

**COMMON SCHEDULE OF RATES
FOR ALL ESCOMs
2018-19**

**(11 & 33 KV Systems)
(w.e.f. 15-12-2018)**

COMMON SCHEDULE OF RATES 2018-19

(Effective from 15.12.2018 till further orders)

PREFACE

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

Material prices: Material prices in CSR 2018-19 are FORD (Free on Rail/Road) PRICES for delivery to stores and are inclusive of GST, Freight & Insurance.

Labour Charges: Labour Charges include agencies overhead charges, loss of man hours during non LC period, stoppage of works due to rain and any such conditions. However statutory charges applicable like ESI, PF and GST etc., are not included.

Special Locality Allowance (SLA) additional labour charges towards break down works, labour charges for working on hazardous installations, calamity works, Headload charges, etc., have to be included in the estimate as applicable depending on the type of contract, i.e., labour award, Total turnkey, Partial turnkey, etc.,

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, GoK 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
- d. 4th Common SR – with effect from 20.11.2014
- e. 5th Common SR – with effect from 10.01.2017

A Committee under the Chairmanship of MD, BESCO was formed with the following members for framing CSR 2018-19

Sl.No.	Name of Members	
1	Sri. P Rajendra Cholan, Managing Director, BESCO	Chairman
2	Sri. Venkatesh Kumar, Director (Technical), BESCO	Members
3	Smt. Bharathi, Director (Technical), MESCOM	Members
4	Sri. BT Prakash Kumar, Director (Technical), HESCO	Members
5	Sri. Vinod Havanagi, Director (Technical), GESCOM	Members
6	Sri. Narasimhe Gowda, Director (Technical), CESC	Members
7	Sri. Renu Prasad, CEE, T&P, KPTCL	Members
8	Representative from IEEMA	Members
9	Representative from Directorate of Economics and Statistics	Members

Representative of KSLECA was also invited as an invitee to the meeting.

The CSR 2018-19 Committee met on 07.07.2018 at Bengaluru and issued guidelines for framing of CSR 2018-19. The draft Common SR 2018-19 was prepared in accordance with the directions issued in the meeting

and the Draft CSR 2018-19 was circulated among all ESCOMs. The ESCOMs were requested to furnish their comments and suggestions on the above.

The second CSR 2018-19 meeting was held on 01.12.2018 at Bengaluru to discuss on the draft CSR 2018-19 which included the suggestions made by other ESCOMs, was tabled for discussion before the following members.

SI.No.	Name of the Members	
1	Smt. C. Shika, Managing Director, BESCO	Chairperson
2	Sri. G. Ashok Kumar, Director (Technical), BESCO	Member
3	Sri. Raghu Prakash, Director (Technical), MESCOM	Member
4	Sri. Narasimhe Gowda, Director (Technical), CESC	Member
5	Sri. Renu Prasad, CEE, T&P, KPTCL	Member
6	Sri. K Narasimha Phani, Deputy Director (Economics & Statics)	Member

The methodology adopted for revising material and labour charges is as under.

4.0 Methodology adopted for revising material prices

➤ Material Prices:

- Weighted Average rate of all ESCOM's for materials where the procurement rates are available from 01.01.2017 to 31.05.2018.
- The prevailing SR rates are updated using IEEMA PV formulae. The PV Indices for January-2017 and the average of indices from July-2017 to June-2018 were considered for updating the rates using IEEMA PV.
- Pro-rata rates on the basis of rates available for similar material.
- Worked out rate for the materials like Poles, Conductor & Line materials.
- Neighboring state rates for the materials having common specification.
- Market/Vendor Rates for remaining items.
- Independent Committee rates for RMUs and Transformers.
- KPWD Electrical Schedule of Rates.
- Existing CