
643	75.62	Hydraulic Crimping Tool with suitable Dies for crimping lugs of size upto 400Sqmm	425360	Set	9500	9500
644	75.63	Hi Visibility Reflective Jackets		No	New Item	672
645	75.64	Hi Visibility Reflective Rain Wear		No	New Item	2939
646	75.65	Protective Eye Wear for Safety with integral hands free LED Lighting		No	New Item	847
647	75.66	Leather Shoes		Pair	New Item	933
648	75.67	Socks		Pair	New Item	90
649	75.68	Waist Leather Belt		No	New Item	469
650	75.69	Chain saw, extremely robust and long lasting chain saw. Highly suitably for cutting firewood, thinning shrubs and bushes and shaping trees.		Set	New Item	24793
651	75.70	Fibre Glass Type Ladder of size 15 Ft		Set	New Item	Will be Intimated
652	75.71	Search Lights (Hand Held & Fixable to Vehicle)		No	New Item	Will be Intimated
653	75.72	LDPE Safety Cone with ESCOMs Logo		No	New Item	Will be Intimated
654	75.73	HM HDPE Flexible Poly Film Barricade Tape of 50 Microns with ESCOMs Logo, Caution, Danger & Men At Work		Mtr	New Item	Will be Intimated
655	75.75	Men at work Sign Board		No	New Item	Will be Intimated
656	75.75	Insulated Crowbars		No	New Item	Will be Intimated
657	75.76	Helmet with Miner Light		No	New Item	Will be Intimated
658	75.77	Foldable Insulated Fibre Ladder		No	New Item	Will be Intimated
659	75.78	Head Torch		No	New Item	Will be Intimated
660	75.78	Insulated GOS Operating Handle/Rod for Redesighed & Modified GOS		No	New Item	1900
	76	**Miscellaneous Materials**				
661	76.1	Cable Covering Tiles 125x250x40 mm	801035	Per 1000	10000	10000
662	76.2	Cable Covering Tiles 125x125x40 mm	801034	Per 1000	5000	5000
663	76.3	RCC Hume Pipes 2000mm long 150mm dia	820672	No	300	300
664	76.4	RCC Hume Pipes 2000mm long 200mm dia	820673	No	380	380
665	76.5	Collars for RCC hume pipe 150mm dia	820703	No	80	80
666	76.6	Collars for RCC hume pipe 200mm dia	820704	No	100	100
667	76.7	MS Pipe 200mm dia with collars	765050	Mtr	937	937
668	76.8	Burnt Bricks (class 35 modular)	802005	No	5	5
669	76.9	Wire cut bricks (Class 75 Modular)	802006	No	10	10
670	76.10	Pre - cast hollow blocks (40x20x20 cms) grade 30		No	26	26
671	76.11	River Sand	800650	Cmt	1640	2000
672	76.12	Artificial Sand/Manufacture Sand	800651	Cmt	950	950
673	76.13	Cement in 50kg bags	800030	Bag	330	330
674	76.14	Ready Mix concrete M20 (1:1.5:3)		Cmt	3450	3450
675	76.15	Ready Mix concrete M25 (1:1:2)		Cmt	3850	3850
676	76.16	Spall (Jelly used for packing)		Cmt	50	50
677	76.17	Stone Spalls		Cmt	130	130
678	76.18	Stone Boulders		Cmt	200	200
679	76.19	Route & Joint indicating stone with MS Anchor rod	802460	No	115	120
680	76.20	Black Cambric tape 25 mm wide 10mil thick and in rolls of 50 Mtr	622675	Roll	120	120

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681	76.21	Yellow Cambric tape 25 mm wide 7mil thick and in rolls of 50 Mtr	622620	Roll	110	110
682	76.22	PVC Insulation Tapes19 mm wide and in rolls of 10 Mtrs	622720	Roll	10	10
683	76.23	ACB Paint	632030	Ltr	120	120
684	76.24	Aluminium Paint	632013	Ltr	180	180
685	76.25	Grey Enamel Paint smoke/battle ship	632050	Ltr	250	250
686	76.26	Red Oxide Paint	632020	Ltr	90	90
687	76.27	Cotton Tapes 19 mm wide and in rolls of 50 Mtrs	622124	Roll	35	35
688	76.28	Cotton Waste	627520	Kg	50	50
689	76.29	Hack saw blade 300x12.5 mm	418185	No	7	7
690	76.30	TW plate 300x300x25 mmwith 20mm dia holes at the corners and coated with two coats of varnish on one side/SMC board.	612621	No	230	230
691	76.31	TW Meter Board, 300x300x75mm, coated with varnish/SMC board	612623	No	110	110
692	76.32	Monoplast	506559	100 Gms	55	55
693	76.33	Bitumen Compound	604060	Kg	65	65
	77	**Copper Control cables 1.1 kV Class**				
694	77.1	2 Core, 2.5 Sqmm	289352	Km	41180	42486
695	77.2	4 Core, 2.5 Sqmm	289354	Km	73260	74211
696	77.3	10 Core, 2.5 Sqmm	289360	Km	161220	161561
697	77.4	14 Core, 2.5 Sqmm	289364	Km	234490	234500
698	77.5	19 Core, 2.5 Sqmm	289369	Km	314530	313615
699	77.6	2 Core, 6 Sqmm	289452	Km	91950	92508
700	77.7	2 Core, 10 Sqmm	289472	Km	117730	117438
701	77.8	4 Core, 4 Sqmm	289404	Km	151830	152675
702	77.9	4 Core, 6 Sqmm	289454	Km	154910	153608
703	77.10	4 Core, 10 Sqmm	289474	Km	252240	248481
704	77.11	4 Core, 16 Sqmm	289484	Km	375150	367781
705	77.12	Flurocent Light Fitting	446024	No	255	255
706	77.13	Flurocent tube	611530	No	40	40
707	77.14	T-5 Tubelight fitting Complete 28 watts with tube - 4 feet	446039	No	440	440
708	77.15	Floracent Lamp for above	446040	No	102	102
709	77.16	T-5 Tubelight Fitting Complete 14 watts with tube - 2 feet	446037	No	425	425
710	77.17	Floracent Lamp for above	446038	No	90	90
711	77.18	Sodium Vapour Lamp (250W)	611730	No	650	650
712	77.19	Automatic Switches for Street Lights	612645	No	1850	1850
713	77.20	GI Bracket for Flurocent Tube	446044	No	300	300
714	77.21	Sodium Vapour lamp Ignitors	612240	No	225	225
715	77.22	Caution/Danger Board	278832/278811	No	108	120
716	77.23	Standard Torch Cell 1.5V	613050	No	11	11
717	77.24	Street light metering box made of MS sheet steel	612660	No	1913	1913
718	77.25	Street light metering box made of SMC	358012	No	1400	1400
	78	**Compact Fluorescent Lamps**				
719	78.1	5 Watts	611545	No	100	100
720	78.2	8 Watts	611548	No	104	104
721	78.3	11 Watts	611551	No	120	120
722	78.4	14 Watts	611554	No	116	116
723	78.5	18 Watts	611558	No	148	148
724	78.6	23 Watts	611563	No	168	168
	79	**Bolts & Nuts**				
	79.1	**MS**				
725	79.1.1	B & N Size 16x40mm	733612	MT	75500	74102
726	79.1.2	B & N Size 16x50mm	733613	MT	75500	74102
727	79.1.3	B & N Size 16x65mm	733616	MT	75500	74102
728	79.1.4	B & N Size 16x75mm	733618	MT	75500	74102
729	79.1.5	B & N Size 16x85mm	733620	MT	75500	74102
730	79.1.6	B & N Size 16x100mm	733623	MT	75500	74102
731	79.1.7	B & N Size 16x125mm	733625	MT	75500	74102
732	79.1.8	B & N Size 16x150mm	733628	MT	75500	74102
733	79.1.9	B & N Size 16x175mm	733630	MT	75500	74102
734	79.1.10	B & N Size 16x200mm	733633	MT	75500	74102
735	79.1.11	B & N Size 16x225mm	733634	MT	75500	74102
	79.2	**GI**				
736	79.2.1	B & N Size 16x40mm		MT	New Item	90102
737	79.2.2	B & N Size 16x50mm		MT	New Item	90102
738	79.2.3	B & N Size 16x65mm		MT	New Item	90102
739	79.2.4	B & N Size 16x75mm		MT	New Item	90102
740	79.2.5	B & N Size 16x85mm		MT	New Item	90102
741	79.2.6	B & N Size 16x100mm		MT	New Item	90102
742	79.2.7	B & N Size 16x125mm		MT	New Item	90102
743	79.2.8	B & N Size 16x150mm		MT	New Item	90102

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744	79.2.9	B & N Size 16x175mm		MT	New Item	90102
745	79.2.10	B & N Size 16x200mm		MT	New Item	90102
746	79.2.11	B & N Size 16x225mm		MT	New Item	90102
	80	**LT Brass Terminal Connector for Transformer (630 Amps, Aprrox. Weight 0.790kg)**				
747	80.1	250 kVA	542180	No	748	822
748	80.2	500 kVA	542185	No	748	822
	81	**Brass Cable Glands**				
749	81.1	25mm	542190	No	62	62
750	81.2	32mm	542192	No	75	75
751	81.3	40mm	542194	No	117	117
752	81.4	45mm	542196	No	156	156
	82	**LT Capacitor 3 Ph Housed in a encloser with necessary fusses, wiring, mounting arrangement as per tech Spec**				
753	82.1	3 kVAr	333103	Set	525	525
754	82.2	9 kVAr	333109	Set	931	931
755	82.3	18 kVAr	333118	Set	1733	1733
756	82.4	27 kVAr	333127	Set	2758	2758
757	82.5	54 kVAr	333154	Set	4883	4883
	83	**FOR DISTRIBUTION TRANSFORMER CENTRES MS Box for housing the ETV Meter 3 phase 4 wire 5A, with associated LT CTs class 0.5 accuracy, ring type, with wiring clamps, B&N and all other accessories required. (EXCLUDING ETV METER)**				
758	83.1	With CT Ratio 50/5 for 15/25kVA Distribution Transformer Centre	358055	Set	5827	5845
759	83.2	With CT Ratio 100/5 for 50/63kVA Distribution Transformer Centre	358060	Set	5347	5362
760	83.3	With CT Ratio 150/5 for 100kVA Distribution Transformer Centre	358065	Set	5011	5023
761	83.4	With CT Ratio 400/5 for 250kVA Distribution Transformer Centre	358070	Set	5011	5200
762	83.5	With CT Ratio 800/5 for 500kVA Distribution Transformer Centre	358075	Set	5011	5350
		SMC metering box as above				
763	83.6	With CT Ratio 50/5 for 15/25kVA Distribution Transformer Centre		Set	New Item	6390
764	83.7	With CT Ratio 100/5 for 50/63kVA Distribution Transformer Centre		Set	New Item	5907
765	83.8	With CT Ratio 150/5 for 100kVA Distribution Transformer Centre		Set	New Item	5568
766	83.9	With CT Ratio 400/5 for 250kVA Distribution Transformer Centre		Set	New Item	5745
767	83.10	With CT Ratio 800/5 for 500kVA Distribution Transformer Centre		Set	New Item	5895
	84	**Installing RLMU for the Existing Distribution Transformer Center**				
768	84.1	Providing RLM Unit with necessary wiring for housing PLC, MCCB, MCB, Energy Meter, CTs, Cotactors etc., as per specification in Metallic Enclousure	358086	No	10752	10752
769	84.2	Programmable Logic Controllers with communication ports	358098	Set	19339	19339
770	84.3	GSM Modem	447662	No	7642	7642
	85	**MCCB**				
771	85.1	For 25 kVA, 40/60 Amps	358088	No	1485	1485
772	85.2	For 63 kVA, 100 Amps	358090	No	1500	1500
773	85.3	For 100 kVA,160 Amps	358092	No	1700	1700
774	85.4	For 100 kVA, 250 Amps	358093	No	5486	5486
775	85.5	For 250 kVA, 400 Amps	358095	No	9752	9752
776	85.6	For 500 kVA, 630 Amps	358096	No	16450	16450
777	85.7	MCB 6 Amps	358094	No	210	210
	86	**Contactors**				
778	86.1	For 25 kVA, 40 Amps	352440	No	2010	2010
779	86.2	For 63 kVA, 100 Amps	352460	No	3280	3280
780	86.3	For 100 kVA, 160 Amps	352480	No	5775	5775
781	86.4	For 100 kVA, 225 Amps	352485	No	11390	11390
	87	**Compact Pre - fabricated Packaged Sub - station 11kV/433 V**				

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		Packaged Sub - Station 11kv/433V consisting of 3 way SF6/VCB insulated compact RMU, oil cooled/dry type copper wound transformer and L.T. section with one ACB as incoming and 7 No outgoing MCCB feeders and with encloser made of electronically Galvanized				
782	87.1	With 100 kVA Oil Cooled Transformer	276530	No	1500000	1132904
783	87.2	With 250 kVA Oil Cooled Transformer	276540	No	1650000	1491923
784	87.3	With 500 kVA Oil Cooled Transformer	276550	No	1579163	2009325
785	87.4	With 750 kVA Oil Cooled Transformer	276575	No	1824000	2415622
786	87.5	With 990 kVA Oil Cooled Transformer	276590	No	2280000	2821919
787	87.6	With 100 kVA Dry Type Transformer	276531	No	1650000	1182768
788	87.7	With 250 kVA Dry Type Transformer	276541	No	1800000	1611596
789	87.8	With 500 kVA Dry Type Transformer	276560	No	1997538	2212473
790	87.9	With 750 kVA Dry Type Transformer	276585	No	2507446	2711112
791	87.10	With 990 kVA Dry Type Transformer	276599	No	2908949	3191280
	88	**Breakup prices**				
	88.1	**Copper wound Oil Cooled Distribution Transformer**				
792	88.1.1	500 kVA	321450	No	760099	805743
793	88.1.2	750 kVA	321475	No	941028	997537
794	88.1.3	990 kVA	321490	No	1255765	1331175
795	88.1.4	LT ACB 2000A	310520	No	115716	115716
796	88.1.5	MCCB 400A	358097	No	14100	14100
	89	**SCRAP MATERIALS**				
		Note: The rates are indicative and the respective zones are authorized to fix the floor price suitabaly as approved in the Common SR 2012-13 meeting held on 09.11.2012 and confirmed vide proceedings CEE/T&P/KPTCL - 6998 - 7013 Dt: 15.11.2012				
797	89.1	Copper Wire	791210	Kg	421	512
798	89.2	Released Copper winding released from failed distribution transformers	731211	Kg	158	192
799	89.3	Copper Conductor	791200	Kg	421	512
800	89.4	Copper Ingots	791205	Kg	294	358
801	89.5	Copper Cable with Leads		Kg	216	248
802	89.6	Aluminium	791010	Kg	120	124
803	89.7	Aluminium wire in pieces	791100	Kg	83	85
804	89.8	Released Aluminium winding released from failed distribution transformers	791175	Kg	81	100
805	89.9	ACSR Conductor	791101	Kg	87	89
806	89.10	Alumininium UG cable	791531	Kg	105	103
807	89.11	Scrap Al Released From UG Cable	791530	Kg	86	88
	90	**Iron Items**				
808	90.1	a) SM Rail Pole, I beam	790100	Kg	28	20
809	90.2	b) Ladder Pole, Tower Parts, Tubular Poles	790101	Kg	26	20
810	90.3	c) Cross arms,Clamps etc	790104	Kg	26	20
811	90.4	d) Released steel from RCC Poles (Skeleton rods)	790104	Kg	26	20
812	90.5	e) Barbed/Ground wire/Zinc sheet etc	790102	Kg	20	20
813	90.6	Transformer Empty tanks of different capacity	790300	No	1704	Deleted
814	90.7	Transformer Empty tanks of different capacity	790300	Kg	18	18
815	90.8	Scrap GOS with Insulators	790401	Kg	25	25
816	90.9	Broken Steel Furniture		Kg	26	26
817	90.10	Brass	791300	Kg	176	176
818	90.11	Baliga Poles	793510	Rmtr	72	72
819	90.12	Scrap Wooden Furniture		Kg	16	16
820	90.13	Empty Barrel of 210 Litres Capacity - Good	442120	No	452	440
821	90.14	Empty Barrel of 210 Litres Capacity - Bad	795030	No	300	292
822	90.15	Lead	791400	Kg	85	80
823	90.16	HT Metering Cubicle, Distribution Boxes, Feeder Piller Boxes etc	795240	Kg	22	20
824	90.17	Energy Meters (Electro Mech) Single Phase	795910/20	Kg	77	46
825	90.18	Energy Meters (Electro Mech) 3 Phase		Kg		46
826	90.19	Single/3 Phase Electronic Meters		Kg		51
827	90.20	CTs & PTs	795500	Kg	478	67
	91	**Scrap Distribution Transformer of Aluminium Winding (without oil)**				
828	91.1	15 kVA		Each	9000	4754
829	91.2	25 kVA	795104	Each	10503	5857
830	91.3	63 kVA	795106	Each	16600	8570
831	91.4	100 kVA	795110	Each	22880	12052
832	91.5	200 kVA	795120	Each	50000	27500
833	91.6	250 kVA	795125	Each	52000	28600
834	91.7	300 kVA	795130	Each	55000	30250
835	91.8	500 kVA	795150	Each	66500	36575

Sl No	Item No	Name of the Material	Material Code	UoM	Common SR 2012-13 in ` FORD Rates inclusive of duties taxes & F&I	Common SR 2014-15 in ` FORD Rates inclusive of duties taxes & F&I
	92	**Scrap Distribution Transformer of Copper Winding (without oil)**				
836	92.1	15 kVA		Each	9740	9740
837	92.2	25 kVA	795160	Each	26066	26066
838	92.3	50 kVA	795165	Each	25126	25126
839	92.4	63 kVA	795166	Each	35000	35000
840	92.5	100 kVA	795170	Each	45402	45402
841	92.6	200 kVA	795180	Each	76004	76004
842	92.7	250 kVA		Each	85000	85000
843	92.8	300 kVA	795190	Each	91767	91767
844	92.9	500 kVA	795195	Each	152393	152393
845	92.10	5 MVA			915000	915000
	93	**Scrap CSP 11kV Distribution Transformer**				
846	93.1	15 kVA		Each	9736	9736
847	93.2	25 kVA	795158	Each	6000	6000
848	93.3	63 kVA	795160	Each	10000	10000
	94	**Scrap Wooden Reels**				
849	94.1	In good condition		Kg	14	14
850	94.2	MT Wooden Reel Deteriorated and with iron Rods	790103	No	77	77

BILL OF MATERIALS-1

For 11 kV DP structure Kit as per Drg No. SIC/DL/WSO 18/29-7-85

Sl No	Particulars MS Angle/Flat in mm	Qty	Wt/Mtr in Kgs	Total Wt/Set in kgs	16 mm Hexogonal Bolt & Nut	Qty	20 mm Class 'A' GI Pipe in Length	Clamps made out of 50x6 mm MS Flat
1	2	3	4	5	6	7	8	9
1	HT power x-arm out of 65x65x6 size 2.34 mtrs Long	2	5.8	27.14	175 mm Long	6	120 mm 2 Nos	type-CDP-1 2 Nos. 2.16 kg/set
					50 mm Long	6	60 mm 3 Nos	
2	Brace X-arm (Horizontal member) 50x50x6 size 1.6 mtrs Long	2	4.5	14.4	65 mm Long	8		type-CDP-2 2 Nos. 2.56 kg/set
3	Brace X-arm (cross member) 50x50x6 size 2.8 mtrs Long	2	4.5	25.2	50 mm long	5		
4	Strain Plate 50x8 size 0.375 mtrs Long	3	3.2	3.49				6 mm thick washer 1No.

Note :

1. All holes are of 18 mm for 16 mm bolts
2. All Sllotted holes are of 18x35 mm long
3. The weights given are for raw materials as per ISI structural steel hand book

BILL OF MATERIALS -2

FOR 100 TO 300 kVA TRANSFORMER CENTER KIT (For double pole TC Structure)

SL. No	Particulars	Qty	MS Angle Flat in mm	Wt/Mtr in Kgs	Length/ piece in mm x Nos	total wt/set in kgs	16 mm dia Hexaganal Bolt & Nut Length in mm	Qty in No	20 mm dia. Class 'A' GI Pipe Length in mm/Qty
1	HT Power Cross arm & strain plate	1 Set	65x65x6	5.8	2,700x2	31.2	175	4	0
			50x6	2.4	375x3	2.7	50	6	0
2	a) GOS Frame	1 No.	45x45x6	4	2,350x2	18.8	75	4	0
			40x40x5	3	340x2	2.04	0	0	0
			40x40x5	3	70x4	0.84	0	0	0
			40x40x5	3	60x6	1.08	0	0	0
	b) Pin insulator support	1 Set	50x6	2.4	400x3	2.88	0	0	0
	c) LA Fixing X-arm	1 Set	50x50x6	4.5	2,350x1	10.58	0	0	0
			45x45x6	5	70x2	0.56	0	0	0
	d) GOS & LA Support X-arm & Clamp for fixing on to the pole	1 Set	65x65x6	5.8	1,025x2	11.86	0	0	0
			50x6	2.4	436x2	2.15	65	4	0
	e) GOS & LA Supporting Brace	1Set	45x45x6	4	1,260x2	10.08	50	4	0
	f) HG Fuse Fixing X-arm	1 Set	65x65x6	5.8	2,350x1	13.63	0	0	0
			65x65x6	5.8	70x2	0.812	85	2	0
	g) HG Fuse support X-arm & Clamp for fixing on to pole	1 Set	65x65x6	5.8	925x2	10.73	0	0	0
			50x6	2.4	496x2	2.27	65	4	4
	h) GOS, LA & HG Fuse supporting brace & clamp for fixing to pole	1 Set	45x45x6	4	1,360x2	10.88	0	0	4
			50x6	2.4	463x1	2.41	0	0	
			0		285x2	1.37	65	4	
3	Transformer belting angle Clamp for fixing on to pole	1 Set	45x45x6	4	2,700x2	21.6	0	0	0
			45x45x6	4	500x2	4	40	4	
			50x6	2.4	493x2	2.44	65	4	
4	a)Transformer seating channel supporting cleat X-arm & clamp for fixing on to pole GOS (ISMC)	1 Set	100x50x4.7	9.2	2,700x2	49.69	225	7	185 mm
			65x65x6	5.8	310x2	3.6	0	0	3 No
			50x6	2.4	523x2	2.44	65	4	0
5	a) GOS Handle supporting X-arm & clamp for fixing on to pole GOS	1 Set	65x65x6	5.8	1,150x1	5.89	0	0	0
			50x6	2.47	548x1	1.32	65	2	0
	b)Handle supporting X-arm brace & clamp for fixing on to pole	1 Set	45x45x6 50x6 50x6	4 2.4 2.4	1800x1 560x1 320x1	6.11	0 0 65	0 0 2	0 0 0
	Note :					**233.962**			

1) The bill of materials are prepared as per Dgr No..KEB/SIC/WS/022/date :12.9.86

2) The weights given are for raw materials as per ISI structural Hand book.

3) All holes are of 18 mm & solt holes 18x35 mm to suit 16 mm unless otherwise stated

4) Bolts required to fix LA's & G.O.S down take off pipe are not included as the same are to be supplied along with equipments,

5) LT.4 pin X-arm & clamp are also not included as they are readily available.

BILL OF MATERIALS-3
3 Pole Structure for Transformer

Sl No	Particulars	Unit	MS Angle Flat in mm	Wt/Mtr in Kgs	Length /Nos in mm	Wt/Set in Kgs
1	2	3	4	5	6	7
1	HT Side power Cross-arm and strain plate	1 Set	50x50x6 50x6	4.5 2.4	1280x3 463x2	17.28 2.22
2	GOS Support Cross arm & Clamp for fixing on to the pole	1 Set	65x65x6 50x6	5.8 2.4	2000x2 463x2	23.2 2.09
3	GOS Frame	2 Nos	45x45x6 45x45x6 45x45x6 45x45x6	4 4 4 4	2350x4 310x4 70x8 60x12	37.6 4.96 2.24 2.28
4	GOS Supporting Cross arm and Clamp	1 Set	45x45x6 50x6 50x6	4 2.4 2.4	1360x4 498x2 285x2	21.76 2.39 1.37
5	a) GOS Handle Supporting Cross arm Brace and Clamps	1 No	65x65x6 50x6	5.8 2.4	2000x1 423x2	11.6 1.26
	b) GOS Handle Supporting Cross arm brace and Clamps		45x45x6 50x6 50x6	4 2.4 2.4	1000x2 50x1 320x1	8.00 1.34 0.77
6	Brace Cross Member and Clamps	1 Set	50x50x6 50x6	4.5 2.4	2700x2 493x2	24.3 2.31

BILL OF MATERIALS-4

FOR 25 TO 63 kVA TRANSFORMER CENTRE KIT (This BoM is suitable for Conventional Transformer Only, Separate BoM- 6 is furnished for Star Rated Tranaformer)

Sl. No	Particulars	Qty	MS Angle/ Flat	Wt/Mtr in Kgs	Length/ Piece in mtr x No	Total Wt/Set in kgs	16 mm dia Hexgonal No.Bolt & Nut	Qty	20 mm class 'A' GI pipe	Qty	Clamp made out of 50x6 mm MS flat No	Qty	Wt/Set in Kgs
1	HT + LT side power X-arm	1 Set 2 No	65x65x6	5.8	2.7x2	31.32	175	7	120	3	0	0	0
2	P.I support X-arm	1 No	50x50x6	4.5	2.7x2 (0.06x3)	12.96	65	4	0	0	460	2	2.16
3	Belting cross arm and belting support X-arm	1 Set 4 No	45x45x6 50x50x6	4 4.5	2.7x2 0.5x2	21.6 4.5	50 65	4 4	0 0	0 0	0 465	0 2	0 2.23
4	Transformer Seating and Transformer seating angle support X-arm	1 Set 4 No	65x65x6	5.8	2.7x2 0.285x2	31.32 3.19	12 50	7 4	0 160	0 3	0 465	0 2	0 2.23
5	Distribution box Fixing Clamps	0	0		0	0	120		0	3	536	2	2.6
6	GI Pipe	0	20x5		160	0	0		0	3	0	0	0
7	H Frame	Set	0		1 No	62.69	0	0	0	0	0	0	0

Note :

1. The bill of materials are prepared as per DRG No.SIC/WS/017/date 28.6.85.

2.The weights given are for raw materials as per ISI structural steel Hand book.

3. All holes are of 18 mm for 16 mm bolts.

4. All slotted holes are of 18x35 mm long.

5. Bolts required to fix Las are not included as the same are to be supplied along with LAs

6 Since the D.O.L.O cut out is being fixed on the pervious support of the T.C and depending on whether it is single support & DP structure provision for D.O.L.O fixing X arm shall have be made in the Estimate, Separately as the same is not include in the Kit.

BILL OF MATERIALS-5

H.FRAME

Sl. No	Particulars	Unit	MS Angle Flat in mm	Wt/Mtr in Kgs	Length in mm	Wt/Set in Kgs
1	2	3	4	5	6	7
1	GOS- H Frame Fixing Cross-Arm	No	65x65x6	5.8	1200x2	13.92
		No	50x6	2.4	473x2	2.27
2	GOS H Frame Fixing Cross arm Clamps Brace Fish Plate	No	45x45x5	3.4	1360x2	9.25
		No	50x6	2.4	503x2	2.41
		No	50x6	2.4	285x2	1.37
3	GOS Frame	No	45x45x5	3.4	2350x2	15.98
		No	45x45x5	3.4	310x2	2.11
		No	45x45x5	3.4	70x4	0.95
		No	45x45x5	3.4	60x6	1.22
4	GOS Handle Frame Fixing Cross-arm	No	65x65x6	5.8	1100x1	6.38
	Clamp for above	No	50x6	2.4	548x1	1.32
5	GOS Handle Frame Fixing Cross set arm Brace Clamps Fish Plate	No	45x45x5	3.4	1000x1	3.40
		No	50x6	2.4	558x1	1.34
		No	50x6	2.4	320x1	0.77
6	MS Bolts & Nuts 16mm with washers	Kgs	16*50 16*65 16*150	3 Nos 12 Nos 6 Nos		
						62.69

Note

1 The hole have to be provided at locations as mentioned in the drawings

2 All holes are in mm and slot holes 18*35 ,, to suit 16mm unless otherwise stated.

3 the weight mentioned in the BoM is as per Steel Table

4 The Bolts & Nuts shall confirm ISS

BILL OF MATERIALS - 6

25/63 kVA TC Structure suitable for mounting Star Rated 25 & 63kVA Transformers

Sl. No.	Part No.	Part No.	Wt/Mtr in Kgs	BESCOM for 3 Star Rated Transformers as approved	
				Qty/set	Approx wt in Kg
1	MS Angle 65x65x6mm x 2700 mm - HT side Power X arms	T1	5.8	1 No	31.32
	MS Angle 65x65x6mm x 2700 mm - LT side Power X arms		5.8	1 No	
2	MS Angle 50x50x6mm x 2700 mm - PI Support X arms	T2	4.5	1 No	12.15
	MS Cleat 50x50x6mm x 70 mm		4.5	3 Nos	0.945
3	MS Angle 45x45x6mm x 2700 mm Belting X arms	DTC-10	4	2 No	21.6
4	MS Angle 45x45x6mm x 500 mm Belting support X arms	DTC-9	4	2 No	4.5
5	MS Channel 100x50x4.7 (ISMC) mm x 2700mm Transformer seating	T4	9.2	2 No	49.68
6	MS Angle 65x65x6mm x 310 mm Transformers seating support X arms	DTC-11	5.8	2 No	3.6
	KIT DETAILS				
7	MS Flat 50x6mm x 450mm	2	2.4	2 No	2.16
8	MS Flat 50x6mm x 465mm	3	2.4	4 No	4.46
9	MS Flat 50x6mm x 535mm	4	2.4	2 No	2.6
10	L&R MS Angle 65x65x6mm x 1025mm GOS & LA Support X-Arms	DTC-4	5.8	2 No	11.89
11	MS Angle 45x45x5 mm x 1360 mm HG Fuse Support	DTC-8	3.4	1+1 No	9.248
12	L&R MS Angle 65x65x6mm x 1100 mm GOS Handle Support X arms Brace	DTC-13	5.8	1 No	6.38
13	L&R MS Angle 45x45x5mm x 1000 mm GOS Handle Support X arms Brace	DTC-14	3.4	1 No	3.400
14	**11kV H Frame Set details**	DTC-3			
	MS Angle of size 45x45x6 mm x 2350 mm		4	2 No Each	18.8
	40x40x5mm 340mm		3	2 No Each	2.04
	40x40x5mm 70mm		3	4 No Each	0.84
	40x40x5mm 60mm		3	6 No Each	1.08
	Clamps				
15	MS Flat 50x6mm x 560 mm	5	2.4	2 No	2.7
16	MS Flat 50x6mm x 498 mm	1	2.4	2 No	2.39
17	MS Flat 50x6mm x 465 mm	3	2.4	2 No	2.22
	FISH PLATE FOR 'H' Frame - GOS Mounting Frames				
	a) 285 mm			2 No	1.368
	b) 320 mm			1 No	0.768
	TOTAL a) Structure Steel				**196.139**
18	**MS Bolts & Nuts Including H Frame**				
	a) 16mm x 175mm			7 No	10 Kgs
	b) 16mm x 65mm			12 No	
	c) 16mm x 200mm			7 No	
	d) 16mm x 50mm			4 No	
	e) 12mm x 50mm			4 No	
	TOTAL b) Bolt and nut				**10 Kgs**

Note: 1) The weight indicated is before punching of the holes.
2) Tolerance of ±4% is allowed on the weight.

BILL OF MATERIALS-7

SINGLE POLE MOUNTED TRANSFORMER STRUCTURAL MATERIALS ON 9 MTRS. LONG RCC POLE (SQ. SECTION) FOR 25/63 kVA TC SET					
Part No.	**MS Angle size in mm**	**Length in mm**	**Quantity**	**Wt / Mtr.**	**Weight in kg.**
1	50x50x6	850	1	4.5	3.825
2	50x50x6	1150	2	4.5	10.35
3	50x50x6	850	2	4.5	7.65
4	45x45x5	Not Applicable			
5	45x45x5	700	2	3.4	4.76
6	45x45x5	1321	2	3.4	8.98
7	8th Plate	Not Applicable			
8	65x65x6	485	1	5.8	2.784
9	65x65x6	850	2	5.8	9.86
10	65x65x6	485	1	5.8	2.784
11	45x45x5	1230	2	3.4	8.16
12	45x45x5	1000	2	3.4	6.8
13	65x65x6 with cleat welded on both ends of length 65mm	485	1	5.8	2.9
	Clamps				
	50x8	550	2	3.1	3.41
	50x8	480	2	3.1	2.976
	Bolts & Nuts (various sizes)				
	16x125mm	8			4
	16x50 mm	8			
	16x50 mm	4			

BILL OF MATERIALS-8

SINGLE POLE MOUNTED TRANSFORMER STRUCTURAL MATERIALS ON 9 MTRS. LONG RCC POLE (SQ. SECTION) FOR 100 kVA TC SET.

Part No.	MS Angle size in mm	Length in mm	Quantity	Wt/Mtr	Weight in kg.
1	50x50x6	850	3	4.5	11.475
2	50x50x6	1150	4	4.5	20.7
3	50x50x6	850	2	4.5	7.65
4	45x45x5	900	2	3.4	6.12
5	45x45x5	1500	2	3.4	10.20
6	45x45x5	1321	2	3.4	8.98
7	8th Plate	Not Applicable			
8	65x65x6	485	2	5.8	5.568
9	65x65x6	850	2	5.8	9.86
10	65x65x6	485	2	5.8	5.568
11	45x45x5	1350	2	3.4	9.18
12	45x45x5	1000	2	3.4	6.8
13	65x65x6 with cleat welded on both ends of length 65mm	485	1	5.8	2.9
	Clamps				
	50x8	550	2	3.1	3.41
	50x8	480	2	3.1	2.976
	Bolts & Nuts (various sizes)				
	16x125mm	8			5
	16x50 mm	8			
	16x50 mm	4			

BILL OF MATERIALS – 9

For OH line (Having Single H Frame with Transformer seating and seating angle support x-arm) for 11mtr Spun Pole for 25KVA Transformer.

Sl No	Size of the steel section	Length (in mm)	Qty (in Nos)	Kgs/Mtr	Total Wt
	TOP Bracket				
1	100x100x8mm MS Angle	850	3	12.1	30.86
2	75x40x4.8mm MS Channel (MC75/MCP75)	2400	2	7.14	34.27
3	45x45x5mm MS Angle	850	3	3.4	8.67
4	75x40x4.8mm MS Channel (MC75/MCP75)	1040	2	7.14	14.85
5	50x50x6mm MS Angle	1000	2	4.5	9
6	50x50x6mm MS Angle	1000	2	4.5	9
7	65x65x6mm MS Angle	1440	2	5.8	16.7
	Transformer Center				
8	130x130x12mm Angle	1110	1	23.4	25.97
9	100x50x5mm MS Channel (MC100/MCP100)	1200	2	9.56	22.94
10	130x130x12mm MS Angle (with side plate)	1110	2	23.4	51.95
11	75x75x6mm MS Angle	1750	2	6.8	23.8
12	65x65x6mm MS Angle	1260	2	5.8	14.62
13	75x40x4.8mm MS Channel (MC75/MCP75)	1110	2	7.14	15.85
	GOS Mounting Structure (Ladder)				
14	45x45x5mm MS Angle	1640	2	3.4	11.15
15	45x45x5mm MS Angle (Cleat)	60	6	3.4	1.22
16	40x40x5mm MS Angle	335	2	3	2.01
17	Round clamps of different sizes made out of MS flats suitable for fixing the above structural materials to the pole.				
	a) 75x6 MS Flat	1000	6	3.532	21.19
18	MS Hexagonal bolts, nuts and washers of different sizes to sufficient in quantity for fixing clamps		15kgs Approx.		15
				Total in Kgs	**329.06**

Note

1. The weights mentioned are subject to tolerance as per IS

2. The weights mentioned are before drilling of holes

BILL OF MATERIALS – 10

For UG Cable network (Having 3 Nos H Frame with Transformer seating and seating angle support x-arm) for 11mtr Spun Pole for 25KVA Transformer.

Sl No	Size of the steel section	Length (in mm)	Qty (in Nos)	Kgs/Mtr	Total Wt
	TOP Bracket				
1	100x100x8mm MS Angle	850	5	12.1	51.43
2	75x40x4.8mm MS Channel (MC75/MCP75)	2400	4	7.14	68.54
3	45x45x5mm MS Angle	850	5	3.4	14.45
4	75x40x4.8mm MS Channel (MC75/MCP75)	1040	2	7.14	14.85
5	50x50x6mm MS Angle	2000	2	4.5	18
6	50x50x6mm MS Angle	1000	2	4.5	9
7	65x65x6mm MS Angle	1440	2	5.8	16.7
	Transformer Center				
8	130x130x12mm Angle	1110	1	23.4	25.97
9	100x50x5mm MS Channel (MC100/MCP100)	1200	2	9.56	22.94
10	130x130x12mm MS Angle (with side plate)	1110	2	23.4	51.95
11	75x75x6mm MS Angle	1750	2	6.8	23.8
12	65x65x6mm MS Angle	1260	2	5.8	14.62
13	75x40x4.8mm MS Channel (MC75/MCP75)	1110	2	7.14	15.85
	GOS Mounting Structure (Ladder)				
14	45x45x5mm MS Angle	1640	6	3.4	33.46
15	45x45x5mm MS Angle (Cleat)	60	18	3.4	3.67
16	40x40x5mm MS Angle	335	6	3	6.03
17	Round clamps of different sizes made out of MS flats suitable for fixing the above structural materials to the pole.				
	a) 75x10 MS Flat	1000	2	5.89	11.77
	b) 75x6 MS Flat	1000	8	3.53	28.26
18	MS Hexagonal bolts, nuts and washers of different sizes to sufficient in quantity for fixing clamps		17kgs Approx.		17
				Total in Kgs	**448.3**

Note

1. The weights mentioned are subject to tolerance as per IS

2. The weights mentioned are before drilling of holes

BILL OF MATERIALS – 11

For OH line (Having Single H Frame without Transformer seating and seating angle support x-arm) for 11 mtr Spun Pole for 63/100/250/500 KVA Transformer.

Sl No	Size of the steel section	Length (in mm)	Qty (in Nos)	Kgs/Mtr	Total Wt
	TOP Bracket				
1	100x100x8mm MS Angle	850	3	12.1	30.86
2	75x40x4.8mm MS Channel (MC75/MCP75)	2400	2	7.14	34.27
3	45x45x5mm MS Angle	850	3	3.4	8.67
4	75x40x4.8mm MS Channel (MC75/MCP75)	1040	2	7.14	14.85
5	50x50x6mm MS Angle	1000	2	4.5	9
6	50x50x6mm MS Angle	1000	2	4.5	9
7	65x65x6mm MS Angle	1440	2	5.8	16.7
	GOS Mounting Structure (Ladder)				
8	45x45x5mm MS Angle	1640	2	3.4	11.15
9	45x45x5mm MS Angle (Cleat)	60	6	3.4	1.22
10	40x40x5mm MS Angle	335	2	3.002	2.01
	Round clamps of different sizes made out of MS flats suitable for fixing the above structural materials to the pole.				
11	a) 75x6 MS Flat	1000	6	3.532	21.19
12	MS Hexagonal bolts, nuts and washers of different sizes to sufficient in quantity for fixing clamps		10kgs Approx.		10
				Total in Kgs	**168.93**

Note

1. The weights mentioned are subject to tolerance as per IS

2. The weights mentioned are before drilling of holes

BILL OF MATERIALS – 12

For UG Cable network (Having 3 Nos H Frame without Transformer seating and seating angle support x-arm) for 11 mtr Spun Pole for 63/100/250/500 KVA Transformer.

Sl No	Size of the steel section	Length (in mm)	Qty (in Nos)	Kgs/Mtr	Total Wt
	TOP Bracket				
1	100x100x8mm MS Angle	850	5	12.1	51.43
2	75x40x4.8mm MS Channel (MC75/MCP75)	2400	4	7.14	68.54
3	45x45x5mm MS Angle	850	5	3.4	14.45
4	75x40x4.8mm MS Channel (MC75/MCP75)	1040	2	7.14	14.85
5	50x50x6mm MS Angle	2000	2	4.5	18
6	50x50x6mm MS Angle	1000	2	4.5	9
7	65x65x6mm MS Angle	1440	2	5.8	16.7
	GOS Mounting Structure (Ladder)				
8	45x45x5mm MS Angle	1640	6	3.4	33.46
9	45x45x5mm MS Angle (Cleat)	60	18	3.4	3.67
10	40x40x5mm MS Angle	335	6	3	6.03
11	Round clamps of different sizes made out of MS flats suitable for fixing the above structural materials to the pole				
	a) 75x6 MS Flat	1000	8	3.53	28.26
12	MS Hexagonal bolts, nuts and washers of different sizes to sufficient in quantity for fixing clamps		10kgs Approx		10
				Total in Kgs	**274.39**

Note

1. The weights mentioned are subject to tolerance as per IS

2. The weights mentioned are before drilling of holes

LABOUR RATES FOR COMMON SR 2014-15 for 11 kV SYSTEM

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
	1	**Digging of Pits**			
	1.1	Digging of Pits **1.8 mtr depth** for errection of 9 to 10 mtr Long Steel/RCC/PSC supports as per approved Drawing.			
1	1.1.1	Ordinary Soil	Per pit	267	**334**
2	1.1.2	Hard Soil	Per pit	916	**1145**
3	1.1.3	Hard latterite Soil	Per pit	1016	**1270**
4	1.1.4	Hard Rock (By Chizling and/Or Wedging)	Per pit	New item	**2172**
	1.2	Digging of Pits **1.5 mtr depth** for erection of 7.5/8 mtr Long Steel/RCC/PSC/PCC supports as per approved Drawing.			
5	1.2.1	Ordinary Soil	Per pit	216	**269**
6	1.2.2	Hard Soil	Per pit	741	**926**
7	1.2.3	Hard latterite Soil	Per pit	820	**1025**
8	1.2.4	Hard Rock	Per pit	New item	**1751**
	1.3	Digging of Pits **2.0mtr depth** for errection of 9.5mtr Long RCC supports (350Kg Working load for 33KV) as per approved Drawing.			
9	1.3.1	Ordinary Soil	Per pit	293	**366**
10	1.3.2	Hard Soil	Per pit	927	**1159**
11	1.3.3	Hard latterite Soil	Per pit	1103	**1379**
12	1.3.4	Hard Rock	Per pit	New item	**2378**
	1.4	Digging of Pits **2.2mtr depth** for errection of 11mtr Long RCC/PSC supports as per approved Drawing.			
13	1.4.1	Ordinary Soil	Per pit	328	**410**
14	1.4.2	Hard Soil	Per pit	1243	**1554**
15	1.4.3	Hard latterite Soil	Per pit	1243	**1554**
16	1.4.4	Hard Rock	Per pit	New item	**2668**
	1.5	Digging of Pit **2.5 mtr depth** for errection of 11mtr long tubular spun pole as per approved Drawing.			
17	1.5.1	Ordinary Soil	Per pit	805	**1007**
18	1.5.2	Hard Soil	Per pit	1610	**2013**
19	1.5.3	Hard latterite Soil	Per pit	1610	**2013**
20	1.5.4	Hard Rock	Per pit	New item	**6542**
	1.6	**Digging of pit. For providing GI Pipe type Earthing**			
21	1.6.1	Ordinary Soil	Per pit	323	**404**
22	1.6.2	Hard Soil	Per pit	1268	**1586**
23	1.6.3	Hard latterite Soil	Per pit	1406	**1757**
24	1.6.4	Hard Rock	Per pit	New item	**2627**
	1.7	**Digging of Pit for GUY SET**			
25	1.7.1	Ordinary Soil	Per pit	138	**173**
26	1.7.2	Hard Soil	Per pit	353	**441**
27	1.7.3	Hard latterite Soil	Per pit	**389**	**487**
28	1.7.4	Hard Rock	Per pit	**New item**	**1124**
		Note: For Hard Latterite Soil and Hard Rock Soil works have to be classified and certified by Executive Engineer,			
	1.8	**Concrete works**			
		Providing cement conccrete to poles and Guy sets with material and labour including necessary curing etc., complete (cost does not include excavation)			
	1.8.1	**A) Base concrteing with CC 1:4: 8**			
		a) Pole base for 11/9.5/9/8 mt supports (500x650x150mm)	Each	**182**	**194**
		b) Pole based for 9mtrs square pole (650x650x150mm)	Each	**237**	**252**
		c) Pole base 11mtr spun pole (1000x1000x150mm)	Each	**603**	**596**
	1.8.2	**B) Pole concreting with CC 1:2:4 (without coping)**			
29		a) 9mtrs support (650x500x1700mm)	Each	**2079**	**2185**
30		b) 9.5 mtrs support (650x500x1850mm)	Each	**2262**	**2373**
31		b) 11 mtrs PSC support (650x500x2000mm)	Each	**New item**	**2312**
32		b) 9 mtrs Square pole (650x650x1700 mm)	Each	**New Item**	**2731**
33		b) 11 mtrs Spun pole (1000x1000x2500mm)	Each	**New Item**	**9668**
34		c) 8mtrs support (400x400x1500mm)	Each	**1197**	**835**
35		d) Guy concreting with Boulders, Mud & Sand As per Drawing No. BESCOM/GM/CP/7/dt: 24.10.07. (with out cement)	Each	**112**	**140**
	1.8.3	**C) providing coping for pole with CC 1:2:4 (As per actuals)**			
36		a) 150mm around poles for a height of 300mm for RCC, PSC, PCC poles/I-beam/Rail steel sections	Each	**256**	**403**
37		b) 390mm all around the pole for an height of 300mm for Spun poles	Each	**666**	**906**
	1.8.4	**D) Guy concreting in Marshy area**			
38		a) Providing cement concrete 1:2:4 for Anchor Rod in Marshy/Black Cotton Soil 600x600x450mm	Each	**794**	**798**
	2	**Erection of Poles**			
39	2.1	Erection of steel supports 9.0 to 10.00 mtr long such as 22.68 kg (50 lbs) Rail, 27.22 kg (60 Lbs) Rail I Beam of sizes 200x100mm, 175x90 mm, 125x100 mm. Fabricates poles tubular poles in pits of 1.8 mtr Depth, Aligning, Refilling with soil and ramming as approved drawing	No	**216**	**269**
40	2.2	Same as above but erection of 7.5 to 8.0 mtr long steel supports (18.75 kgs., /41Lbs) Rail, 125x75 mm, I beam in pit of 1.5 mtr depth.	No	**192**	**240**

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
41	2.3	Same as above but erection of RCC/PCC/PSC poles of 7.5 to 8 mtr long in pit of 1.5 mtr depth.	No	**385**	**482**
42	2.4	Erection of RCC/PSC poles 9 to 10 mtr long but in a pit of 1.8 mtr depth	No	**483**	**603**
43	2.5	Erection of RCC poles 9.5 mtr long 350Kg WL but in a pit of 2.0 mtr depth for 33KV lines	No	**680**	**850**
44	2.6	Erection of 11 mtr PSC pole with working load of 365kg in a pit of 2 mtrs depth.	No	**770**	**963**
45	2.7	Erection of 11mtr long Concrete spun pole in a pit of 2.5 mtr depth.	No	**861**	**1077**
		Releasing and Replacing Insulators			
46	2.8	11KV Pin Insulators	No	***New Item***	**25**
47	2.9	11KV Dead End Insulators Disc, Strain etc	No	***New Item***	**30**
48	2.9	Erection of 2 pole structure formed out of SM rails or I -Beam of sizes 200x100 175x90 mm, 225x100mm of 9 to 10 mtr long in pits of 1.8 mtr depth for line deviation with necessary foundation, inclusive of fixing of cross Arms, Braces, Strain Insulators.	Per structure	**1349**	**1686**
49	2.10	Same as above using RCC poles 9 mtr to 10 mtr long	Per structure	**1767**	**2209**
50	2.11	Same as above using RCC poles 7.5/8 mtr long in pits of 1.5 mtr depth.	Per structure	**1767**	**2209**
51	2.12	providing spiral earth electrode type earthing along with pole (without charcoal, salt etc.,)	No	**39**	**49**
52	2.13	Errection of H Frame.	No	**135**	**169**
53	2.14	Erection of Double pole transformers structure including fixing of structural materials, erection of poles etc., complete for mounting of transformers as per approved drawing using I-Beems or MS Rail 8 mtrs. long.	Per structure	**1772**	**2216**
	2.15	**Same as item No. 9 with RCC pole 9/8 mtr. long.**			
	2.16	**Upto 63 kVA**	Per structure		
54	2.16.1	with 9 mtrs. RCC pole		**2378**	**2973**
55	2.16.2	with 8 mtrs. RCC pole		**2090**	**2612**
	2.17	**100 to 250 kVA**	Per structure		**0**
56	2.17.1	with 9 mtrs. RCC pole		**2465**	**3081**
57	2.17.2	with 8 mtrs. RCC pole		**2271**	**2839**
	2.18	**Above 250 kVA**	Per structure		**0**
58	2.18.1	with 9 mtrs. RCC pole		**2724**	**3405**
59	2.18.2	with 8 mtrs. RCC pole		**2440**	**3050**
	3	**Erection of single pole mounted Transformer structures**			
60	3.1	for 250 kVA Transformer on the existing 11 mtrs. Spun pole (excluding erection of pole)	Per structure	**1439**	**1799**
61	3.2	for 100 kVA on the existing 9 mtrs. RCC pole (Squre Section) (excluding erection of pole)	Per structure	**720**	**899**
62	3.3	for 25/63 kVA on the existing 9 mtrs. RCC pole (Square Section) (excluding erection of pole)	Per structure	**720**	**899**
63	3.4	**3 Pole structure:** Erection of 3 pole structure formed with 3 Nos 9 mtr RCC Pole with platform for mounting 100 to 500 kVA transformers as per approved Drawing including fixing structure materials, erection of poles etc., complete. (excluding excavation charges)	Per structure	**3637**	**4546**
64	3.5	**4 Pole Structure:** Erection of 4 pole structure formed with SM Rail or I Beam of size 200x100 mm 175x90 mm, 225x100 mm size, 9 to 10 mtr long pits for line deviation with necessary foundation, including fixing of cross arm, braces, strain/disc insulators.	Per structure	**3003**	**3753**
65	3.6	Erection of 4 Pole structure as in item, 11, with platform for mounting of Transformer. (excluding excavation charges)	Per structure	**3439**	**4299**
66	**4**	**Construction of platform** with size stone, cement concert for erection of 500 kVA Transformer/Metering cubicle/Heavy Equipment. Construction of platform (1.5x1.5x1.2) mtr in size stone, for erection of transformers/Heavy equipment including all materials, labour. Excavation of (1.5x1.5x1) mt pit for foundation providing and laying cement concrete 1:4:8 for foundation laid in 1cm thick layers, well compacted curing etc., complete providing and construction of stone masonary 0.9m below ground level and 1.2m above ground level neatly hammer dressed in cement morter 1:6 cutting complete providing pointing to stone masonary in cement morter 1:3 after racking joint & nisely lining curing etc., plastering the concrete surfaces in cement morter 1:4 including smooth randering curing etc., curing at every stages completely.	Per structure	**20438**	**17972**
67	4.1	Fixing of 2 Pin cross arm with insulator and Braces fixing	Each	**68**	**85**
68	4.2	Fixing of 4 Pin cross arm with insulator and Braces fixing	Each	**68**	**85**

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
69	4.3	Fixing of V-Shape/Horizontal cross arm including single top support Braces and Insulators fixing	Each	**70**	**88**
70	4.4	Fixing of V-Shape/Horizontal cross arm for DC Line including Braces and Insulators fixing. (Without Single Top Support)	Each	**58**	**72**
71	4.5	Fixing of 4 Pin double cross arm including braces and insulators.	set	**119**	**148**
72	4.6	Fixing of HT/LT single top support .	Each	**45**	**56**
73	4.7	Fixing of Earth Guard Stirrup	Set of 2 nos	**70**	**88**
	5	**Fixing of Anticlimbing Device**			
74	5.1	Spike Type	per set	**16**	**20**
75	5.2	GI Barbed Wire (12 mtrs/1kg)	No	**18**	**23**
76	5.3	a) Fixing of GUY Sets with break insulators making use of 7/3.15 mm (7/10 SWG) galvanised steel wire with turn buckle and anchoring arrangement as per approved drawing. (Excluding excavation of PIT)	per set	**113**	**141**
77		b) Same as above but using 2 strain insulators (No.15)	per set	**126**	**158**
78	5.4	Fixing guarding including fixing of necessary cross arms for existing HT and LT line at Road Crossing, Telephone Line Crossings up to span of 60 mtrs.	per set	**427**	**533**
79	5.5	Fixing guarding including fixing of necessary cross arms between HT and LT line up to a span of 40 mtrs	per set	**427**	**533**
80	5.6	Above 40 Mtrs. Span	per set	**750**	**938**
81	5.7	Stringing of conductor wren, squirrel, weasel, binding of conductor on each insulator and dead ending on strain or disc/strain insulator by means of clamps.	per km/wire	**1354**	**1693**
82	5.8	do - for Rabbit ACSR	per km/wire	**1846**	**2308**
83	5.9	do - for Coyote ACSR	per km/wire	**3225**	**4031**
	6	**Erection of Transformer**			
84	6.1	a) Erection of 25 to 63 kVA Transformer on Transformer structure.	Each	**483**	**603**
85	6.2	-do- 100 kVA Transformer	Each	**644**	**805**
86	6.3	-do- 200-250 kVA Transformer	Each	**966**	**1208**
87	6.4	-do- 300-500 kVA Transformer	Each	**1288**	**1610**
88	6.5	Providing GI Pipe Earthing for lightning arresters Transformer Neutral and Transformer Metal parts (Excluding digging of pits)	per set of 1 no. of electrode	**82**	**103**
89	6.6	Hiring of crane for erection of 250/500 kVA Transformer (applicable **for maintenance works** only and in case of non -availability of departmental crane)	Per TFR	**3500**	**4025**
90	6.7	Hiring of crane for releasing existing Transformer and erection of **NEW** 250 to 500kVA Transformers. (applicable for maintenance works only and in case of non -availability of departmental crane)	No	**4200**	**4830**
91	6.8	Hiring of crane for releasing existing Transformer and erection of **NEW** 250 to 500kVA Transformers. In case of failure and agumentation, (applicable for maintenance works only and in case of non -availability of departmental crane)		**4200**	**4830**
		NOTE:- When the awards are issued for erection of New Transformers under labour awards, Hire charges are not			
	7	**HT Metering**			
92	7.1	Erection of HT metering Cubicle on Platform.	No	**966**	**1208**
93	7.2	Erection of LT Feeder piller box including necessary civil works like soil excavation & concreting etc. complete			
94	7.2.1	upto 8 ways	No	**700**	**875**
95	7.2.2	above 8 ways	No	**757**	**946**
	8	**Distribution Box for DTCs**			
96	8.1	Fixing LT Distribution box for 100/250/500 KVA DTCs (Excluding wiring)	Per box	**322**	**403**
	9	**Additional cost for making termination using H/Wedge Clamps**			
97	9.1	Rabbit to Rabbit	No	**51**	**64**
98	9.2	Coyote to Coyote	No	**68**	**85**
99	9.3	Rabbit to Coyote	No	**68**	**85**
100	9.4	Additional cost for making termination using H- Clamps along with 2 hole Paddle/In-Line Connector/Micro wedge connector.	set	**140**	**175**
	10	**Fixing Metering Box for housing the ETV Meter 3-ph 4 wire along with CT's, Meter & wiring for DTC's**			
101	10.1	25/63 kVA TC	per set	**811**	**1014**

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
102	10.2	100 kVA TC	per set	**811**	**1014**
103	10.3	250 kVA TC	per set	**811**	**1014**
104	10.4	300/500 kVA TC	per set	**811**	**1014**
	11	**Fixing 3-phase LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for**			
105	11.1	15/25 kVA DTC, 3 kVAr	per set	**270**	**338**
106	11.2	63 kVA DTC, 9 kVAr	per set	**270**	**338**
107	11.3	100 kVA DTC, 18 kVAr	per set	**318**	**398**
108	11.4	250 kVA DTC, 27 kVAr	per set	**372**	**465**
109	11.5	500 kVA DTC, 54 kVAr	per set	**389**	**486**
	12	**Erection & Commmissioning of 11kV Auto reclosures and Sectionalizers with remote communication capability**			
110	12.1	Erection of fabricated steel structure for Seating Auto reclosures and Sectionalizers	per set	**280**	**350**
111	12.2	Erection of 11kV Auto reclosures with control box GSM modem, connecting cable, control transformer, wiring testing and commissioning including parameterisation	per set	**1960**	**2450**
112	12.3	Erection of 11kV sectionalizers with control box GSM modem, connecting cable, PTs wiring testing and commissioning including parameterisation	per set	**1680**	**2100**
	13	**Installing RLM Unit for the existing Distribution TC including wiring**			
113	13.1	for 25 kVA	per set	**2466**	**3083**
114	13.2	for 63 kVA	per set	**2466**	**3083**
115	13.3	for 100 kVA	per set	**2466**	**3083**
116	13.4	Fixing DOLO cutouts/Horn Gap Fuses including fixing of cross arms and wiring	Each	**100**	**125**
117	13.5	Fixing of GOS including wiring (11kV SB 200A)	set	**450**	**563**
118	13.6	Fixing of GOS including wiring (11kV DB 400A)		**500**	**625**
119	13.7	Fixing of 11KV GOS SB or DB including wiring on existing structure		**New Item**	**1250**
119 a	13.7a	Modofication of GOS Operating System for making Foot path free for pedestrian	Per GOS	**New Item**	**1979**
120	13.8	Fixing of 3 Nos lightning arrestors including wiring.	set/3 No's	**50**	**63**
121	13.9	Fixing Pole Fuse Board	No	**61**	**76**
122	13.10	Fixing PVC pipe for taking the leads form the conductor to the pole fuse board (including taking the lead wire inside the PVC pipe & giving connection to the overhead line & pole fuse box/Aerial fuse Board).	set	**93**	**116**
123	13.11	Fixing of LT Line spacers	No	**29**	**36**
124	13.12	Releasing & Refixing of over head service mains (single phase/three phase) for consumer installation and street lighting and similar work (While executing reconductoring work)	Per connection/ installation	**28**	**35**
125	13.13	Releasing & Refixing of over head service mains (single phase/three phase) for consumer installation and street lighting and similar work (While replacing existing pole)	Per connection/ installation	**42**	**53**
	13.14	**Supplying and fixing conduit**			
126	13.15	Supplying heavy guage PVC pipe 25mm dia 2mm thick confirming to IS 2509 with suitable size bends, junction box, adhesive paste etc and fixing using inverted wood plug in case RCC ceiling & RCC Wall stone structure are rawal plugs in case of brick walls and cement plastering damaged portion using heavy gaauge saddles at an intervel of 700mm using NF Screws (2/1)	Mtr	**New Item**	**68**
127	13.16	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded **Aluminum** unsheathed wire 4 Sq mm single core/multi core cable in open or cocealed system of wiring (10/521)	Mtr	**New Item**	**12**
128	13.17	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded **Copper** unsheathed wire 4 Sq mm single core/multi core cable in open or cocealed system of wiring (10/521)	Mtr	**New Item**	**39**
129	13.18	Supplying and fixing of porcelain fuse channel with cut out 16 Amps on existing wooden/panel using necessary nuts, bolts, and washers etc complee (32/3)	No	**New Item**	**69**

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
130	13.19	Fixing and Wiring of Single/Three Meter phase meter on the existing meter board	Per connection	**New Item**	**90**
131	13.20	Releasing of Single/Three Phase Meter	Per connection	**New Item**	**60**
132	13.21	**Street Light and Other Works** Fixing and Wiring Incandescent street Light Fitting with two Clamps.	set	**267**	**334**
133	13.22	Fixing and Wiring of FTL with suitable clamps bracket bolts and nuts using departmental material and departmental ladder vehicle under supervision of departmental Staff.	set	**267**	**334**
134	13.23	Fixing and Wiring as SV/M.V light Fittins with suitable clamps Brackets, lamps, Bolts and nuts using departmental Materials and departmental Lader vehicle under supervision of departmental Staff.	set	**428**	**535**
135	13.24	Fixing of Mercury Vapour Lamp fitting/Ornamental Light Fitting with Contral Boxes etc.,	set	**314**	**393**
136	13.25	Fixing of LT Protection Kit	Per Kit	**145**	**181**
137	13.26	(a) Wiring of One circuit of LT Wiring for for 25/63/100 KVA DTC to the existing LT protection Kit/Distribution Box via metering box. (includes fixing of necessary supports like 2 Pin X-arms, Spacers etc)	Set	**402**	**503**
138	13.27	(b) Wiring of Two circuits of LT Wiring for for 25/63/100 KVA DTC to the existing LT protection Kit/Distribution Box via metering box.(includes fixing of necessary supports like 2 Pin X-arms, Spacers etc)	Set	**644**	**805**
139	13.28	Fixing One Circuit of LT Wiring for 250/500 KVA Transformers via metering box. (includes fixing of necessary supports like 2 Pin X-arms, Spacers etc)	Per Circuit	**515**	**644**
140	13.29	Surveying for construction of HT and LT Lines duly furnishing single line diagram indicating pole locations	Km	**400**	**500**
141	13.30	Numbering and Scheduling of poles	Km	**303**	**379**
142	13.31	Magpying (Excluding Cost of paint etc.,)	Km	**120**	**150**
143	13.32	Dismanting of Steel/I- Beam	No	**90% of the pole erection charges.**	**90% of the pole erection charges.**
144	13.33	Releasing of baliga pole	No	**85% of the 8 Mtrs. RCC Pole erection charges.**	**85% of the 8 Mtrs. RCC Pole erection charges.**
	14	**Releasing & Restringing of loose spans, binding, straightening of inclined pole etc.**			
145	14.1	Tightening of loose spans a) Weasel/Squirrel b) Rabbit c) Coyote	Km	**90% of the corresponding strining charges.**	**90% of the corresponding stringing charges.**
146	14.2	Straightening of slant/bent poles	No	**75% of the corresponding erection charges.**	**75% of the corresponding erection charges.**
		Note: Above works (3.53) has to be recorded in register maintained at SO/SD/Division office. Record has to be verified by Executive Engineer (Ele) before issuing approval for work orders /awards.			
147	14.3	Dismantling of 2 B&S to I/O copper or equivalent	Km	**531**	**664**
148	14.4	Dismantling of copper conductor above 2 B&S.	Km	**856**	**1070**
149	14.5	Any Dismantling work	No	**90% of the corresponding erection charges.**	**90% of the corresponding erection charges.**
	15	**Jungle Clearing: 3 mtrs corridor (1.5 mtrs on either side of line)**			
	15.1	**Trimming of trees and branches and clearing as per IE Rules.**			
150	15.1.1	In Malnad/hilly areas if Jungle/trees/Plants/Shrubs exists only (once in two years)	Km	**2172**	**2715**
151	15.1.2	In Maidan (In accordance with necessity)	Km	**766**	**958**
	15.2	**As above for construction of new line including Trimming of Trees, if Jungle/Tree/Plant/Shrubs Exists.**			
152	15.2.1	Malnad/Hill Area	Km	**3884**	**4855**
153	15.2.2	Maidan Area	Km	**2321**	**2901**
	15.3	**Cutting, Clearing of Vegetation Grass/shrubs such other small plants, including removal of Roots etc., in station yard/store yard.**			
	15.3.1	Maidan Area (Twice in year)	Sqmt	**3**	**4**
	15.3.2	Malnad Area (Once in Three Months)	Sqmt	**3**	**4**
		Note: Locality allowance noted under Sl. No. 67 is not applicable to item No. 61 & 62 **Transportation Rates:**			
	16	**Transporation by Head Load (applicable only in case where the materials have to be carried/transported from the road side to the interiors using physical/Manual labour)**			

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
154	16.1	**Poles:** for Transporting one pole (Not payable for distance less than 25 Mtrs)	No	**98**	**123**
155	16.2	**Conductor:** For Transporting 1 km Length Conductor (Not payable for distance less than 25 Mtrs)	per km	**42**	**53**
156	16.3	**Transformer:** For Transportation 25 kVA Transformer (Not payable for distance less than 25 Mtrs).	No	**210**	**263**
157	16.4	**Transformer:** For Transportation 63 kVA transformer (Not payable for distance less than 25 Mtrs).	No	**350**	**438**
158	16.5	**Transformer:** For Transportation 100 kVA Transformer (Not payable for distance less than 25 Mtrs).	No	**350**	**438**
	17	**Hire Charges (These charges have to be specifically approved by the Corporate Office in respect of repair to transformers when applicable)**			
159	17.1	Transportation using 7.5/10 Tons Lorry	Km	**Rs. 20 per Kms subjected to a minimum of Rs. 1000/- per day**	**Rs. 23 per Kms subjected to a minimum of Rs. 1200/- per day**
160	17.2	Transportation using mini Lorry/Tempo	Km	**Rs. 15 per Kms subjected to a minimum of Rs. 750/- per day**	**Rs. 17 per Kms subjected to a minimum of Rs. 1000/- per day**
161	17.3	Loading of any type of material not covered specifically (cost includes crane charges if any).	MT	**834**	**1043**
162	17.4	UnLoading of any type of material not covered specifically (cost includes crane charges if any).	MT	**834**	**1043**
163	17.5	Loading of Power Transformer and other similar materials like switchgear cable drums, Drake /Lynx, conductors etc., (cost includes crane charges if any).	MT	**926**	**1158**
164	17.6	Unloading of Power Transformer and other similar materials like switchgear cable drums, Drake/Lynx conductors etc., (cost includes crane charges if any).	MT	**926**	**1158**
	18	**a) Loading and unloading of poles (loading of poles to vehicles at stores and unloading at workspot) NOTE:- Consolidated amount for both loading and unloading.**			
165	18.1	8 mtr RCC/PSC poles	No	**45**	**56**
166	18.2	9 mtr RCC/PSC poles	No	**60**	**75**
167	18.3	8 mtr PCC pole	No	**37**	**47**
	19	**a) Loading of Transformer(when maintaince men for loading and unloading are not available in store)**			
168	19.1	25 kVA	No	**115**	**144**
169	19.2	63 kVA	No	**115**	**144**
170	19.3	100 kVA	No	**173**	**216**
171	19.4	250/300 kVA	No	**288**	**360**
172	19.5	500 kVA	No	**575**	**719**
	20	**b) Un loading of Transformer**			
173	20.1	25 kVA	No	**115**	**144**
174	20.2	63 kVA	No	**115**	**144**
175	20.3	100 kVA	No	**173**	**216**
176	20.4	250/300 kVA	No	**288**	**360**
177	20.5	500 kVA	No	**575**	**719**
	21	**Fixing of energy meter to non-metered IP sets 10HP and below: Including cost of all the materials like Meter Board, Channel cutouts and necessary wires required for the work.**			
178	21.1	Fixing Single phase Energy meter to IP Sets fixed inside Pump House	Per IP Set	**554**	**693**
179	21.2	Fixing 3 ph Energy meter to IP Sets fixed in Pump House	Per IP Set	**766**	**958**
180	21.3	Fixing of Energy meters to IP sets, (where there is no pumphouse) where power supply is availed directly from the pole to the IP set and weather proof meter housing box is required (including cost of WP box).	Per IP Set	**2561**	**3201**
	22	**UG Cable Works**			
	22.1	Earth work excavation for cable trench of 0.5 to 0.75 mtr. Width and Depth upto 1 mtr. including trial pits, depositing on bank upto a lead of 50 mtrs, Supplying and Displaying necessary Danger Boards and Lighting, Using sight Rails and Sign Boards at every 100mtrs wherever necessary as directed.			
181	22.1.1	In Ordinary Soil	Cmt	**145**	**181**
182	22.1.2	In Hard Soil	Cmt	**217**	**271**
183	22.1.3	In Ordinary Rock without Blasting	Cmt	**193**	**241**
184	22.1.4	In Ordinary Rock with Blasting	Cmt	**317**	**396**
185	22.1.5	Hard Rock/Latterite Rock latterite Soil	Cmt	**781**	**976**
186	22.2	***Soil classification has to be certified by the concerned Executive Engineer Elc.**			
	Note:	20% over & above may be given if depth is more than 1 m			

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
187	22.3	Refilling the cable trenches with selected available earth from trench excavation including watering, consolidation in layers of 15 cm. Thickness including depositing of the surplus earth with a lead of 200 Mtrs.	Cmt	**32**	**40**
	22.4	Cutting of Road surface for cable trenches and disposing of the excavated earth, as directed including Barricading, Danger Lighting then Refilling the Cable Trenches.			
188	22.4.1	Macadam Road	Cmt	**182**	**228**
189	22.4.2	Tar Road	Cmt	**300**	**375**
190	22.4.3	Cement Concrete Road	Cmt	**603**	**754**
191	22.5	Removing the Existing Stone Slabs pavement and stocking the materials for excavating the trench with a lead of 50 mtr Refixing the stone slab after refilling the trenches as in item 2	Sqmt	**81**	**101**
192	22.6	Laying and Jointing the pipes (100-150 mm), dia including lowering in Position: Fixing Collars etc., Joining with mud mortor complete			
193	22.7	RCC Pipe	Mtr	**28**	**35**
194	22.8	Stone Ware Pipe	Mtr	**22**	**28**
195	22.9	Laying the GI Pipe 80mm to 150 mm dia at Drainage Water Supply Crossing including fixing collars elbows, bends, Tees and other fitting with Cuts and Threads wherever necessary complete.	Mtr	**32**	**40**
196	22.10	Removing and Refixing stone Masonary with necessary patch up and cementing drain works for Cluvert, Water Valve Crossing etc., including cost of materials.	Cmt	**420**	**525**
197	22.11	Covering cable with Tiles	Km	**1843**	**2304**
198	22.12	Spreading and forming with sand all round the cable to a depth of 75 mm and width of 500 mm. (Does not include cost of sand).	Km	**6475**	**8094**
199	22.13	Removing the kerb Stones and Refixing at the original place with necessary earthwork	Rmtr	**6**	**8**
200	22.14	Fixing of Route Joint indicating Slabs	No	**48**	**60**
	22.15	Transporting HT cable from Store to work spot including loading and unloading (including Crane and other equipment charges if any)			
201	22.15.1	3x95 to 150 Sqmm	Km (Cable)	**8096**	**10120**
202	22.15.2	3x185 to 3x240 Sqmm	Km (Cable)	**9716**	**12145**
203	22.15.3	1x300 to 1x1000 Sqmm (SC Cable)	Km (Cable)	**9716**	**12145**
204	22.15.4	3x300 to 3x500 Sqmm	Km (Cable)	**11334**	**14168**
205		**-do- for LT Cables**	Km (Cable)		
206	22.15.5	2.5 to 25 Sq.mm (SC Cable 4 core 3.5 core)	Km (Cable)	**500**	**625**
207	22.15.6	35 to 95 Sq.mm (4 core/3.5 core)	Km (Cable)	**1000**	**1250**
208	22.15.7	120 to 240 Sq.mm (4 core/3.5 core)	Km (Cable)	**1100**	**1375**
	23	**Laying of cable in Existing trench/GI pipe/Stone Ware/RCC Hume pipe using Wooden/Aluminum Rollers as directed by the departmental staff.**			
	23.1	**HT Cable**			
209	23.1.1	3x95 to 150 sq.mm	Cable km	**25343**	**31679**
210	23.1.2	3x185 to 240 sq.mm	Cable km	**26751**	**33439**
211	23.1.3	1x1000 sq. mm	Cable km	**26751**	**33439**
212	23.1.4	3x300 to 3x500 sq.mm	Cable km	**28158**	**35198**
	23.2	**LT Cable**			
213	23.2.1	2.5 to 25 sq.mm	Cable km	**9043**	**11304**
214	23.2.2	35 to 95 sq.mm	Cable km	**13234**	**16543**
215	23.2.3	120 to 240 sq.mm	Cable km	**13514**	**16893**
	23.3	**Cable Joint and wiring(for HT Cable only)**			
	23.3.1	**Epoxy straight through joint**			
216	23.3.2	3x95 to 3x150 sq.mm	No	**700**	**875**

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
217	23.3.3	3x185 to 3x240 sq.mm	No	**700**	**875**
218	23.3.4	3x300 to 3x400 sq.mm	No	**700**	**875**
	23.4	**Heat shrinkable straight through joint**			
219	23.4.1	3x95 to 3x150 sq.mm	No	**1200**	**1500**
220	23.4.2	3x185 to 3x240 sq.mm	No	**1200**	**1500**
221	23.4.3	3x300 to 3x400 sq.mm	No	**1200**	**1500**
	24	**Making and Fixing pot head for HT Cable only**			
	24.1	**Epoxy type**			
222	24.1.1	3x95 to 3x150 sq.mm	No	**700**	**875**
223	24.1.2	3x185 to 3x240 sq.mm	No	**700**	**875**
224	24.1.3	3x300 to 3x400 sq.mm	No	**700**	**875**
	24.2	**Heat shrinkable type**			
225	24.2.1	3x95 to 3x150 sq.mm	No	**1100**	**1375**
226	24.2.2	3x185 to 3x240 sq.mm	No	**1100**	**1375**
227	24.2.3	3x300 to 3x400 sq.mm	No	**1100**	**1375**
228	24.2.4	Releasing of HT cable after excavation refilling, consolidation Rewinding to the drum etc.,	Km	**25342**	**31678**
229	24.2.5	-do- for LT cable	Km	**8707**	**10884**
	25	**Earth Excavation for R.M.U. Foundation Depositing of earth on Bank up to a lead of 50 mtr and with a lift up to 1.5 mtr**			
230	25.1	Ordinary Soil	Cmt	**134**	**141**
231	25.2	In hard soil	Cmt	**201**	**211**
232	25.3	In ordinary Rock without Blasting	Cmt	**216**	**270**
233	25.4	In ordinary Rock with Blasting	Cmt	**231**	**289**
234	25.5	Hard Rock/Lattirite Rock/Lattirite Soft (Chistling & Wedging)	Cmt	**628**	**941**
235		**Note: Soil classifications has to be made by respective Executive Engineer**			
236	25.6	Refilling the RMU foundation with the approved new earth with initial lead of 50 mtr including watering and tamping layers of 15 cm thick etc., complete.	Cmt	**42**	**56**
237	25.7	Lifting of Excess Earth up to distance of 10 km	Cmt	**165**	**206**
238	25.8	KSRB 4-1.3: Providing and Laying in position plain cement cocrente of mix M7.5 (1:4:8) with OPC Cement @ 180 Kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85 cum and fine aggregtes @ 0.57 cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. SPECIFICATION No. KBS 4.1, 4.2	Cmt	**3799**	**3973**
239	25.9	KSRB 4-1.6: Providing and Laying in position plain cement cocrente of mix M15 (1:2:4) with Cement @ 240 Kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.459 cum machine mixed concrete laid in layers not exceeding 15 cms. thick well compacted, in foundation and plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. SPECIFICATION No. KBS 4.1, 4.2	Cmt	**4276**	**4425**
240	25.10	KSRB 4.9.1: Providing mild steel reinforcement for RCC work including straightening, cutting, bending, hooking, placing in position, lapping and /or welding wherever required, and Laying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid)cost of materials labour, HOM of machinery complete as per specifications. SPECIFICATION No. KBS 4.6.3	Quintal	**6383**	**6830**
241	25.11	KSRB 5.2-3: Providing and constructing granite/trap/basalt size stone masonry in foundtaio with cement mortar 1:8 edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour curing complete as per specifications. KBS 5.1.13	Cmt	**3116**	**3776**
242	25.12	KSRB 5.3-2: Providing and constructing granite/trap/basalt size stone masonry in foundation cement mortar 1:6 stones hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour curing complete as per specifications. KSB 5.1.13	Cmt	**2773**	**3287**
243	25.13	KSRB 5-8.5: Providing quoin dressing to stone masonry and stone slabs, two line 5 Cms wide on each face as per specifications. (measurement including mortar joints) KSB 5.1.13	Mtr	**70**	**68**
244	25.14	Plastering concrete surface in cement mortar 1:4, 20 mm thick inclusive of smooth rendering curing etc., complete.	Sqmt	**160**	**188**
245	25.15	Providing and constructing Burnt Brick Masonary with approved quality of Non-modular bricks of standard size of class designation 50 (table moulded) with cement mortar 1:8 for basement and superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications. Specification No. KBS 6.2	Cmt	**4000**	**5189**
246	25.16	1. Transporting RMU (Coventional) unit from store to work spot including loading, unloading. (No separate crane charges)			
247	25.16.1	5 panels	No	**9070**	**11338**

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
248	25.16.2	1 panel	No	**1814**	**2268**
		1. Transporting RMU (Compact) unit from store to work spot including loading, unloading. (No separate crane charges)			
249		5 panels	No	New Item	**6000**
250		3 panel	No	New Item	**4000**
	25.16	2. Fixing foundation frame of channels and angle iron welding fixing in concrete aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel initial filling of oil etc., complete.			
251	25.16.1	5 panels	No	**10042**	**12553**
252	25.16.2	1 panel	No	**2008**	**2510**
253	25.17	Lettering the RMU with enamel paint and also writing single line diagram of each panel, caution Board, Danger Board etc., including cost of Paint, Brush etc.,	per panel	**422**	**528**
254	25.18	Cleaning of Bitumen type pothead bus joint (All sizes)	No	**668**	**835**
255	25.19	Breaking and cleaning of straight through joint (All sizes)	No	**668**	**835**
	25.20	Sealing of cable ends including supply of plumbing lead, plumbing materials.			
256	25.20.1	PILC	No	**646**	**808**
257	25.20.2	XLPE	No	**120**	**150**
	26	**LABOUR for Aerial Bunched Conductor & Accessories**			
		Item Description			
258	26.1	Stringing of 11kV grade aerial bunched 3 core cable of XLPE insulation & black LDPE sheathing having a standard aluminum conductor, standard around a weather resistant black XLPE insulated AAA messenger wire 11kV size 3x95 sq.mm+1x70 sq.mm with bare messenger	Km	**14461**	**18076**
259	26.2	Stringing of 11kV grade aerial bunched 3 core cable of XLPE insulation & black LDPE sheathing having a standard aluminum conductor, standard around a weather resistant black XLPE insulated AAA messenger wire 11kV size 3x120 sq.mm+1x95 sq.mm with bare messenger	Km	**14461**	**18076**
260	26.3	Stringing of 1.1kV grade aerial bunched 3 core cable of XLPE insulation standard aluminum conductor, standard around a weather resistant black XLPE insulated AAA messenger wire (3x95) (for Phase conductor) + (1x70) (insulated messenger neutral) + (1x16) street light control.	Km	**10753**	**13441**
261	26.4	Stringing of 1.1kV grade aerial bunched 3 core cable of XLPE insulation standard aluminum conductor, standard around a weather resistant black XLPE insulated AAA messenger wire (3x95) (for Phase conductor) + (1x70) (insulated messenger neutral) + (1x25) for street light control.	Km	**10753**	**13441**
262	26.5	Stringing of 1.1kV grade aerial bunched 3 core cable of XLPE insulation standard aluminum conductor, standard around a weather resistant black XLPE insulated AAA messenger wire (3x95) (for Phase conductor) + (1x70) (insulated messenger neutral) + (1x35) for street light control.	Km	**10753**	**13441**
263	26.6	Erection of Suspension Clamp - 25 to 95 sqmm bare messenger	No	**102**	**102**
264	26.7	Erection of Anchor Clamp - 25 to 95 Sq. mm bare messenger	No	**102**	**102**
265	26.8	Erection of Suspension Clamp - 25 to 95 sqmm insulated messenger with bracket	No	**136**	**136**
266	26.9	Erection of Anchor Clamp - 25 to 95 Sq. mm insulated messenger with bracket	No	**136**	**136**
267	26.10	Fixing of Universal Hook	No	**102**	**102**
268	26.11	Pole Clamp-145mm x 95	No	**170**	**170**
269	26.12	Installation of Insulation piercing connector for main to street light Main : 16-95sqmm, Tap : 1.5-10sqmm(EP95)	No	**48**	**48**
270	26.13	Installation of Insulation piercing connector for main to service line Main : 16-95sqmm, Tap : 4-35sqmm(P2X95)	No	**68**	**68**
271	26.14	Installation of Insulation piercing connector for main to service line Main : 25-95sqmm, Tap : 25-95sqmm(P3X95)	No	**68**	**68**
272	26.15	Installation of Insulation piercing connector for main to service line Main : 50-150sqmm, Tap : 4-35sqmm(P4X150D)	No	**68**	**68**
273	26.16	Installation of Pre-insulated straight thru' joints-MJPT for 16sqmm cable	No	**136**	**136**
274	26.17	Installation of Pre-insulated straight thru' joints-MJPT for 25sqmm cable	No	**136**	**136**
275	26.18	Installation of Pre-insulated straight thru' joints-MJPT for 50sqmm cable	No	**136**	**136**
276	26.19	Installation of Pre-insulated straight thru' joints-MJPT for 70sqmm cable	No	**136**	**136**

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
277	26.20	Installation of Pre-insulated straight thru' joints-MJPT for 120sqmm cable	No	**170**	**170**
278	26.21	Installation of Pre-insulated lugs-CPTAU for 16sqmm	No	**136**	**136**
279	26.22	Installation of Pre-insulated lugs-CPTAU for 25sqmm	No	**136**	**136**
280	26.23	Installation of Pre-insulated lugs-CPTAU for 50sqmm	No	**136**	**136**
281	26.24	Installation of Pre-insulated lugs-CPTAU for 70sqmm	No	**136**	**136**
282	26.25	Installation of Pre-insulated lugs-CPTAU for 95sqmm	No	**142**	**142**
283	26.26	Installation of Pre-insulated lugs-CPTAU for 120sqmm	No	**176**	**176**
284	26.27	Distribution box suitable for 20 single phase connections	No	**340**	**340**
285	26.28	Distribution box suitable for 6 3 phase connections	No	**476**	**476**
286	26.29	T-connector KZ3 95	No	**115**	**115**
287	26.30	End cap for 50/70 Sqmm	No	**4**	**4**
288	26.31	11kV AB Cable T-joint installation for 3 Core	No's	**2747**	**916**
289	26.32	11kV AB Cable Straight thru' joint installation for 3 Core	No's	**2198**	**733**
290	26.33	11kV AB Cable Termination installation for 3 Core	No's	**1859**	**620**
291	26.34	Surge Arrester for ABC	No	**95**	**95**
292	26.35	Ground connection for messenger wire	No	**23**	**23**
293	26.36	Anchor sleeve for messenger wire	No	**4**	**4**
	27	**Laying of UG Cables by trenchless technology by adopting horizontal boring & Drawing of cable including preparation at site**			
	27.1	**Without HDPE Pipe**			
294	27.1.1	i) Normal soil 5" bore size	Rmtr	**500**	**625**
295	27.1.2	ii) Rock soil 5" bore size	Rmtr	**870**	**1088**
296	27.1.3	iii) Normal soil 6" bore size	Rmtr	**500**	**625**
297	27.1.4	iv) Rock soil 6" bore size	Rmtr	**870**	**1088**
298	27.1.5	v) Normal soil 8" bore size	Rmtr	**N.A**	To be deleted
299	27.1.6	vi) Rock soil 8" bore size	Rmtr	**N.A**	To be deleted
	27.2	**With HDPE Pipe**			
300	27.2.1	i) Normal soil 5" bore size	Rmtr	**600**	**750**
301	27.2.2	ii) Rock soil 5" bore size	Rmtr	**970**	**1213**
302	27.2.3	iii) Normal soil 6" bore size	Rmtr	**730**	**913**
303	27.2.4	iv) Rock soil 6" bore size	Rmtr	**1140**	**1425**
304	27.2.5	v) Normal soil 8" bore size	Rmtr	**N.A**	To be Deleted
305	27.2.6	vi) Rock soil 8" bore size	Rmtr	**N.A**	To be Deleted
306	27.3	Providing chain link fencing 50mm size of 8 guage properly stretched between rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts, cutting, bending wherever necessary, wastage and lapping etc., complete as per the direction of the engineer incharge for work including two coats of approved quality paint over one coat of primer paint.	Sqmt	**676**	**780**
307	27.4	LTFP box Painting (including scrubbing of old paint, supplying and applying primer and two coats of aluminium /enamel paint including minor repair to box)	LS	**1035**	**1294**
308	27.5	Spun Pole Painting (supplying and applying two coats of enamel paints to 11Mtrs spun pole) and painting all the metal parts of the structure with two coats of aluminium paint over primer	Pole	**4830**	**5555**
309	27.6	Spun Pole Painting (supplying & applying two coats of enamel paints to 11Mtrs spun pole) and painting	Pole	**2070**	**2381**
310	27.7	Repairing the broken damaged door of RMU with necessary hinges, welding etc., with necessary paint touch up including supply of paint for touch up.	per door	**457**	**571**
311	27.8	Repairing the broken damaged door of LT feeder box with necessary hinges, welding etc.with necessary paint touch up including supply of paint for touch up.	per box	**305**	**381**
312	27.9	Repairing the broken damaged door of LT distribution box fixed to DTC with necessary hinges, welding etc. with necessary paint touch up including supply of paint for touch up.	per box	**229**	**286**
	28	**Erection of Compact Pre-fabricated Packaged Sub-station 11kV/433 V**			

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
313	28.1	Installing & fixing the compact pre-fabricated packaged sub-station 100/250/500/750/990 kVA transformer on the existing concrete plinth.(This does not include the cost of plinth, cable duct, laying & termination of cable etc. provision for the same shall be made)	set	**8467**	**8467**
314	28.2	**Labour Charges towards Station Works (As per Prevailing KPTCL SR with effect from 01.09.06)**			
	29	**11KV SWITCHGEAR**			
315	29.1	Erection, alignment and fixing to the foundation, indoor/outdoor 11KV switchgear panel/unit including movement from the point of unloading to thr point of erction.	Per Panel		
316	29.1.1	11KV Indoor/outdoor switchgear		**1471**	**1839**
317	29.1.2	11KV Kiosk		**1224**	**1530**
318		**Wiring & assisting in testing & Commissioning**			
319	29.1.2.1	11KV indoor/outdoor switchgear		**488**	**610**
320	29.1.2.2	11KV Kiosk		**488**	**610**
	30	**a) Wiring b)Testing & Commissioning**			
321	30.1	Identification of wires, Ferruling Crimping & Termination of wires fir annunciation, etc., Testing of Relays, CTs, PTs, & Breaker for operation.			
322	30.2	For indoor /outdoor panel comprising of 2I +8F+1BC+1AP3	Per Set	55802	**69753**
323	30.3	For single 11KV panel indoor type	Each	11160	**13950**
324	30.4	For additional 11KV panel (indoor type)	Each	5580	**6975**
325	30.5	For single 11KV panel outdoor type/Kiosk	Each	13098	**16373**
326	30.6	For each additional 11KV panel out door type/kiosk	Each	8529	**10661**
	31	**Special labour charges for Ganga Kalyna and Water Works, Drinking Water Works and SC & E&I Works:**			
		Note:-			
		(1) These labour charges are applicable for 1 to 2 pole and 3 to 5 poles in respect of Ganga Kalyana and Water Works (316, 327)			
		(2) These rates are applicable only when 1 to 2 pole and 3 to 5 poles are involved and no other associated works. (316, 317)			
		(3) These rates are applicable only when 1 to 4 pole works for Service Main and E&I Works (328 to 332)			
		The Labour charges are all inclusive i.e., digging of pits, erretion of poles, fixing of cross arms, insulators, stringing of wires, providing of guy sets, fixing of spiral earthrodes, Etc.,			
		No other labour charges or any other charges towards special locality allowance, LC charges, additional labour charges, Transportation charges, etc., are payable.			
		(4) Certificate has to be furnished by the section officer who prepares the estimate that the estimates are not split to claim the above labour charges.			
		Labour Charges for one to two pole and three to five pole works in respect of all types of works wherein other works such as DTC erection etc., and other works are not involved.			
327	31.1	The Consolidated labour chrges for 1 to 2 poles works for Ganga kalyana & Water works. This amount includes all charges including Transportation charges, loading and un-loading charges, etc.,	set	New Item	**7813**
328	31.2	The Consolidated labour chrges for 3 to 5 poles works for all types of works. This amounts includes all charges including Transportation charges, loading and un-loading charges, etc.,	set	New Item	**12344**
329	31.3	The Consolidated labour chrges for 1 to 4 poles works for Service connection and E&I works. This amount includes all charges including Transportation charges, loading and un-loading charges, etc.,			
330	31.3.1	For work involing 1 pole	set	New Item	**3750**
331	31.3.2	For work involing 2 pole	set	New Item	**5000**
332	31.3.3	For work involing 3 pole	set	New Item	**6250**
333	31.3.4	For work involing 4 pole	set	New Item	**7500**
334	31.3.5	For work involing 5 & above pole works	set	New Item	**Estimates are to be prepared as per SR**
	NOTE:				
	1	The loading and unloading charges shall be included at the following rates in all estimates for the works which are proposed to be taken up on labour contract.			
	2	**For Poles - As per the rates provided for Loading and unloading of poles in the SR**			
	3	**For all other materials excluding transformers and conductors - 10% of the rates provisioned for Loading and unloading of poles in the estimate.**			
	4	**For Transformers and Conductor** - As per the rates provided in the S.R.			

Sl No	Item No	Particulars	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
	5	The Labour charges for erection of Poles, Guy Sets, DP Structures etc., involving excavation of soil provided in the cost sheet for general works is for ordinary soil only. Wherever other type of soil is encountered, the difference in rates for excavation in such soil provided in the Schedule of labour shall be worked out and adopted.			

Schedule of Rate for Standard Stock Materials
Common SR 2014-15 (33kV System)

Sl No	Item No	Name of the Material	Material Code	UoM	Common SR 2012-13 in ` FORD Rates inclusive of duties taxes & F&I	Common SR 2014-15 in ` FORD Rates inclusive of duties taxes & F&I
	1	**33/11 kV Transformer with all fittings and accessories, OLTC, RTCC, First filling of oil and 10 % Spare oil**				
1	1.1	5 MVA	322205	No	4129300	4557570
2	1.2	10 MVA	322210	No	9235300	10267860
	2	**Circuit Breakers**				
3	2.1	33 kV Circuit Breaker SF6 type 800A, 25kA	311601	No	326940	349540
	3	**11kV Switch Gear**				
4	3.1	11kV 500MVA (1600A, for two incomer & two capacitor bank and 1250A for eight feeders) indoor type switchgear comprising 2IC+10F+1BC+2AP VCB's all of 25KA repturing capacity as per technical specification		Set	7123629	7616045
5	3.2	11kV 500MVA (1600A, for one incomer & one capacitor bank and 1250A for four feeders) indoor type switchgear comprising 1IC+5F+1BC+1AP VCB's all of 25KA repturing capacity as per technical specification		Set	3760685	4020640
6	3.3	11kV, 500 MVA, (1600A, for incomer & 1250 A for feeder) outdoor Switch gear, comprising of 2IC+1BC+12F + 1 AP3 VCBs	309204	Set	7918842	8466226
7	3.4	11kV, 500 MVA, (1600A, for incomer & 1250 A for feedder) outdoor Switch gear, comprising of 2IC+1BC+10F+1 AP3 VCBs	309202	Set	6894963	7371572
8	3.5	11 KV, 500 MVA, 1250 A, (I/C) and 800 A (feeder), outdoor Switch Gear, comprising of 2IC+1BC+8F+1AP3 VCBs	309200	Set	5803156	6204295
9	3.6	11 kV Switch gear, 350 MVA, 800 Amps Outdoor MCVCB comprising of 1IC+5F+1 AP3	309206	Set	3174149	3393560
10	3.7	11kV 500 MVA 1250 Amps 25kA feeder panel	309208	No	528802	565355
11	3.8	11kV 500 MVA 1250 Amps SWG 1IC+5F+1AP3 MCVCB	309210	Set	3227925	3451053
	4	**11kV Kiosk**				
12	4.1	11kV 350 MVA, 800A Outdoor Type, kiosk comprising of 1IC+4F+1 AP3 PCVCB	309214	Set	2012000	2151078
13	4.2	11kV, 350 MVA, 800A Outdoor type, kiosk PCVCB	309218	No	297000	317530
	5	**Instrument Transformers**				
	5.1	**Current Transformers**				
14	5.1.1	220kV CT's		No	269490	298147
15	5.1.2	110 kV 0.2 class accuracy CT with all accessiories for metering purpose				
16		a. CT ratio 100-75-1A		No	102917	113861
17		b. CT ratio 100-50-75-5A		No	103590	114606
18		c. CT ratio 100-5A		No	102920	113864
19	5.1.3	33 kV class CT With 0.2 accuracy class 400 - 200/1-1A for lines	336470	No	25960	28721
20	5.1.4	33 kV class CT With 0.2 accuracy class 200 - 100/1-1-1A for Transformer	336473	No	25960	28721
21	5.1.5	33kV Class CT 30/5A	336400	No	16230	17956
22	5.1.6	33kV Oudoor CT's 400/200/1-1		No	New Item	35136
23	5.1.7	33kV Oudoor CT's 200/100/1-1		No	New Item	35136
24	5.1.8	11kV Oudoor CT's 800/400/1-1-1		No	New Item	29704
25	5.1.9	11kV Oudoor CT's 600/300/1-1-1		No	New Item	26734
26	5.1.10	11kV Oudoor CT's 400/200/1-1-1		No	New Item	27848
27	5.1.11	11kV Oudoor CT's 200/100/1-1		No	New Item	23392
28	5.1.12	11kV NCTs 800-400/1-1-1A (for 350 MVA SWG)	330210	No	16230	17956
29	5.1.13	11kV NCTs 600-300/1-1-1A (for PCVCBs)	330220	No	16230	17956
	6	**Potential Transformers**				
30	6.1	220kV PTs		No	607520	607520
31	6.2	110kV 0.2 class accuracy PT with all accessiories for metering purpose		Nos	137000	151568
32	6.3	33kV Voltage Transformer 33kV √3 110√3- 110√3	335512	No	34650	38335
33		33kV Oudoor PT's		No	New Item	
34	6.4	11kV Voltage Transformer 11kV/110V-110V	335220	No	7780	8607
35	6.5	11kV Oudoor PT's		No	New Item	
	7	**Lightning Arester**				
36	7.1	a) 30kV Lightning Arester Normal Duty Metal oxide (Discharge Class-2)	303510	No	11050	12225
37	7.2	b) 30kV Lightning Arester Normal Duty Metal oxide (Discharge Class-3)	303512	No	7940	8784
38	7.3	30kV Lightning Arester Normal Duty polymeric	303520	No	10030	11096
	8	**Isolators**				
39	8.1	Isolators 33kV 800A, 25kA Upright with Earth Switch complete metallic portion with insulator	304536	Set	73300	78367
40	8.2	Isolators 33kV 800A, 25kA Upright without Earth Switch complete metallic portion with insulator (live point height 3750mm)	304524	Set	68260	72978
41	8.3	Isolators 33kV 800A, 25kA Upright without Earth Switch complete metallic portion with insulator (live point height 4750mm)	304525	Set	73320	78388
	9	**Battery Set/Battery Charger**				
42	9.1	Battery Set (Tubular) 48V, 100Ah	344007	Set	75600	75600
43	9.2	Battery Set (Tubular) 110V, 100Ah	344011	Set	165600	165600
44	9.3	Battery Set (Maintance free VRLA) 48V, 100Ah	344107	Set	38400	38400

Sl No	Item No	Name of the Material	Material Code	UoM	Common SR 2012-13 in ` FORD Rates inclusive of duties taxes & F&I	Common SR 2014-15 in ` FORD Rates inclusive of duties taxes & F&I
45	9.4	Battery Set (Maintance free VRLA) 110V, 100Ah	344111	Set	82800	82800
46	9.5	Battery Charger 48V, 100Ah	344416	Set	39700	42135
47	9.6	Battery Charger 110V, 100Ah (with float cum boost charger working on 230V 1ph AC supply along with integral DCDB consisting 4 nos. O/G feeders as per specifications)	344426	Set	74200	78750
48	9.7	Capacitor Bank with 0.2% Series reactor & NCT 12.1kV 2.5 MVAr star connected Capacitor Bank	333424	Set	403200	403200
	10	**Panel**				
49	10.1	33 kV Line Panel (Simplex)	339500	No	402800	402800
50	10.2	33/11kV Transformer Panel (Simplex)	339530	No	584000	584000
51	10.3	33 kV Capacitor Bank Panel	339540	No	321900	321900
	11	**Towers**				
52	11.1	a) Design,fabrication,galvansing and supply of transmission line tower materials including stubs	201050	MT	98450	102614
53	11.2	b) Fabrication,galvanization and supply of mild steel tower materials	201055	MT	83664	87203
54	11.3	c) Supply of galvanised Bolts & Nuts	736002	MT	98450	102614
55	11.4	d) Supply of stub templates	210080	MT	98450	102614
	12	**Outdoor type meter box to house ETV meters, made of CRCA steel mounted on angle iron frame work**				
56	12.1	Meter box suitable for fixing 6 ETV meters	358046	No	13973	14371
57	12.2	Meter box suitable for fixing 4 ETV meters	358044	No	8541	8784
58	12.3	Meter box suitable for fixing 3 ETV meters	358043	No	5979	6149
	13	**Insulators**				
59	13.4	Solid Core Insulator 33kV	283125	No	2894	3253
60	13.2	33 kV Pin Insulator (Shell only)	283006	No	388	437
61	13.3	33 kV Pin Insulator (Pin only)	283056	No	155	162
62	13.4	33kV Composit Disc Insulator	283433	No	647	728
	14	**HARDWARE CLAMPS FOR STATION MATERIALS**				
	14.1	**Bolted Type Tension Clamp**				
63	14.1.1	Single Lynx ACSR conductor 70/90 kN 16mm	285080	No	963	1015
64	14.1.2	Single Coyote ACSR conductor 70/90 kN 16mm	285079	No	866	913
65	14.1.3	Single Rabbit ACSR conductor 70/90 kN 16mm	285078	No	662	698
	14.2	**Bolted Type Suspension Clamp**				
66	14.2.1	Single Lynx ACSR conductor 70/90 kN 16mm	285050	No	758	799
67	14.2.2	Single Coyote ACSR conductor 70/90 kN 16mm	258046	No	686	723
68	14.2.3	Single Rabbit ACSR conductor 70/90 kN 16mm	285038	No	541	571
69	**14.3**	**Ground Wire Clamp 7/3.15mm 2 bolt**	281410	No	686	723
	14.4	**Post Insulator Clamp**				
70	14.4.1	Single Lynx ACSR conductor 127/76mm	285699	No	566	596
71	14.4.2	Single Coyote ACSR conductor 127/76mm	285697	No	517	545
72	14.4.3	Single Rabbit ACSR conductor 76mm	285696	No	481	507
	14.5	**"T" Clamp for ACSR Conductor**				
73	14.5.1	Single Lynx to Single Lynx	285610	No	325	343
74	14.5.2	Single Coyote to Single Coyote	285605	No	301	317
	14.6	**Terminal connector clamp for ACSR Conductor**				
75	14.6.1	Single Lynx	282620	No	511	539
76	14.6.2	Single Coyote	282616	No	439	463
	15	**STATION STRUCTURES**				
77	15.1	Fabrication, galvanization and supply of Station Structures	276110	MT	136208	143591
78	15.2	Supply of galvanized Bolts & Nuts		MT	123931	130648
79	15.3	Double pole structure for 33kV	279103	Set	5515	5672
80	15.4	V-Shape X arm for 33kV	279016	No	823	846
81	15.5	HT ST Support for 33kV	279093	No	343	353
82	15.6	Clamp 9.5M RCC Pole for 33kV	279526	No	93	96
	16	**33 kV 3 Core XLPE UG Insulated Aluminium Cable**				
83	16.1	33 kV 3 Core XLPE UG Cable-95 Sqmm	287451	Km	2102240	2286860
84	16.2	33 kV 3 Core XLPE UG Cable-150 Sqmm	287453	Km	2470100	2689630
85	16.3	33 kV 3 Core XLPE UG Cable-240 Sqmm	287456	Km	2720400	2973570
86	16.4	33 kV 3 Core XLPE UG Cable-300 Sqmm	287457	Km	3621840	3938710
87	16.5	33 kV 3 Core XLPE UG Cable-400 Sqmm	287458	Km	4185000	4553100
	17	**33kV Jointing and Cable termination kits for XLPE cable**				
	17.1	**Heat Shrinkable type transition jointing kit**				
88	17.1.1	33 kV 3 Core XLPE UG Cable-95 Sqmm	288050	No	23100	23100
89	17.1.2	33 kV 3 Core XLPE UG Cable-150 Sqmm	288052	No	23100	23100
90	17.1.3	33 kV 3 Core XLPE UG Cable-240 Sqmm	288054	No	34060	34060
91	17.1.4	33 kV 3 Core XLPE UG Cable-300 Sqmm	288055	No	34060	34060
92	17.1.5	33 kV 3 Core XLPE UG Cable-400 Sqmm	288056	No	39500	39500
	17.2	**Heat Shrinkable indoor type cable termination kit**				
93	17.2.1	33 kV 3 Core XLPE UG Cable-95 Sqmm	288060	No	5840	5840
94	17.2.2	33 kV 3 Core XLPE UG Cable-150 Sqmm	288062	No	5840	5840
95	17.2.3	33 kV 3 Core XLPE UG Cable-240 Sqmm	288064	No	7990	7990
96	17.2.4	33 kV 3 Core XLPE UG Cable-300 Sqmm	288065	No	7990	7990
97	17.2.5	33 kV 3 Core XLPE UG Cable-400 Sqmm	288066	No	8740	8740
	17.3	**Heat Shrinkable outdoor type cable termination kit**				
98	17.3.1	33 kV 3 Core XLPE UG Cable-95 Sqmm	288070	No	7255	7255
99	17.3.2	33 kV 3 Core XLPE UG Cable-150 Sqmm	288072	No	7255	7255
100	17.3.3	33 kV 3 Core XLPE UG Cable-240 Sqmm	288074	No	9030	9030
101	17.3.4	33 kV 3 Core XLPE UG Cable-300 Sqmm	288075	No	9030	9030

Sl No	Item No	Name of the Material	Material Code	UoM	Common SR 2012-13 in ` FORD Rates inclusive of duties taxes & F&I	Common SR 2014-15 in ` FORD Rates inclusive of duties taxes & F&I
102	17.3.5	33 kV 3 Core XLPE UG Cable-400 Sqmm	288076	No	10730	10730
	17.4	**Heat Shrinkable Straight through jointing kits with Aluminum lugs & ferrules**				
103	17.4.1	33 kV 3 Core XLPE UG Cable-95 Sqmm	288080	No	18920	18920
104	17.4.2	33 kV 3 Core XLPE UG Cable-150 Sqmm	288082	No	18920	18920
105	17.4.3	33 kV 3 Core XLPE UG Cable-240 Sqmm	288084	No	25320	25320
106	17.4.4	33 kV 3 Core XLPE UG Cable-300 Sqmm	288085	No	25320	25320
107	17.4.5	33 kV 3 Core XLPE UG Cable-400 Sqmm	288086	No	30160	30160

LABOUR RATES FOR COMMON SR 2014-15 for 33 kV SYSTEM

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
	1	**Detailed Surveying on Turn-Key:**			
	i)	Reconnaissance Survey-cum-walk over Survey along with Departmental Staff to determine the feasible route of the line on topo sheet. An alternate route if available should be indicated. The route of the line is to be indicated and got approved by the competent authority (Rates include the cost of Toposheet and Transportation)			
1	a)	Hilly terrain	km	**636**	795
2	b)	Plain terrain	km	**618**	773
	ii)	Detailed Survey, fixing anchor points and taking levels at 20 mtrs intervels drawing route profile on Graph paper indicating geographical features like Nalas, Rivers, Gardens, P&T Lines, Railway-crossings etc., and enroute villages.			
3	a)	Hilly terrain	km	**3147**	3934
4	b)	Plain terrain	km	**2101**	2626
5	iii)	Fixing marking stones with approved marks including painting above the ground level and Yellow Lettering and marking the direction of incoming line and out going lines are to be clearly marked on the top with red colour. If the distance between two anchor points is more than I km, one more directional stone is to be fixed. So also for the road crossing, railway crossing ,River crossing , HT crossing and nala crossing for all on both the sides.	Per Stone	**313**	391
6	iv)	Burgie details for identification for all Anchor towers with existing permanent marks like poles, telephone lines, buildings, etc.,	Per Anchor Tower	**283**	354
7	v)	v) Conducting soil resistivity tests	Per Test	**542**	678
	vi)	Clearing of bushes, tree branches of trees crops and shrubs wherever encountered for detailed survey to enroute the corridor width of 3 mtrs (including viewing for fixing anchor towers etc.,)			
8	a)	Hilly terrain	KM	**939**	1174
9	b)	Plain terrain	KM	**627**	784
10	vii)	a) Submission of reports in the form of good binding including the preparation of sketches for burgie details for each anchor points, scheduling of line details, S.R. values, soil classification reports, tower schedule, abstract of towers etc., complete.	Per set	**191**	239
11		b) Drawing the route profile on graph sheet, including geographic feature like Nalas, rivers, gardens, P&T lines railway crossing etc, inclusive of all stationaries. (Normal requirement is 5 Sets)		**191**	239
12	Viii) a)	**Preparing the Schedules:** PTCC Proposal : Containing PTCC questionaire, topo sheet extracts with marking of the proposed line, SR Report, tower sketch, station single line diagram etc., (30 Copies/Sets)	Set	**757**	946
13	b)	Railway Crossing proposal with drawing are inclusive of graph sheets and other stationery materials, labour etc., (10 Sets)	Per crossing	**757**	946
14	c)	Tree Schedule Containing the details like name of tree, girth size of tree, distance from central line of the alignment, approximate height of the tree etc., complete	Per Hectare	**542**	678
15	d)	**Forest proposals:** Inclusive of all works like fixing of stones at every 20 mtrs in the centre line and both ends of the corridor, painting of each tree after chipping, writing the numbers on the tree, taking girth size of all the trees coming in the corridor at 1 mtr height from GL, approximate height of the tree and forest clearance proposals etc., complete (10 Sets). **Note:** This applies to forest area only.	Km	**3529**	4411

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
	2	**Check Survey by using their own Equipment**			
16		a) Hilly terrain	KM	**1627**	2034
17		b) Plain Terrain	KM	**1089**	1361
	3	**Taking block levels for Sub-staitons:**			
18	a)	Running Peripheral Theodolite traverse along periphery and coordinating and heightening of all corners/turning points, establishing permanent co-ordinate axis formation of grids at 50m intervals for northing and easting with reference to already established permanent co-ordinate axis levels at 50m grid intersection for preparing plot plan of the entire area with contours. Including existing structure location.	Acre	**1047**	1309
19	b)	Establishing datum level and bench marks at every 100m/50m intervals both longitudinal and laterally and all corners/turning points with stone pillars of size not less than 0.2mx2mx1.0m buried on the ground and exposed top engraved for painting RL, and coordinates of that point.	No	**1047**	1309
20	c)	Taking level at 5M suitable grid interval in the sub-station area for plotting block levels, contour map.	No	**23**	29
21	d)	Preparation of CAD drawings, generating the contours using appropriate software and submission of 6 sets of blue prints and one tracing sheet (original) and one soft copy etc. Complete.	Per Project	**10464**	13080
22	e)	Furnishing cutting and filling quantities using appropriate software for earth work calculation.	Per Project	**3139**	3924
23	f)	Super imposing GA drawings on contour maps in Co-ordination with departmental engineers and supply of 12 sets of blue print drawings etc., complete.	Per Project	**8370**	10463
	4	**Geo Technical Investigations:**			0
24	a)	Making 150mm nominal diameter bore holes at various locations in soil using suitable approved method of boring including, cleaning providing Bore holes at interval and at change of strata, collections of water samples, observation such as ground water etc., Collection of undisturbed soild samples at ever 2.0m/3.0m interval and at change of strata, transportation of all the collected samples to the laboratory and back filling of bore holes on completion of the work, complete as per sepcification and instruction of the engineers, for depths up to 6.0 m below natural ground level or refusal strata.	Mtrs	**1566**	1958
	b)	Conducting various laboratory tests on soil samples at approved laboratory including preparation of soil samples for determination of soil, Proparties etc., Complete as per specification. **Note:** Laboratory identified shall be approved by ESCOM Engineers not below the rank of EE(Civil).			0
25	i)	Bulk density and moisture content	Each	**627**	784
26	ii)	Sieve analysis	Each	**627**	784
27	iii)	Hydrometer Analysis	Each	**627**	784
28	iv)	Liquid limit and plastic limit	Each	**627**	784
29	v)	Shrinkage limits	Each	**733**	916
30	iv)	Specific gravity	Each	**733**	916
31	vii)	Standard proctor density test	Each	**733**	916
32	viii)	Swell pressure	Each	**840**	1050
33	ix)	Free swell index	Each	**840**	1050
34	x)	Uncombined Compressive strength	Each	**840**	1050
35	xi)	Triaxial shear test	Each	**840**	1050
36	xii)	One dimensional consolidation test	Each	**840**	1050
37	xiii)	California bearing ratio	Each	**840**	1050
38	C)	Submitting final report in 6 copies including all field records and laboratory test results, graphs and recommendations etc., complete as per specifications.	Per Job	**12558**	15698

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
		Note: The above rates are inclusive of mobilization of Plant Equipment & Materials for, Topographical survey, block leveling and Geotechnical investigation works, and Demobilization. No extra rate is admisible for mobilization & Demobilization			
	5	**Excavation for station structure:**			
		Excavation of pits as per specifications for lattice type of station structures, Tr. Plinth, control panels, mounting structures for breakers, CT's, PT's Isolators, LA's etc., Excavation of trenches for control cables, U.G. Cables, Groundmat etc.,			1) Corresponding rates in KPWD SR as mentioned against each classification below shall be adopted. 2) Area weightages applicable for the respective areas as per latest KPWD SR shall be allowed to arrive at Final Rate. 3) Extra for excavation under water conditions and/or foul conditions including bailing/pumping out, rempving slush add 20% of the rate of the respective rate on account of slow progress of work under these conditions. (The extra percentage indicated here shall be as indicated in the relevant KPWD SR)
39	i)	Normal Soil	Cmt	**As per KPWD SR applicable to respective area**	Latest KPWD SR Rates for hard soil
40	ii)	B.C. Soil	Cmt		Latest KPWD SR Rates for Ordinary soil
41	iii)	Partially Submerged soil	Cmt		Latest KPWD SR Rates for Ordinary soil
42	iv)	Fully submerged soil	Cmt		Latest KPWD SR Rates for Ordinary soil
43	v)	Wet black cotton soil	Cmt		Rate for ordinary rock (Without blasting) of latest KPWD SR
44	iv)	Dry fissured/Ordinary rock	Cmt		Latest KPWD SR Rates for Ordinary soil
45	vii)	Latterite soil	Cmt		Rate for ordinary rock (Without blasting) of latest KPWD SR
46	viii)	Hard rock with blasting/Hard latterite	Cmt		Rate for ordinary rock (With blasting) of latest KPWD SR
		Note 1: For Excavation purposes measurement shall be as per actuals. **2**: For foundation purposes predominant soil shall be considered.			
	6	**Excavation (For Tr. Line Tower)**		**Rates as per item 5 + 50% extra**	**Rates as per item 5 + 50% extra**
47	i)	Normal Soil	Cmt		
48	ii)	B.C. Soil	Cmt		
49	iii)	Partially Submerged soil	Cmt		

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
50	iv)	Fully submerged soil	Cmt		
51	v)	Wet black cotton soil	Cmt		
52	vi)	Dry fissured/Ordinary rock	Cmt		
53	vii)	Latterite soil	Cmt		
54	viii)	Hard rock with blasting/Hard latterite	Cmt		
	7	**Back Filling :**			
55	i)	Back filling with excavated earth available near the tower and consolidation layer by layer of 150 mm depth with adequate quantity of water.	Cmt	**Rates as per KPWD SR applicable to respective area +10% extra**	**Rates as per KPWD SR applicable to respective area +10% extra**
56	ii)	Supplying and back filling with external hard murrum soil with proper consolidation including lead and lift.	Cmt	**Rates as per KPWD SR applicable to repective area +10% extra**	**Rates as per KPWD SR applicable to repective area +10% extra**
		Note: This item is applicable only when Black cotton, soil, wet black cotton soil, dry fissured rock, ordinary rock, Hard rock are encountered.			
	8	**Concreting and curing (For Both Transmission lines and station structures)**			
	a)	Concreting & curing as per specifications including the cost of materials,T&P materials and labour charges with all lead and lift, for lattice type station structures,Tr. Plinth, control panels, mounting structures for Breakers, CT's PT's Isolators, LA's, etc.,			1) Corresponding rates in latest KPWD SR as mentioned against each classification shall be adopted. 2) For the above basic rate add applicable area weightage as per latest KPWD SR.
57	i)	1:4:8 concrete (M 7.5)	Cmt	**As per KPWD SR applicable to respective area**	Rates under plain concrete for foundation of latest KPWD SR
58	ii)	1:3:6 concrete (M-10)	Cmt		Rates under basement of latest KPWD SR
59	iii)	1:2:4 concrete (M-15)	Cmt		Rates under raft foundation of latest KPWD SR
60	iv)	1:1.5: 3 concrete (M-20)	Cmt		Rates under raft foundation of latest KPWD SR
61	b)	Concreting and curing as per specifications including the cost of materials, T&P materials and labour charges with all lead and lift, for Tr. line towers.	Cmt	**For arriving at the rates for concrete items for transmission lines add 25% weightage to the basic rates of different proportion of concrete proposed above**	For arriving at the rates for concrete items for transmission lines add 25% weightage to the basic rates of different proportion of concrete proposed above.
		Note : a) Extra as indicated in the relevant KPWD SR may be allowed for providing concrete in watery situation including cost of bailing out water and removing slush. b) Only machine mixing is to be used for concreting. c) Jelly to be used is 20mm and down size for 1:1.5:3, 1:2:4 and 1:3:6 concrete and 40mm and down size for CC 1:4:8.			
	9	**Towers**			
62	a)	Sorting of tower parts made of fabricated angle iron	MT	**245**	306

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
63	b)	Setting up of stubs templates and from one location to another location	Per Location	**318**	398
64	c)	Assembling and errection of towers including tightening of bolts and nuts including loading,unloading at store and site (Including the Wt. of stubs)	MT	**1779**	2224
65	d)	Rivetting of tower bolt ends by heating using dry-Acetylene gas and hammering to destroy threads so as to make the tower members theft - prrof (Bolts at nodal points only to be selected and rivetted up to hieght of bottom cross arm, as per the directions of the field engineer)	Per Bolt	**8**	10
66	e)	Welding of bolts and nuts	Per Bolt	**8**	9
		Note: For tower errections requiring shutdown 25% above S.R. for item 5c to 5e only are to be adopted.			
	10	**Supplying and fixing AC devices:**			
67	a)	Supplying and fixing G.I. Angle iron 45x45x5 mm (1mtr length) with cleats, bolt & nuts as per specification and fixing above 0.5 mtrs length each at inner and outer surface of the tower to facilitate running of barbed wire.	Per Set	**1741**	2176
68	b)	Supplying and fixing barbed wire as per specification	Rmtr	**33**	41
	11	**Fixing of Boards**			
69	a)	Fixing Danger Board	Nos	**34**	43
70	b)	Fixing Number Plate	Nos	**34**	43
71	c)	Fixing Phase plate	Set (3 Nos)	**100**	125
72	d)	Fixing Circuit Plates	Nos	**34**	43
	12	**Stringing conductor with out allowing the conductor to touch the ground and damaging the conductor**			
	A	Paving out the conductor from anchor to anchor normally spaced at 5 spans with 4 tangent towers in between, including providing stays at each anchor points and jointing of conductors, hositing anf fixing of insulator string, armour rods,vibration dampers, including the cost of TY&P materials like comealong, wire ropes, pulley, rollers, suspesnion, clamps, compression jointing machines with bits , drum stands, manila ropes, truckker and jeep etc(Rate of 1 route KM of single conductor)			
73	i	For hilly tarrian	KM	**New Item**	9088 With Coyote ACSR
74	ii				9088 with Rabbit on towers
75	i	For plain Tarrian	KM	**New Item**	6662 With Coyote ACSR
76	ii				3330 with Rabitt on towers
		Stringing of Ground Conductor as above			
77		For hilly tarrian	KM	**New Item**	4447
78		For plain Tarrian	KM	**New Item**	3331
		Note:			
79		II) For shut down works 50% more than the above rates of the Work (This is applicable to shutdown of 33 kV and above lines only. 11 kV and LT lines shutdown not included).		**New Item**	50% more above the rates specified for normal works is admissible for shutdown works of 33 kV and above lines, CTs, PTs, Las only
80		III) (A) River Crossing works (B) Railway Crossing Works (C) Breakdown works in substations & lines		**New Item**	**100% extra**
81		IV) 2nd Circuit stringing with 1st circuit under live condition		**New Item**	**75% extra**

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
82		V) (A) National highway and State highway crossing works (B) Works under shutdown condition in both substation and lines (Pre-programed works)		**New Item**	**50% extra**
	13	**Stringing Conductors for short lengths: These Rates are applicable only when total Length of the entire Line is less than 3 spans (River crossing, railway crossing Etc.,).**			
		A) Stringing of conductors in special conditions where normal 5 spans between anchor to anchor are not encountered, whereas anchors are provided at single/ two/ three spans with average span intervals of 267/320 Mtrs, (rate for spans of single conductor)			
		i) For hilly terrian			
83		**a)** Anchoring single span upto 320 mtrs.	1 Span	**4102**	5128 With Coyote
84				**2009**	2511 With Rabitt
85		**b)** Anchoring 2 span interval upto 640 mtrs with 1 tangent tower only	2 Spans	**5086**	6358 With Coyote
86				**2429**	3037 With Rabitt
87		**c)** Anchoring 3 span interval up to 960 mtrs with two tangent towers only	3 Spans	**5966**	7456 With Coyote
88				**2871**	3588 With Rabitt
		ii) For plain terrian			
89		**a)** Anchoring single span up to 320 Mtrs	1 Span	**3077**	3847 With Coyote
90				**1482**	1853 With Rabitt
91		**b)** Anchoring 2 span interval upto 640 Mtrs with 1 tangent tower only	2 Spans	**3941**	4926 With Coyote
92				**1818**	2272 With Rabitt
93		**c)** Anchoring 3 span interval up to 960 mtrs with two tangent towers only	3 Spans	**4415**	5519 With Coyote
94				**2132**	2665 With Rabitt
	14	**Rates for Short span stringing in Normal length of the line of more than 3 spans comprising of short spans**			
		A) Stringing of conductors in special conditions where normal 5 spans between anchor to anchor are not encountered, where as anchors are provided at single/ two/ three spans with average span intervals of 275/320 Mtrs (Rate for spans of Single Conductor)			
		i) For hilly terrian			
95		**a)** Anchoring single span upto 320 Mtrs	1 Span	**611**	764 With Coyote
96				**299**	374 With Rabbit
97		**b)** Anchoring 2 span interval upto 640 Mtrs with 1 tangent tower only	2 Spans	**1016**	1270 With Coyote
98				**490**	612 With Rabbit
99		**c)** Anchoring 3 Span interval up to 960 Mtrs with two tangent towers only	3 Spans	**1490**	1862 With Coyote
100				**718**	898 With Rabbit
		ii) For Plain terrian			
101		**a)** Anchoring single span upto 320 Mtrs	1 Span	**459**	573 With Coyote
102				**223**	278 With Rabbit
103		**b)** Anchoring 2 span interval upto 640 Mtrs with 1 tangent tower only	2 Spans	**748**	935 With Coyote
104				**367**	458 With Rabbit
105		**c)** Anchoring 3 Span interval upto 960 Mtrs with two tangent towers only	3 Spans	**1107**	1383 With Coyote
106				**557**	697 With Rabbit
	15	**Grounding of Towers/Equipments**	Material + Labour		
107		**a)** Grounding of towers including cost of 40mm dia 2.5 mm thick, class 'C' G.I. Pipe of 3 Mtrs length as per specifications, with 50X6 mm GI Flats 3 Mtr long, salt charcoal, including excavation charges.	Set	**2777**	3471

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
108		**b**) Grounding of towers/Equipments excluding the cost of G.I. Pipe/C.I. Pipe as per specifications with 50X6 mm G.I. Flat 3 Mtr Long (to be supplied departmentally). But salt & Charcoal to be supplied by contractor. The rates include excavation charges.	Set	**1336**	1670
109		**c)** Grounding of equipments by providing cast iron pipe of 100mm ID 13mm thickness, 2.75 Mtrs long with 2 part clamp out of G.I.Flat 50X6mm continuously welded alround the pipe using cast iron welding electrodes as per drawing including the cost of excavation (All materials to be supplied by the contractor)	Set	**1867**	2334
		Note : All the leads from earthmat & equipment should be connected to earth electrode through the GI Flat 50 x 6 mm of suitable length and welded as per specifications.			
110	**16**	**Supplying and fixing of counter poise earthing with GI Stranded wire where hard rock is encountered as per specifications. (including excavation charges).**	Per Loc	**3668**	4585
	17	**Station Structures**			
111	a)	Errection, assembly and alignment of Station structure as per the directions of site Engineer.	MT	**1679**	2099
112	b)	Erection, alignment & assembly of fabricated steel lattice structure, pedestal structures & Mounting structures, for G.O.S., CT's, PT's LA's etc.,	MT	**1565**	1956
	18	**Erection of Transformers**			
113	a)	Moving the Transformer on to the plinth (Maximum allowable distance is 50 mtrs.) more than 50 mtrs. approval of the CEE, O&M Zone has to be obtained)	Per MT/ Mtr	**33**	41
114	b)	Assembly of Transformer parts like bushings, radiators, filling oil into Tr. etc., (for the total wt. of the Tr.)	MT	**750**	938
	c)	**Filling oil to the power Tr., Conservator and radiator (for maintenance purpose only).**			
115	i)	For 5 MVA to 20 MVA Tr.	Litre	**1**	2
116	d)	Filtration of oil using filter set of the contractor, to bring the insulation value to I.E. Specifications.	Litre	**3**	4
117	e)	Filtering Oil as above but with the filter set supplied by the ESCOM	Litre	**1**	2
	19	**Wiring of Transformer marshalling box, bucholtz relay, fixing Thermometer, OLTC upto control panel and assisting in testing and commissioning by RT/MT/Firm Engineers.**			
118	i)	5 MVA to 6.3/8 MVA Tr.	LS	**3451**	4314
119	**20**	**Fabrication of Transformer railing and embedding in Transformer plinth. (Rails to be supplied by the HESCOM)**	LS	**693**	866
120	**21**	**Fixing of H.T. fuse units & wiring**	Per Set (3 Nos)	**806**	1008
	22	**Wiring Testing & Commissioning of 5 MVA 33/11 kV Power Transformers**			
121		**a) Wiring:** Identification of wires, Ferruling crimping and termination of wires. Wiring of Protective Devices, Cooling fans, Oil flow Pumps, OLTC, RTCC		**8370**	**8370**

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
122		**b) Testing:** 1. Ratio Test 2. SC test 3. Excitation test 4. Magnetic Balance test 5. Vector group test. 6. induced high voltage test. 7. OLTC operation. 8. Protective devices operation checks. 9. stability checks:- for differential and REFR protection	Each	**33481**	**33481**
	23	**Erection of Breakers / 11 kV Kiosks with CTs on Mounting Structures**			
	a)	**BREAKERS**			
123	i)	Erection, assembly, alignment & interpole wiring of breakers with its connected equipments including movement from the point of unloading to the point of erection.	Per Set	**4880**	4966
124	ii)	Assisting in Testing and Commissioning	Each	**976**	995
		Testing & Commissioning:			
125		**Wiring:** Identification, of wires Ferruling crimping and termination of wires in Breaker & Wiring up to control panel / Relay panels.	Set	**41848**	41848
126		**Testing:** Test for insulation level, gas leakage, Testing for travel time, Trip and close timings. Local Trip close Test, Remote trip and close test, Tripping rhrough relays, operation of interlocks etc.,	Set		
	24	**Erection of CTs and PTs**			
127	a)	Erection of CTs and PTs and wiring including movement from the point of unloading to the point of erection.	Set (3 Nos)	**1224**	1530
128	b)	Assisting in Testing and Commissioning	Set	**368**	460
	c)	**Testing & Commissioning**			
129	i)	**Current transformers:** **Wiring:** Indentification of wires Ferruling Crimping of lugs Connections up to marshalling box and Control panel. Current transformers: Tests: Insulation, Polarity, Ratio, Excitation	Set (3 Nos)	**13947**	13947
130	ii)	**Potential Transformers:** **Wiring:** Indentification of wires Ferruling Crimping of lugs Connections up to marshalling box. **Potential Transformers:** Tests: Insulation, Polarity, Ratio.	Set (3 Nos)	**13947**	13947
	25	**Erection of NCTs**			
131	a)	Erection of NCTs with ground including movement from the point of unloading to the point of erection	Set	**354**	443
132	b)	Assisting in Testing and Commissioning	Set	**45**	56
	26	**Erection of Isolators**			
133	a)	Assembly, Errection alignment and wiring including movement from the point of unloading to the point of erection. (Upright)	Set	**736**	920
134	b)	Assisting in Testing and Commissioning (Upright)	Set	**75**	94

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
		Note : 1) Assisting in testing and commissioning for item No. 13 to 18 means contractors should provide labourers for testing and commissioning by RT/MT/Firm engineers. 2) Testing & Commissioning in item 13 & 18 means the testing will be carried out bythe firms themselves using their own testing equipments and staff in presence of the MRT staff who will witness the tests.			
	27	**Erection of Lightening Arrestors**			
135		Erection of Lightning arrestors and wiring including movement from the point of unloading to the point of erection	Set	**184**	230
136	**28**	**Fixing of Solid Core insulator**	Per Stack	**61**	76
137	**29**	**Testing & Commissioning:** Capacitor Bank with reactors	Each	**15064**	18830
		Control Cables and U.G. Cables			
	30	**Formation of Cable Duct**			
138	a)	(i) Burnt brick/size stone/RCC **Cable duct** including form box, back filling the sides, removing the excess escavated soil, duct covering with RCC slabs.	Cmt	**As per KPWD SR applicable to respective area**	**As per Latest KPWD electrical SR applicable to respective areas.**
139		(ii) Supplying 300 mm dia 1.5" to 2" thick RCC Hume pipes including loading unloading, and transportation charges and laying at required level and gradient as per the direction of field engineer	Rmtr	**As per KPWD SR applicable to respective area**	**As per Latest KPWD electrical SR applicable to respective areas.**
140	b)	Providing, laying and jointing PVC pipes conforming to IS 4085-1960, & 7634-1975, and approved makes with necessary specials such as collars, bends, Elbows, Tee, nipples, plugs with cuts and threads using jointing ring with solutions, wherever necessary as per the directions of the field Engineer including all lead and lift.		**As per KPWD SR applicable to respective area**	**As per Latest KPWD electrical SR applicable to respective areas.**
141	i)	25 mm dia (outer) 2mm to 2.5mm thick	Mtr	**As per KPWD SR applicable to respective area**	**As per Latest KPWD electrical SR applicable to respective areas.**
142	ii)	32 mm dia (outer) 2mm to 2.5mm thick	Mtr		
143	ii)	63 mm dia (outer) 2mm to 2.5mm thick	Mtr		
144	iv)	75 mm dia (outer) 2mm to 2.5mm thick	Mtr		
145	v)	90 mm dia (outer) 2mm to 2.5mm thick	Mtr		
146	vi)	110 mm dia (outer) 2mm to 2.5mm thick	Mtr		
147	vii)	140 mm dia (outer) 2mm to 2.5mm thick	Mtr		
148	vii)	160 mm dia (outer) 2mm to 2.5mm thick	Mtr		
	d)	**Supplying & Laying cable trays including welding fixing of supports**			
149	i)	Cable tray of 600mm width (suitable for cable ducts of A,B & C type)	Rmtr	**429**	537
150	ii)	Cable tray of 300mm width (suitable for cable ducts of A,B & C type)	Rmtr	**306**	383
151	e)	Laying of control cables from equipments to control panels.	Rmtr	**6**	8
	31	**Control Panels**			
152	a)	Erection of control panels, auxilary panels, carrier cabinets etc., alignment and fixing properly to foundation base including movement from the point of unloading to the point of erection.	Per Panel	**2444**	3055
153	b)	Wiring & assisting in testing and commissioning of panels.	Per Panel	**3819**	4774

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
154	C)	**Test & Commissioning:** **i) C& R Panels Wiring & Testing:** **Wiring:**Identification, Ferruling, Crimping, termination of wires in C&R panels. **Testing**: Testing for insulation level, Testing of relays, control operations for closing tripping etc., interlocks Alarm, Annunciation and Indication Checks.	Each	**41848**	41848
	32	**11 kV Switchgear**			
	a)	Erection, alignment and fixing to the foundation, indoor/outdoor 11kV switchgear Panel/unit including movement from the point of unloading to the point of erection.			
155		i) 11kV Indoor/out door switchgear	Per Panel	**1471**	1839
156		ii) 11kV Kiosk	Per Panel	**1224**	1530
	b	**Wiring & assisting in testing & Commissioning**			
157		i) 11 kV indoor/ outdoor switchgear	Per Panel	**488**	610
158		ii) 11kV Kiosk	Per Panel	**488**	610
	c	**Testing & Commissioning:** **Wiring:** Identification of wires, Ferruling Crimping & Termination of wires for annunciation, etc., Testing of Relays, CTs, PTs, & Breaker for operation			
159	i)	For indoor/outdoor panel comprising of 2I+8F+1BC+1AP3	Per Set	**55802**	69753
160	ii)	For single 11kV panel indoor/outdoor type /Kiosk	Nos	**11160**	13950
161	iii)	For additional 11kV panel indoor	Nos	**5580**	6975
162	iv)	For each additional 11kV panel out door type/Kiosk	Nos	**8529**	10661
		Note:Assisting in testing & Commissioning for item 19,20 & 21 mean contractors should provide labourers for wiring & Commissioning by RT/MT/Firm Engineers.			
	33	**Busbar Formation**			
		Main bus/cross bus (all the three phases in a segment) of using Coyote-single/double conductors with fixing of insulator spacers, levelling of string conductors to the required height above the equipment, including providing jumps to interconnect different segments of the main bus.			
163	a)	Main Bus/Cross Bus as above using Lynx/Coyote Conductor		**2369**	2961
164	b)	Formation of cross bus in each individual bay using Lynx/Coyote - Single/Double conductor with fixing of insulators, spacers, levelling the strung conductors to the required height above the equipment including providing jumps to inter-connect different segments of the main bus.	Per Bay	**4512**	5640
165	**34**	Faradays Cage Formation as per specification:	Per Bay	**180**	225
	35	**Groundmat**			
166	a)	Laying of M.S. Flats, welding, applying ACB paint to welded portion and covering with sodium bentonite clay	Rmtr	**24**	25
167	b)	Supplying and laying of MS flats, of various sizes, welding and applying ACB paint to welded portion and covering with sodium bentonite clay, as per the drawing/standard specifications and consolidation.	Rmtr	**50x6mm - 233** **50x8mm - 249** **75x6mm - 432** **75x8mm - 457** **75x12mm - 484**	**50x6mm - 262** **50x8mm - 280** **75x6mm - 486** **75x8mm - 514** **75x12mm - 545**
168	c)	Same as above but without sodium bentonite clay	Rmtr	**50x6mm - 115** **50x8mm - 130** **75x6mm - 314** **75x8mm - 338** **75x12mm- 367**	**50x6mm - 129** **50x8mm - 146** **75x6mm - 353** **75x8mm - 380** **75x12mm - 413**

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
169	d)	Grounding of equipment with various sizes, G.I. Flat and connecting Equipment to the earthmat/ground pit. Each point of earthing with all formation works like bending, twisting, drilling of holes and connecting by welding (inclusive of all T&P and consumables) to the earthmat/ ground pit/ point of earth connection,all the materials supplied by the contractor.	Per point	**50x6mm - 193 50x8mm - 215 75x6mm - 462 75x8mm - 488 75x12mm - 528**	**50x6mm - 217 50x8mm - 242 75x6mm - 520 75x8mm - 549 75x12mm - 594**
170	e)	Providing 25mm dia M.S.rod 1.05 Mtr. Long earthmat spikes including heating, bending top 50mm over lap flattening and making spike edge at one end driving into the earth below the ground level and welding the rod with ground mat flat.	Each	**191**	239
171	f)	Supplying & Providing 450 mm dia 450 mm height 1.5" to 2" thick hume pipe collar (non pressure type) for earth pits including all lead and lifts etc.,	Each	**551**	689
	36	**Providing Deep Bore earthing**			
		"Sinking bore of 150mm clear dia using fast rig including fixing of 40mm dia MS rod, including jointing the pipes as per KPTCL standard and providing sodium bentonite treatment in the annular space, including transportation of rig and other supporting vehicles etc., complete, as per the directions of engineer in charge, including cost of MS rod & sodium bentonite".			
172		**a)** Drilling 150mm dia bore	Rmtr	**438**	547
173		**b)** 40 mm dia MS rod	Rmtr	**346**	432
174		**c)** Bentonite Clay	Kgs	**11**	14
175		**d)** Cost of GI flat for joining two rods by welding to obtain continuous length	Per joint	**420**	525
	37	**Spreading of Jelly**			
		Supplying and spreading 100mm thick with 20/25mm jelly with all lead and lifts.			
176		i) 20/25 mm Jelly	Cmt	**925**	1156
		Note : Only 20/25mm jelly shall be used.			
	38	**Station Yard Lightning**			
177		**a)** Supplying and erection of fabricated supporting structures including foundation.	Per Set	**As per Latest KPWD electrical SR applicable to respective areas.**	**As per Latest KPWD electrical SR applicable to respective areas.**
178		**b)** Supplying and fixing of Sodium Vapour lamp fittings of 250 watts.	Per Fitting	**As per Latest KPWD electrical SR applicable to respective areas.**	**As per Latest KPWD electrical SR applicable to respective areas.**
179		**c)** Supplying and laying of 1.1KV, 6 Sqmm PVC cable or any other specified size, testing and commissioning of yard lights.	Rmtr	**As per Latest KPWD electrical SR applicable to respective areas.**	**As per Latest KPWD electrical SR applicable to respective areas.**
180		**d)** Erection of RCC poles with stringing of O.H. conductor/Laying of cable for yard lights.		**Furnished in 11kV Works**	Furnished in 11kV Works
	39	**Painting of structures**		**Material+Labour**	**Material+Labour**
181		**a)** Supplying and painting of two coats of good quality Red Oxide primer after cleaning and scrapping the surface.	Sq Mtr	**49**	62
182		**b)** As above with 2 coats of good quality Aluminium paint after2 coats of good quality Red Oxide primer.	Sq Mtr	**85**	106
183		**c)** Supplying and painting two coats of aluminium paint after cleaning and scraping the surface wilthout applying Red Oxide primer	Sq Mtr	**44**	55
184		**d)** As per (b) but with synthetic enamel paint	Sq Mtr	**97**	121

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
185		**e)** Supplying and painting two coats of Synthetic enamel paint after cleaning and scraping the surface without aplying red oxide primer.	Sq Mtr	**49**	62
	40	**Battery Set and charger**			
	a)	Installing, assembling, filling of acid, wiring, assisting, test-charging and discharging Battery set.			
186	i)	110 Volts	Set	**6111**	7639
187	ii)	48/24 Volts	Set	**2447**	3059
	b)	Erection of Battery Charger and wiring			
188	i)	110 Volts	Set	**976**	1220
189	ii)	48/24 Volts	Set	**976**	1220
190	c)	**Testing & Commissioning of Battery Charger:** **Wiring:** Identification, Ferruling, Crimping & connecting i)AC Supply cable upto 2 sources ii) Load cables, connection at charger end upto 10 load points			
191		**Testing:** i) AC supply Voltage Phase Sequence. ii) Testing of Output DC Voltages in Boost/Float/Trickle/Variations as per the order/requirement . iii) Testing for Ripple Factor. **Commissioning:** i) Fixing of Boost Voltage level ii) Fixing of Float Voltage level iii) Fixing of Trickle Volage level iv) Testing of alarm, indication and load ckts, Auto /Manual change overs etc. v) Full load test in Boost & Trickle modes.			
192	i)	110V DC: (1 set for 33kV Stations)	Per Set	**21300**	**21300**
	41	**Fencing :**			
		Colony and Station yard Boundary fencing including erection of supports			
193		a) Security fencing using 8SWG chainlink/50mm Mesh		**As per KPWD SR applicable to respective area**	**As per KPWD SR applicable to respective area**
194		b) Barbed wire fencing			
	42	**PLCC Equipments**			
195	**a)**	Erection of mounting structures for coupling capacitors	Set	**4347**	**4347**
196	**b)**	Erection of Coupling capacitors/wave traps/LMU.	Set	**1634**	**1634**
197	**c)**	Wiring , testing and commissioning	Set	**486**	**486**
	43	**Yard Levelling**			
198		Yard Levelling and filling up of soil and consolidation.	Cmt	**As per KPWD SR applicable to respective area**	**As per KPWD SR applicable to respective area**
	44	**Watch and Ward**			
201		Emoluments for watch and ward including pay and DA for 8 hours duty	Per shift	**171**	244
	45	**Transportation**			
		Transportation of Transformer, CT's, PT's, Breakers, C&R Panels, 11KV Switchgears and EHT LA's only.			
	a)	**Using 10 MT Lorry**			
199		**i)** 1 to 50 KMs		**Rs. 46/- per KM, subject to a Min. of Rs.10,000/-**	**Rs. 53/- per KM, subject to a Min. of Rs.10000/-**
200		**ii)** 51 to 100 KMs		**Min + Rs.36/- per KM**	**Min + Rs.40/- per KM**
201		**iii)** 101 to 150 KMs		**Min + Rs.27/- per KM**	**Min + Rs.30/- per KM**
202		**iv)** Beyond 150 KMs		**Min + Rs.17/- per KM**	**Min + Rs.19/- per KM**
	b)	**Using 10 MT Truck & Trailor**			

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
203		**i)** 1 to 50 KMs		**Rs. 46/- per KM, subject to a Min. of Rs. 20,000/--**	**Rs. 53/- per KM, subject to a Min. of Rs. 2000/-**
204		**ii)** 51 to 100 KMs		**Min + Rs.36/- per KM**	**Min + Rs.40/- per KM**
205		**iii)** 101 to 150 KMs		**Min + Rs.27/- per KM**	**Min + Rs.30/- per KM**
206		**iv**) Beyond 150 KMs		**Min + Rs.17/- per KM**	**Min + Rs.19/- per KM**
	c)	**Using 20 MT Truck & Trailor.**			
207		**i)** 1 to 50 KMs		**Rs. 365/- per KM, subject to a Min. of Rs. 25,000/-**	**Rs. 420/- per KM, subject to a Min. of Rs. 25000/-**
208		**ii)** 51 to 100 KMs		**Min + Rs 318 /- per KM**	**Min + Rs 350 /- per KM**
209		**iii)** 101 to 150 KMs		**Min + Rs172/- per KM**	**Min + Rs 190/- per KM**
210		**iv)** Beyond 150 KMs		**Min + Rs154/- per KM**	**Min + Rs 170/- per KM**
211		Mobilisation charges of IDLE Transportation applicable for places where heavy duty trucks are not available, is admissible in addition to: (a) as far as possible full load shall be transported.		**21**	26
212		**b)** Transportation of other materials		**25% of the above**	**27% of the above**
213		**c)** Using light vehicle including fuel, oil, lubricants and crew subject to a minimum of 100 Kms per day in case of break down/ subject to prior approval of CEE.	Per Set	**Prevailing Board approved Rates**	**Prevailing Board approved Rates**
	46	**Loading and Unloading**			
214		**a)** Loading of Power Trs, CT's. PT's Breakers, C&R Panels, 11KV Switchgears, wavetrap, coupling capacitors, HT UG Cables, Insulators, ACSR Conductor, Ground Conductors, etc.,	MT	**1291**	1614
215		**b)** Unloading of power Transformers, CT's PT's Breakers, C&R Panels, 11 KV Switchgears, Wavetrap, coupling capacitors, HT UG Cables, Insulators, ACSR conductor, Ground conductors, etc.,	MT	**1291**	1614
216		**c)** Loading of other materials like structural steel, building materials etc.,	MT	**229**	286
217		**d)** Unloading of other materials like structural steel, building materials etc.,	MT	**229**	286
	47	**Benching, Revetment and Pitching**			
218		Providing granite rough stone 30 to 50 cms thick dry packing of revetments and pitching side slopes of quadrant including providing the walls, jelly packing, 0.15 cms thick and wedging etc., Complete including cost of conveyance of all materials.	Cmt	**As per KPWD SR applicable to respective area**	**For substation works as per KPWD SR and for Transmission line works Add 25% extra**
	48	**Labour for 33KV lines using 9/9.5 Mtrs Long RCC Poles**			
219		**a)** Erection of 9/9.5 Mtrs RCC Poles 300 Kg working load, in the excavated pit as per the approved drawing specification (excluding the cost of excavation, backfilling and concreting) **Note:** The rates of excavation, Backfilling and concreting are to be adopted as noted in Sl. No's- 1.3 to 1.8 of 11KV system respectively.	Nos	**973**	1216
220		**b)** Erection of DP structure including fixing of braces insulators etc., as per the approved drawings and specifications (excluding the cost of excavation, backfilling and concreting). **Note:** The rates of excavation, Backfilling and concreting are to be adopted as noted under 1.3 to 1.8 of 11KV system respectively.	Set	**2301**	2876
221		**c)** Fixing of V-Shape cross arms, single top supports and insulators.	Set	**68**	85

Sl No	Item No	Description	Unit	Common SR 2012-13 in `	Common SR 2014-15 in `
222		**d)** Fixing of spiral earth electrodes	Nos	**25**	31
223		**e)** Road/P&T Guarding	Set	**672**	840
224		**f)** Stringing Rabbit conductor, fixing disc insulator to cross arms etc.,	KM	**1846**	2308
225		**g)** Stringing Coyote conductor, fixing disc insulator to cross arms etc.,	KM	**3225**	4031
226		**h)** Supplying and fixing of AC devices as per specification	Rmtr	**As provisioned in 11 kV works**	**As provisioned in 11 kV works**
	49	**Dismantling**			
227		i) Dismantling of Power Transformer		**Same rate as that of erection of Power Transformer**	**Same rate as that of erection of Power Transformer**
228		ii) Dismantling charges for conctrete with steel reinforcement	Cmt	**566**	707
229		iii) Dismantling of concrete only	Cmt	**276**	345
230		iv) Dismantling charges in all other cases		**75% of erection charges in general**	**75% of erection charges in general**

Special Locality Allowance:
Locality allowance at the rate noted below be given over and above the schedule of labour for the listed areas.

Sl No	Name of ESCOM	Area	Percentage over & above SR
1	**BESCOM**	**Davanagere District:** Channagiri, Honnalli Taluks	20
		Tumkur District: Pavagada Taluk.	15
		All Divisions coming under Bangalore Metropoliton Area Zone	30
		Anekal, Chandapura, Hosakote & Devanahalli. In BRAZ	20
2	**MESCOM**	**South Kanara District:** Bantwala, Mangalore, Sulya, Puttur, Belthangadi Taluk	45
		Udupi District: Udupi,Kundapura,Karkala Taluk	45
		Chickmagalur District: Kadur, Chichmagalur, Koppa, Tarikere, Mudigere, Narasimharajapura, Sringeri Taluk	35
		Shimoga District: Hosanagara,Thirthalli,Sagara,Soraba,Shikaripura Taluk	35
		Shimoga District: Shimoga,Bhadrawathi,Taluks	25
3	**HESCOM**	**Dharwad District:** a) Kalghatagi b)Dharwad Taluk	 30 20
		Haveri District: a)Hanagal,Herikerur b)Byadagi,Shiggon,Savanur Taluks	 30 20
		Belgaum District: Khanapura Taluk Hukkeri, Belgaum,Bailahongala Soundathi Taluks	20
		Uttar Kannad District: Karwar, Joida, Haliyal, Sirsi, Mundagod, Yellapur, Bhatakal, Sidapur, Honnavar, Kumta and Ankola.	40
4	**CESCO**	**Kodagu District:** Madikeri, Virajpet, Somwarpet Taluks	40
		Mysore District: H.D.Kote, Hunsur and piriyapattana	30
		Chamaraj Nagar District: Gundlupet, Chamarajanagar, Kollegal Taluk	30
		Hassan District: Sakaleshpura, Hassan, Arakalagudu, Belur, Alur.	40
5	**GESCOM**	**Taluks:** Raichur, Koppal, Bellary, Gangavathi, Sandur, Manvi, Sindhanur, Shahapur, Jewargi, Sedam	15

Note: In case of civil works where KPWD SR rates are adopted, the locality allowance as applicable in KPWD SR shall be followed.

PART – 7

Technical Specification for Overhead and Underground Service Connection works for the Year 2012-13

Technical Specification for Overhead and Underground Service Connection works for the Year 2009- 10

Technical Specification for Overhead and underground Service connection works for the year 2009-10

In view of Board Notification vide No.KEB/B11/B10/2195/84-87 and amendment and Regulation-5 of KEB Electricity Supply Regulation, only specification have been furnished in respect of U.G.Cable & over head service connection work has to be got done through the license electrical contractors.

Note : The materials referred to in the specifications of various works dealt in this section shall confirm to the latest ISS as detailed below :

1. PVC insulated PVC sheathed Aluminium wires of 650/1100 V Class shall confirm to IS 604 and bear the ISI certification mark.

2. PVC insulated PVC sheathed Aluminium conductor underground cables with steel rope/steel wire armouring of 1100 V class shall confirm to IS 1544 and shall bear the ISI certification mark.

3. Brazed conduit pipes - IS 1653
4. PVC conduit pipes - IS 2509
5. Class 'A' (light) G.I. Pipe - IS 1239
6. Stoneware pipe - IS 300
7. ACC pipe - IS 1626
8. G.I. Wire - IS 1280
9. G.I.Bolts & Nuts - IS 6639
10. G.I.Heavy Washers - IS 6610
11. G.I.Plain Washers - IS 2016

12. Other materials shall confirm to the relevant Indian standard specification wherever applicable.

A) SPECIFICATIONS FOR OVERHEAD SERVICE MAINS

1. Short poles

   (Where clearance between messenger wire and ground is Inadequate)

   a) Supplying and fixing 40 mm 2.90 thick G.I. Pipe 1.8 mm long complete with atleast 2 nos of through bolts 12 mm dia with M.S.back plate 100x100x6 mm with eye bolt fixed at the top for dead ending messenger wire with masonry patch work complete as per approved drawing (for single phase installations).

2. Guy set for short poles as in (a)/(b)

Supplying and fixing guy set for items(a) & (b) (wherever span exceeds 10 mtr) formed out of not less than 4 mm (8 SWG) G.I. wire with eye bolt or anchor bolt of not less than 12 mm dia with cement concerting work including one break insulator as per approved drawing. If suitable wall or R.C.C. roof is not available for anchoring guy sets, the anchoring has to be done by fixing G.I. wire to the rafter of the tile or asbestos roof.

3. Eye bolt :

(If building height is sufficient to string service main from pole)

Supplying and fixing M.S.EYE BOLT 16mm dia of sufficient length to cover the thickness of the wall but not less than 375 mm long with one M.S.back plate of 150x150x60 mm and M.S. washer of 3 mm thick in front, inclusive of masonry patch work etc. complete as per approved drawing.

4. Clamp for supporting messenger wire

Supplying and fixing on the pole support 25x6 mm clamp with bolts nuts and flat iron strap for supporting the messenger wire on the pole.

5. Insulated wire on messenger wire :

(Single phase and Three phase)

Using 2 single/1 Twin core wires for single phase and 4 single/2 Twin core wires for 3 phase.

Supplying and stringing PVC insulated and PVC sheathed 650/1100 V class aluminium conductor of sizes supported by 3.14 mm (10 SWG) G.I. messenger wire with two break insulator one at each end of the span and with suspenders at intervals of 0.75 mtr. Each suspender shall be porcelain reel insulator of suitable bore through which insulated wire shall pass (single core or twin core as the case may be) and this reel insulator shall be fixed to the messenger wire using 2 mm. (No.14 SWG) G.I. wire suitably bent and twisted. Separate reel insulators shall be provided for each wire. The messenger wire shall be dead-ended on the clamp provided to the departmental pole vide item No.4 above.

Size of Insulated wire in Sq. mm	2.50	4.00	6.00	10.00	16.00	25.00	50.00
Single phase - use 2 nos. single core Wire/ one no. 2 core							
Three phase - use 4 nos. single core Wire/ Two no. Twin core							

6. Insulated wire in pipe
(Single phase and three phase)

Supply fixing and wiring service mains in pipe of the following sizes with necessary threaded water tight bends, collars hooks wooden plugs bushing and screws etc.,

a) 16 SWG braized conduit pipe finished with black stove enamelling both inside and outside.

b) PVC conduit pipe

c) Class 'A' (light) G.I.Pipe

d) PVC insulated aluminium wire of 650/1100 V grade

(single core or twin core as the case may be) with necessary length of loose wire not less than 1 meter long to be terminated inside the meter board without joints and connected to the main side of the energy meter, using bi-metallic connectors, accessories, sleeves etc., inclusive of masonry patch work. The conduit shall be connected to the earth electrode by means of G.I. wire not less than 4 mm (8 SWG) and tinned copper clamp of width 25 mm and 24 gauge with GI bolt nut and washers.

a) Single Phase Service

Sized of insulated wire in Sq. mm	2.5	4.0	6.0	10.0	16.0	25.0	50.0
Diameter of pipe in mm	19	19	19	25	40	40	40
In Braized Conduit pipe	1) Using 2 single core wires 2) Using twin core wires						
In PVC Conduit pipe	1) Using 2 single core wires 2) Using twin core wires						

b) Three phase service

Sized of insulated wire in Sq. mm	2.5	4.0	6.0	10.0	16.0	25.0	50.0
Diameter of pipe in mm	19	19	19	32	40	40	50
In Braized Conduit pipe	1) Using 4 single core wires 2) Using 2 twin core wires						
In PVC Conduit pipe	1) Using 4 single core wires 2) Using 2 twin core wires						
In G.I. Pipe	1) Using 4 single core wires 2) Using 2 twin core wires						

7. Meter Board

1. Single phase

a) Supplying, fixing and wiring, T.W.Meter board 300x300x65 mm made out of 15 mm thick plank for the front and 12 mm thick plank for the pack with 40x20 mm batten alround using well seasoned teak wood, fixing them with screws, and smooth finishing with 2 coats of high grade varnish. The back of meter board shall be fixed to the wall by means of screws on atleast 2 Nos of wooden plugs of 40x25x100 mm long well fixed in the wall with necessary masonry patch work etc., complete. The planks for both front and back of the meter board shall be made out of not more than two pieces.

b) -do- 375x300x65 mm.

2. Three Phase :

- do - 500 x 500 x 65 mm T.W. meter board as in item 7(a) but using atleast 4 Nos. of plugs. The planks for both front and back of the meter board shall be made out of not more than three pieces.

8. Earthing :

a) Supplying, fixing and wiring earth electrodes for grounding conduits, IC cut outs and other equipments on the meter board using 40 mm dia, 2.90 mm thick G.I.pipe 2.5 mtr long burred in a pit. The pit should be filled in with equal proportion of salt and charcoal 150 mm allround the pipe to complete depth. The connection from the pipe to the conduit etc. is to be established through G.I. wire of size as per clause. 7.33 of S 732 using 12 mm dia bolts, nuts washers and checks nuts etc. The pipe shall have 16 through holes of 12 mm dia as per our drawing.

b) - do - using 40mm dia 2.90 mm G.I.Pipe 5.5 mtr long burried horizontally where rock is encountered at a depth less than 2 mtr depth burial shall be not less than 0.75 mtr.

c) -do- using 2 Nos. of 40 mm dia 2.90 thick G.I.Pipe 1.25 mtr long burried in pits, 2.5 mtr apart and connected in parallel.

Note : Wherever the specified ground resistance (as per IS 3043 or its latest version thereof) is not obtained by the groundings, extra grounds are to be provided until the specified resistance value is obtained, in all such cases concerned. Assistant Executive Engineer must himself inspect and pass order as to where the additional earthing is to be provided.

B) L.T. Underground cables

1. Laying underground cable in New/Existing trench :

Supplying and laying PVC insulated sheathed steel wire/steel tape armoured UG cable with PVC outer sheathing 1.1 KV Class. The work shall include digging of trench 0.5 mtr wide 0.6 mtr deep laying the cable in trench refilling and consolidating the soil.

Size of Cable in Sq. mm	6	16	25	35	50	95	120	150	185	225	240
In trench (New or Existing)	Using 2 core Cables for single phase Using 3 core cable for 3 phase Using 4 core cable for 3 phase										

2. Laying underground cable in ground inside stoneware pipe in New/Existing trench.

Supplying and laying UG cable in stoneware pipe of size 101.6 mm dia 0.6 mtr long (4" dia 2' long) at road crossing in trench of 0.50 mtr width and 0.60 mtr depth.

(size of cable to be used are as in B(1)]

3. Laying UG cable in ground inside ACC pipe in New/existing trench

Supplying and laying UG cable in ACC pipe of size 101.6 mm dia (4" dia) in trench of 0.5 mtr width and 0.6 mtr depth.

(size of cables to be used as in B(1)]

4. Running the cable above ground :

Supplying running and connecting the UG cable up to meter board.

a) Above ground in 2.90 mm thick G.I. pipe with necessary clamps, bolts nuts & washers etc. for fixing the pipe on the pole and drain crossing only (40 mm dia pipe for 6, 10 and 16 Sq. mm size cable and 50 mm dia pipe for 25.35 and 50 Sq mm 65 mm dia pipe for 95, 120, 150 Sq. mm size cables and 80 mm dia pipe for 185, 225 & 240 Sq. mm size cables.

5. Fixing of pot heads :

Supplying and fixing LT cast iron pot-heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts and nuts & washers etc.,

Size of Cable in Sq. mm	6	10	16	25	35	50	70	95	120	150	185	225	240
No. of Cores	2	2	2	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5

c) **Sealable Cutouts**

Fixing of ironclad sealable cutouts at consumer's premises
Supply fixing and wiring of sealable cutouts with MS. Sheet cover of not less than 0.9 mm (20 SWG) thick, painted with grey enameled paint both inside and outside on the meter board including porcelain fuse cutouts 600/500 V grade of different capacities conforming to the relevant latest Indian Standard Specifications.

Capacity of cutouts complete in Amps	15	30	60	100	200	300

6. Average rate of Over Head Service main wire and UG Cable per meter

a) Over Head Service main wire

Average rate in Rs. per metre

Sl. No	**Insulated wire size in Sq.mm**	**2.5**	**4.0**	**6.0**	**10.0**	**16.0**	**25.0**	**50.0**
1	Single Phase i) 2 Single Core ii) Twin core wire							
2	3 Phase 4 Single Core Wire							

b) Under Ground Cable

Average rate in Rs. per metre

Sl. No	**UG Cable Size in Sq. mm**	**10.0**	**16.0**	**25.0**	**35.0**	**50.0**	**70.0**	**95.0**
1	Single Phase							
2	Three Phase							

PART – 7

I. Fees for Initial Inspections:

SCALE "A"

For an inspection or test of any generating station, receiving station or other places in which energy is generated, transmitted, received or distributed at a rate exceeding 250 Watts and a voltage of 100 Volts.

Sl. No.	Capacity		Fees in Rs.
i)	Domestic lighting sets in residential premises with 10 kW and below		100/-
ii)	For cases other than mentioned in item (1) above:		
	a)	Upto and including 10 kVA	600/-
	b)	Above 10 KVA up to and including 100 kVA	800/-
	c)	Above 100 kVA up to and including 500 kVA	1200/-
	d)	Above 500 kVA up to and including 1000 kVA	2400/-
	e)	i) Above 1000 kVA up to and including 5000 kVA	5000/-
		ii) For every additional 1000 kVA or part thereof in excess of 5000 kVA	An additional fee of Rs.500/- per 1000 kVA shall be levied in excess of e(i) above.

Notes:

In the case of generating station or other place in which energy is generated the fee shall be paid by the Supplier or the person generating energy. In the case of receiving station, the fee shall be paid by the Owner.

The fee shall be levied separately for individual equipment.

The equipment means capacitor bank in outdoor sub-station, generators, power/ distribution / furnace / unit ratio transformer (excluding welding and instrument transformers).

SCALE "B"

For an inspection, examination or test made in pursuance of rule 50 to 70 of the Indian Electricity Rules1956 or under any applicable rules and regulations made under electricity act 2003, where energy is or is about to be supplied or used at extra high, high and

medium voltage except in these cases to which scales A and C to H of this Schedule specifically refer.

Sl. No.	Capacity	Fees in Rs.
	Up to and including 5 kW	200/-
	Above 5 kW up to and including 50 kW	300/-
	Above 50 kW up to and including 100 kW	1000/-
	Above 100 kW up to and including 500 kW	1500/-
	Above 500 kW up to and including 1000 kW	2000/-
	Above 1000 kW up to and including 5000 kW	5000/-
	For every additional 1000 kVA or part thereof in excess of 5000 kVA	An additional fee of Rs.500/- per 1000 kW shall be levied in excess of "6" above.

For inspection of multistoried building (more than 15 meters in height from ground level to roof level) in pursuance of rule 50A of IE rules 1956 or under any applicable rules and regulations made under electricity act 2003

Sl. No.	Capacity	Fees in Rs.
	For Multistoried Building up to six floors including basement and ground floor (for each block of a building)	3500/-
	For Multistoried Building having more than six floors including basement and ground floor (for each block of a building)	4750/-
	For any addition or alteration to the Multistoried building	3000/-

Note (for both a & b):

1. The fee shall be paid by the owner to whom energy is or is about to be supplied.
2. Separate fee shall be levied for inspection of X-rays, neon signs, lifts, sub-station and standby generators according to the respective scale of fees.
3. The fee is inclusive of connected switch gear and cables.
4. For HV motor load, fee should be levied separately for individual equipment.
5. For MV load (i.e. Motor, welding transformer etc.), fees shall be levied on the total connected load on each MCC of every transformer or generator.

SCALE "C"

Fee for an inspection, examination or test of any electrical installation, appliances or apparatus (other than a generating Station or a receiving station for which a separate fee will

be charged under scale "A" in a factory within the meaning of the factories Act (XXIII) of 1948 to which energy is supplied by the ESCOMs or Licensee or in which energy is generated.

Sl. No.	Capacity	Fees in Rs.
	For power	Fees as per scale 'B' be applied
	For lighting or for purposes other than power provided no fees under this item shall be charged in respect of an electric installation appliance or apparatus in any factory where not more than twenty workers are employed)	Rs. 50/- per kW or part thereof subject to maximum of Rs.500/-

Note:

If any factory of which energy is supplied by a licensee or in which energy is generated both for lighting and for power, separate fee under Clause (i) and (ii) should be charged.

The fee shall be paid by the owner.

SCALE "D"

For an inspection or of examination of service line and connected metering apparatus on consumer premises in pursuance of Rules 30 and 31 of the Indian Electricity Rules 1956 or any applicable rules and regulations made under electricity act 2003.

Sl. No.	Capacity	Fees in Rs.
1.	Low or medium voltage service line	240/-
2.	High or extra high voltage service line	600/-

Note: The fee shall be paid by the licensee or the supplier.

SCALE "E"

Fee for inspection of Neon sign and X-Ray installations in pursuance of rule 71 & 73 of IE rules 1956 or any applicable rules & regulations made under Electricity Act 2003.

Sl. No.	Particulars	Fees in Rs.
	Neon Sign	500/- per equipment
	X-ray / CT scan etc similar equipment	750/- per equipment

Note:

The fee shall be paid by the owner to whom energy is or about to be supplied.

Separate fee shall be levied for Lifts, sub-station and standby generators according to the respective scale of fees.

The fee is inclusive of connected switch gear and cables.

SCALE "F"

For an inspection of one aerial line crossing the other aerial line in pursuance of Rule 87 of the Indian Electricity Rules, 1956 or under any applicable rules & regulations made under Electricity Act 2003.

Sl. No.	Particulars	Fees in Rs.
For an inspection, examination of every new aerial line including a service line crossing either above or below a telegraph, telephone or other aerial line.		
	For inspection of First Crossing	240/-
	For Inspection of every additional crossing	100/-

Note:

1. The fees shall be paid by the person whose line was last erected.

SCALE "G"

The fee for any inspection or examination of an aerial line or underground cable in pursuance of Rule 39,66,77 to 81 and 85 etc., of I.E. Rules 1956 or under any applicable rules & regulations made under EA 2003.

Sl. No.	Particulars	Fees in Rs.
1.	For an inspection or examination of an extra high voltage line or cable	Rs. 500/- per km or part thereof subject to a minimum of Rs. 2500/-.
2.	For an inspection or examination of a high Voltage line or cable.	Rs. 100/- per km or part thereof subject to a minimum of Rs. 1000/-.
3.	For an inspection or examination of medium or low voltage aerial distribution main or cable.	Rs. 100/- per km or part thereof subject to a minimum of Rs. 500/-.

Note:

The fee shall be paid by the supplier or owner.

SCALE "H"

Fee for the inspection or examination of Switchgear:

Sl. No.	Particulars	Fees in Rs.
	For Low or Medium Voltage	200/-
	For High voltage	600/-
	For Extra High voltage	1200/-

Note:

1. The fee shall be paid by the supplier or owner or occupier
2. Switch Gear includes Fuses, Isolators, circuit breakers, Lightning Arresters, Protection C.T & P.T along with connected control cables & jumps.
3. If more than one switchgear of the same class of voltage is connected either to primary or secondary side of a transformer or to a generator, all the switchgears at each side shall be considered as single for the purpose of calculation of fees.

II. FEE for Periodical Inspections:

SCALE "I"

For an inspection or test of any generating station, receiving station or other places in which energy is generated, received or distributed at a rate exceeding 250 Watts and a voltage of 100 Volts.

Sl. No.	Capacity		Fees in Rs.
1	Domestic lighting sets in residential premises with 10 kW and below		100/-
2	For cases other than mentioned in item (1) above:		
		Upto and including 10 kVA	200/-
		Above 10 KVA up to and including 100 kVA	300/-
		Above 100 kVA up to and including 500 kVA	700/-
		Above 500 kVA up to and including 1000 kVA	1800/-
		Above 1000 kVA up to and including 5000 kVA	5000/-
		For every additional 1000 kVA or part thereof in excess of 5000 kVA	An additional fee of Rs.500/- per 1000 kVA shall be levied in excess of "e" above.

Note:

1. In the case of generating station or other place in which energy is generated the fee shall be paid by the Supplier or the person generating energy. In the case of receiving station, the fee shall be paid by the Owner.
2. The fee shall be levied separately for individual equipment.
3. The equipment means capacitor bank in outdoor sub-station, generators, power/ distribution / furnace / unit ratio transformer (excluding welding and instrument transformers).

SCALE "J"

a) For an inspection, examination or test or installation, made when energy is used at extra high, high and medium voltage except in the cases to which scales 'I', 'K' to 'O' of this schedule specifically refer:

Sl. No.	Capacity	Fees in Rs.
	Up to and including 5 kW	200/-
	Above 5 kW up to and including 50 kW	300/-
	Above 50 kW up to and including 100 kW	1000/-
	Above 100 kW up to and including 500 kW	1500/-
	Above 500 kW up to and including 1000 kW	2000/-
	Above 1000 kW up to and including 5000 kW	5000/-
	For every additional 1000 kW or part thereof in excess of 5000 kW	An additional fee of Rs.500/- per 1000 kW shall be levied in excess of "6" above.

b) For inspection of multi storied Building (more than 15 meters in height from ground level to roof level)

Sl. No.	Capacity	Fees in Rs.

1.	For Multistoried Building up to six floors including basement and ground floor (for each block of a building)	700/-
2.	For Multistoried Building having more than six floors including basement and ground floor (for each block of a building)	3000/-

Note (for both a & b):

1. The fee shall be paid by the owner to whom energy is or is about to be supplied.
2. Separate fee shall be levied for inspection of X-rays, neon signs, lifts, sub-station and standby generators according to the respective scale of fees.
3. The fee is inclusive of connected switch gear and cables.
4. For HV motor load, fee should be levied separately for individual equipment.
5. For MV load (i.e. Motor, welding transformer etc.), fees shall be levied on the total connected load on each MCC of every transformer or generator.

SCALE "K"

Fee for inspection of Neon sign and X-Ray installations in pursuance of rule 71 & 73 of IE rules 1956 or any applicable rules & regulations made under Electricity Act 2003.

Sl. No.	Particulars	Fees in Rs.
	Neon Sign	Rs.300/- per equipment
	X-ray / CT scan etc similar equipment	Rs.500/- per equipment

Note:

The fee shall be paid by the owner to whom energy is or about to be supplied.

Separate fee shall be levied for Lifts, sub-station and standby generators according to the respective scale of fees.

The fee is inclusive of connected switch gear and cables.

SCALE "L"

For an inspection, examination or test of any electrical installation appliances or apparatus (other than a generating station or a receiving station for which a separate fee will be charged under scale "I") **in a factory within the meaning of the factories Acts 1948** to which energy is supplied by the ESCOMS or Licensee or in which energy is generated.

Sl. No.	Capacity	Fees in Rs.
1.	For power	Fees as per scale 'J' be applied
2.	For lighting or for purposes other than power provided no fees under this item shall be charged in respect of an electric installation appliance or apparatus in any factory where not more than twenty workers are employed)	Rs.50/- per kW or part thereof subject to maximum of Rs.500

Note:

If any factory of which energy is supplied by a licensee or in which energy is generated both for lighting and for power, separate fee under Clause (i) and (ii) should be charged.

The fee shall be paid by the owner or consumer.

SCALE "M"

For an inspection or examination of service line and connected metering apparatus on consumer premises.

Sl. No.	Capacity	Fees in Rs.
1.	Low or medium voltage service line	100/-
2.	High or extra high voltage service line	600/-

Note:

1. The fee shall be paid by the licensee or the supplier.

SCALE "N"

Fee for inspection or examination of overhead line or cable:

Sl. No.	Particulars	Fees in Rs.
	For an inspection or examination of an extra high voltage line or cable	Rs. 300/- per km or part thereof subject to a minimum of Rs. 1200/-.
	For an inspection or examination of a high Voltage line or cable.	Rs. 100/- per km or part thereof subject to a minimum of Rs. 500/-.
	For an inspection or examination of medium or low voltage aerial distribution main or cable.	Rs. 50/- per km or part thereof subject to a minimum of Rs. 200/-.

Note:

The fee shall be paid by the supplier or owner or occupier.

SCALE "O"

Fee for the inspection or examination of Switchgear:

Sl. No.	Particulars	Fees in Rs.
1.	Low or Medium voltage	200/-
2.	High voltage	600/-
3.	Extra High voltage	1200/-

Note:

The fee shall be paid by the owner or consumer or occupier.

Switch Gear includes Fuses, Isolators, circuit breakers, Lightning Arresters, Protection C.T & P.T along with connected control cables & jumps.

If more than one switchgear of the same class of voltage is connected either to primary or secondary side of a transformer or to a generator, all the switchgears at each side shall be considered as single for the purpose of calculation of fees.

III. FEES for other services of the Electrical Inspector

SCALE "P"

Sl. No.	Capacity	Fees in Rs.
1.	For an inspection of OH line and for issue of a clearance certificate under Rule 77,79,80,82 & 83 of I.E. Rules 1956 or under any rules and regulations made under electricity act 2003 after due measurement.	350/-

Note:

The fee shall be paid by the person who proposes either to erect a new building or structure or to make any temporary addition or alteration in or upon any building or structure.

SCALE "Q"

Sl. No.	Capacity	Fees in Rs.
1.	For an inspection or examination of any electric traction system including trolley wires and over head equipments and Test of bending and package currents.	Rs.500/- per day or part thereof.

Note:

The fee shall be paid by the Licensee or the owner of the electric traction system as the case may be.

SCALE "R"

Fee for testing energy meters and connected CT & PT

Sl. No.	Particulars		Fees in Rs.
1.	For testing a single meter of any description in the laboratory		
		Without CT & PT	125/-
		With CT & PT	250/-
2.	If meter is to be tested on the consumers premises		
	a)	Without CT & PT	1000/-
	b)	With CT & PT	5000/-

Note:

The fee shall be paid by the person or agency or firm or any other body at whose request the test is conducted.

SCALE "S"

Fee for an inspection or examination or test of voltage within the consumer premises at the request of the consumer of the licensee and issue of a certificate.

Sl. No.	Particulars	Fees in Rs.
	Low voltage and medium voltage	120/-
	High voltage	240/-

Note:

1. For inspection and examination or test of voltage and reading voltage for a duration of 24 hours as above Rs.50/- in addition to the amount charged for each item above.
2. The consumer shall pay the fee in the first instance but the Electrical Inspector shall decide as to who should pay the fee when reported as dispute between the consumer and the supplier.

SCALE "T"

Sl. No.	Particulars	Fees in Rs.
	Fee for an inspection, examination or test of any main or distributing main or service line for the existence of leakage therein which may result in electrolysis to other pipe or to any appliance connected with.	Rs.240/- for the first hour and thereafter Rs.50/- per hour or thereof

Note:

1. If any leakage is discovered in any street main, distributing main or service line, the fee shall be paid by the Licensee or the owner of the main or service line as the case may be.
2. If a leakage is discovered the fee shall be paid by the owner of the water gas or other pipe or of all appliances connected therewith.

SCALE "U"

Sl. No.	Particulars	Fees in Rs.
	Fee for testing an Installation for the existence of leakage to earth.	Rs.240/-

Note:

1. The fee shall be paid by the applicant.

SCALE "V"

Sl. No.	Particulars	Fees in Rs.
	For localizing of the leakage to earth in any installation.	Rs.240/- for the first hour and part thereof and thereafter Rs.50/- per hour or part thereof.

Note:

The fee shall be paid by the applicant.

SCALE "W"

Fee for witnessing testing of single energy meter along with connected CT and PT.

Sl. No.	Capacity	Fees in Rs.
	Single Phase LV installation	300/-
	Three phase MV installation	500/-
	HV installation	1000/-
	EHV installation	3000/-

Note:

1. The fee shall be paid by the applicant.

SCALE "X"

Fee for testing of Earth Electrode

Sl. No.	Particulars	Fees in Rs.
1.	Fee for testing of Earth Electrode	Rs. 50/- per earth electrode.

Note:

The fee shall be paid by the applicant.

SCALE "Y"

INSPECTION OF TEMPORARY INSTALLATIONS

For inspection and to issue electrical fitness certificate to amusements, circus, jatra, yakshagana, fair etc.

Sl. No.	Capacity	Fees in Rs.
1.	Up to and including 5 kW	300/-
2.	Above 5 kW up to and including 50 kW	500/-
3.	Above 50 kW up to and including 100 kW	600/-
4.	Above 100 kW up to and including 500 kW	1200/-
5.	Above 500 kW up to and including 1000 kW	2400/-
6.	Above 1000 kW up to and including 5000 kW	3000/-
7.	For every additional 1000 kW or part thereof in excess of 5000 kW	An additional fee of Rs.500/- per 1000 kW shall be levied in excess of "6" above.

Note:

1. The fee shall be paid by the owner to whom energy is or about to be supplied.
2. Separate fee shall be levied for Lifts, sub-station and standby generators according to the respective scale of fees.
3. The fee is inclusive of connected switch gear and cables

SCALE "Z"

Fee for security an approval of drawings detailing method of construction of the following types of installations.

Sl. No.	Capacity		Fees in Rs.
1.	Drawing of generating sets:		
	a)	Upto and including 100 kVA	250/-
	b)	Above 100 KVA up to and including 1000 kVA	600/-
	c)	Above1000 kVA up to and including 5000 kVA	2000/-
	d)	Above 500 kVA	2500/-
2.	Drawing of transformer centers and HT installations		
	a)	Up to and including 100 kVA	500/-
	b)	Above 100 kVA & upto 1000 kVA	1000/-
	c)	Above 1000 kVA up to and including 5000 kVA	2000/-
	d)	Above 5000 kVA	3000/-
3.		M.S. Building up to and including 6 floors including basement and ground floor	2000/-
		M.S. Building having more than 6 floors including basement and Ground floor.	3000/-
4.	Medium pressure and low voltage consumer installations		200/-
5.	Addition and alternations to existing installations		
	a)	Up to and including 100 kW	500/-
	b)	Above 100 kW up to and including 1000 kW	1000/-
	c)	Above 1000 kW up to and including 5000 kW	1500/-
	d)	Above 5000 kW	2000/-
6.	Cinema theatres/ auditorium		1000/-
7.	Lifts/escalators etc		500/-
8.	Others (other than drawings detailed under 1 to 7 above)		1000/-

SCALE "ZA"

Issue of Electrical Certificate of any installation at the request of any supplier or consumer not falling within the purview of the above scales and certification of testing equipment of testing Agencies:

Sl. No.	Capacity	Fees in Rs.
	For low voltage installations	240/-
	For medium voltage installations	350/-
	For High or Extra high voltage installations	700/-
	For certification of testing equipments of Testing Agencies	1000/-

Note:

The fee shall be paid by the applicant.

SCALE "ZB"

Inspection Fee for Lifts, Escalators, etc.

Sl. No.	Capacity	Fees in Rs.
1.	Initial inspection of Lifts	2000/-
2.	Periodical inspection of Lifts	1000/-
3.	Initial & Periodical inspection of Escalators etc	2500/-

SCALE "ZC"

Inspection Fee for Cinemas and Videos (both initial and Periodical)

Sl. No.	Capacity	Fees in Rs.
	Permanent theatres and Multiplex Cinema per screen	2000/-
	Semi- permanent theatres	1500/-
	Touring/Temporary cinemas/video	500/-

SCALE "ZD"

Periodical Inspection Fee for the Govt. owned Electricity supply companies (ESCOMS), KPTCL, KPCL & Hukkeri co-operative society installations.

Transformers and Generators:

Sl. No.	Capacity	Fees in Rs.
1.	Up to 100 kVA	450/-
2.	Above 100 kVA up to including 500 kVA	1000/-
3.	Above 500 kVA up to including 1000 kVA	1800/-
4.	Above 1000 kVA for every additional 1000 kVA or part thereof in excess of 1000 kVA	An additional fee of Rs. 120/- per 1000 kVA shall be levied in excess of "3" above

Note:

1. The fee shall be levied separately for individual equipment.
2. The equipment means capacitor bank in outdoor sub-station, generators, power/distribution/furnace/ unit ratio transformer.

- **Switchgears:**

Sl. No.	Capacity	Fees in Rs.
	For Low / Medium voltage	180/-
	For High voltage	550/-
	For Extra High voltage	1200/-

Note:

Switch Gear includes Fuses, Isolators, circuit breakers, Lightning Arresters, Protection C.T & P.T along with connected control cables & jumps.

If more than one switchgear of the same class of voltage is connected either to primary or secondary side of a transformer or to a generator, all the switchgears at each side shall be considered as single for the purpose of calculation of fees.

- **Lines and Cables:**

Sl. No.	Capacity	Fees in Rs.
1.	For Low/ Medium voltage	Rs.40/- per km or part thereof Subject to a minimum of Rs.90/-
2.	For High voltage	Rs.50/- per km or part thereof Subject to a minimum of Rs.350/-
3.	For Extra High voltage	Rs.100/- per km or part thereof Subject to a minimum of Rs.700/-

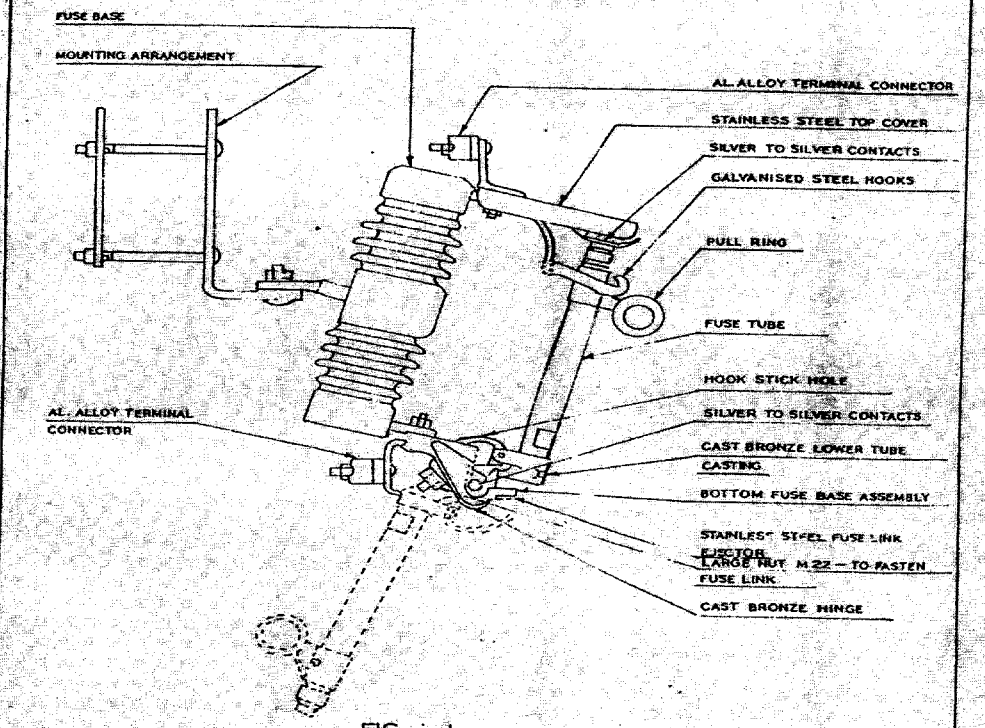


FIG. :- 1

११ के० वी० फ्यूज कट-आउट का प्रारूपिक निर्माण विवरण

TYPICAL CONSTRUCTIONAL DETAILS OF 11KV FUSE CUT-OUT

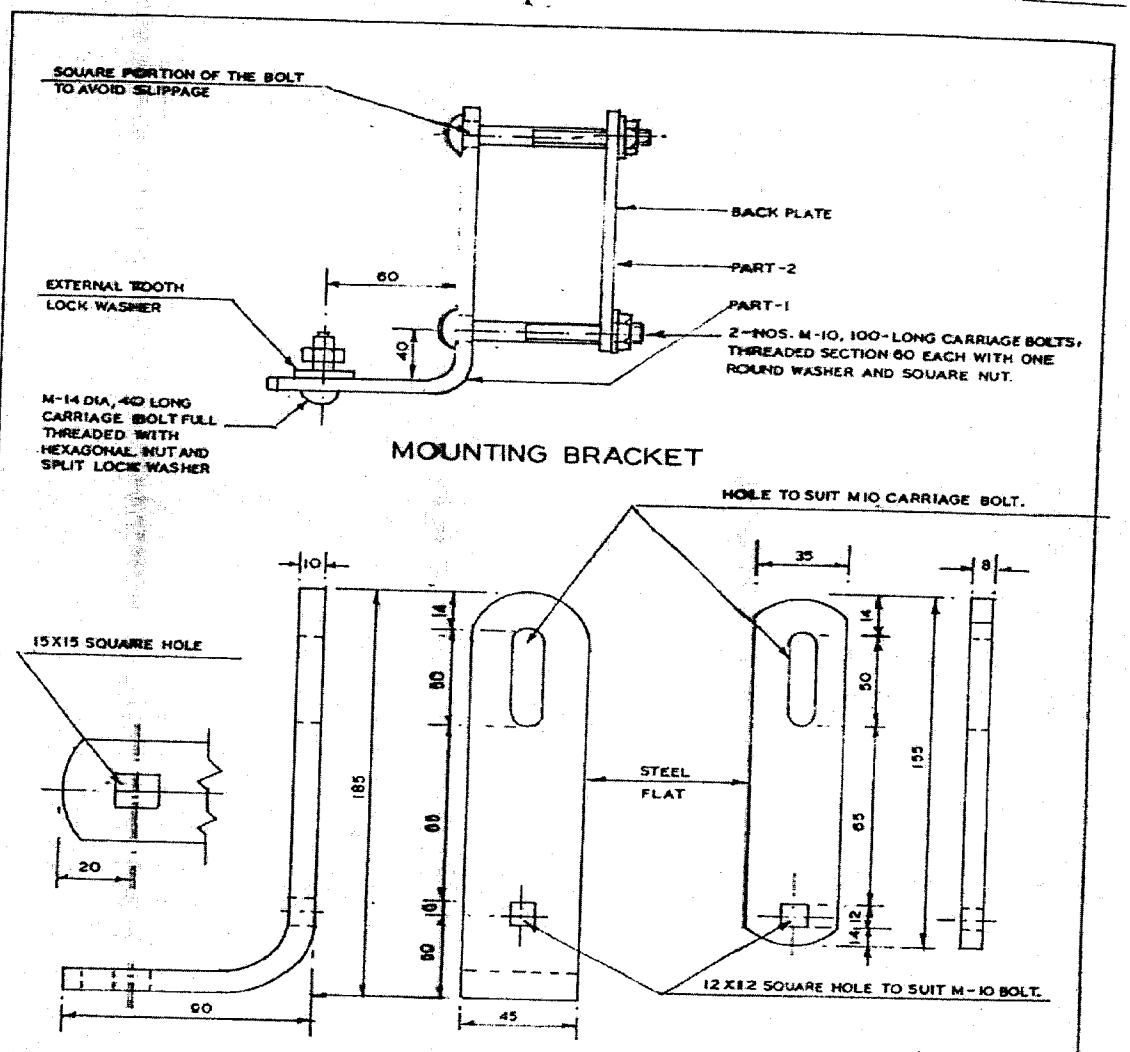
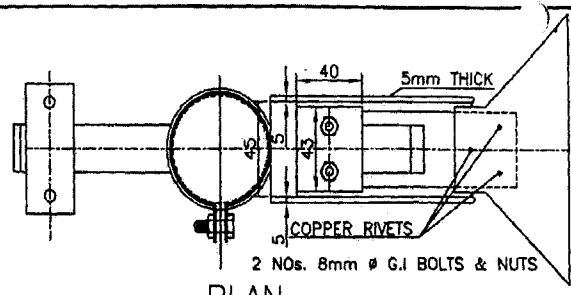


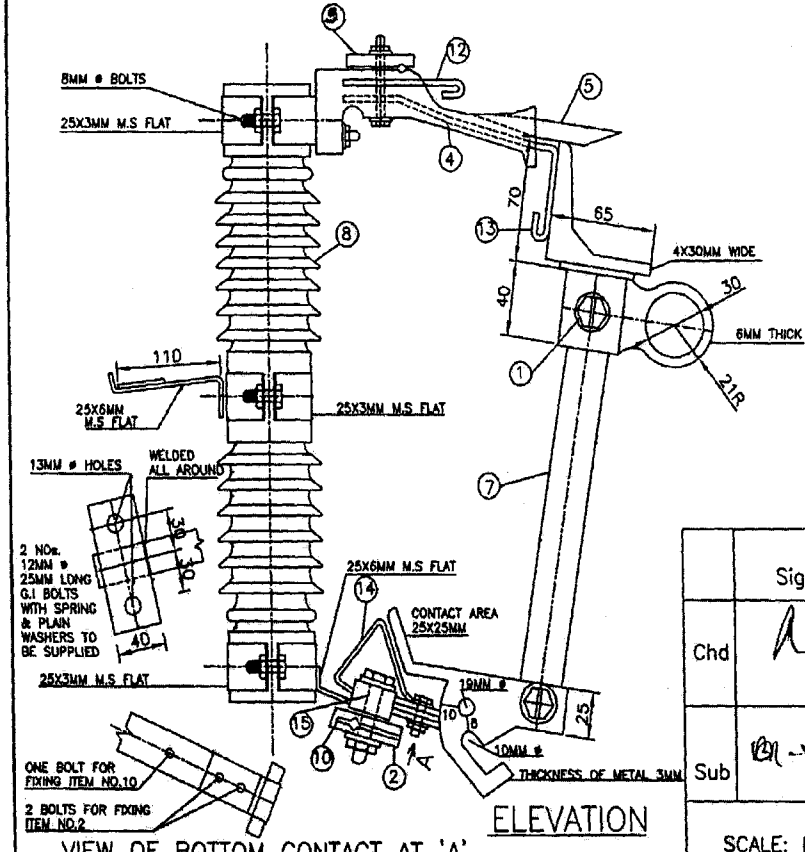
FIG. 2:- MOUNTING DETAILS OF 11KV FUSE CUTOUT

ALL DIMENSIONS ARE IN mm.

११ के० वी० ड्राप-आउट
फ्यूज कटआउट
11 KV DROP-OUT FUSE

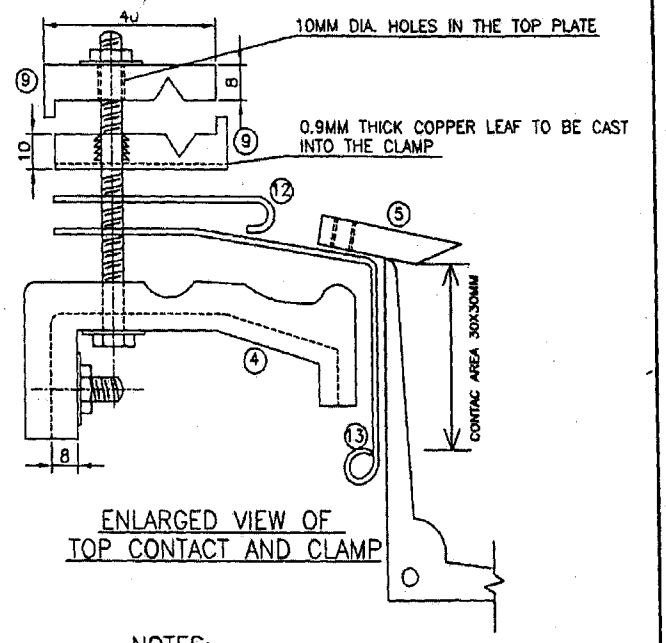


PLAN



VIEW OF BOTTOM CONTACT AT 'A'

ELEVATION



ENLARGED VIEW OF TOP CONTACT AND CLAMP

NOTES:-

1. ALL FERROUS PARTS TO BE HOT DIP GALVANISED.
2. ITEM 13 AND 14 ARE TO BE SUITABLY BENT TO ENSURE 100% CONTACT.
3. ALL DIMENSIONS ARE IN MM.
4. ALL BOLTS AND NUTS SHALL BE PROVIDED WITH PLAIN AND SPRING WASHERS.
5. BIMETALLIC CLAMPS SHALL HAVE 'V' NOTCHES TO ACCOMMODATE SQIRREL, WEASEL & RABBIT CONDUCTORS.

	Signatures		ಬೆ ವಿ ಕಂ
Chd	12/1/12 AGM (Q&S)	11 KV 100 AMPS.	BESCOM
Sub	12/1/12 DGM (Q&S)	D.O.L.O CUTOUT	Approved: 12/1/12 General Manager, (Elec.) Quality & Safety
SCALE: N.T.S			DRG.NO.BESCOM/GM/Q&S/ DATED:

DESCRIPTION

1. FUSE HOLDER TOP (GUN METAL)
2. BOTTOM CONTACT (GUN METAL)
3. L ANGLE TOP (GUN METAL) AREA AT THE POINT OF CONTACT SHOULD BE 900 SQ.MM (30X30MM)
4. TOP CONTACT HOLDER (ALUMINIUM CAST)
5. TOP CONTACT TONGUE (ALUMINIUM CAST) CONTACT PORTION SHOULD BE 900 SQ.MM
6. FUSE HOLDER BOTTOM (GUN METAL) CONTACT AREA SHOULD BE 625 SQ.MM (25X25)
7. FIBRE TUBE FOR FUSE
8. SOLID PORCELAIN INSULATOR 11KV CLASS.
9. BIMETALLIC CLAMP TOP WITH TWO BOLTS.
10. BIMETALLIC CLAMP BOTTOM WITH SINGLE BOLT.
11. TINNED BRASS 4MM ø HEX. BOLTS WITH NOTCH FOR SCREW DRIVER AND A BRASS WASHER.
12. PHOSPHOR BRONZE STAY PIECE.
13. 2 NOs. 0.91MM (20 SWG) 25MM WIDE PHOSPHOR BRONZE STRIP BENT SUITABLY TO ENSURE 100% CONTACT.
14. 2 NOs. 0.91MM (20SWG) 25MM WIDE BENT SUITABLY TO ENSURE 100% CONTACT.
15. COPPER JUMPER PIECES 2 NOs. HAVING CONTACT AREA OF 25X30MM.

NOTES:–

1. ALL FERROUS PARTS TO BE HOT DIP GALVANISED.
2. ITEM 13 AND 14 ARE TO BE SUITABLY BENT TO ENSURE 100% CONTACT.
3. ALL DIMENSIONS ARE IN MM.
4. ALL BOLTS AND NUTS SHALL BE PROVIDED WITH PLAIN AND SPRING WASHERS.
5. BIMETALLIC CLAMPS SHALL HAVE 'V' NOTCHES TO ACCOMMODATE SQIRREL, WEASEL & RABBIT CONDUCTORS.

	Signatures	BILL OF MATERIALS FOR 11 KV 100 AMPS. D.O.L.O CUTOUT	ಬೆ ವಿ ಕಂ BESCOM
Chd	AGM (Q&S)		Approved:
Sub	DGM (Q&S)		General Manager,(Elec.) Quality & Safety
SCALE: N.T.S			DRG.NO.BESCOM/GM/Q&S/ DATED: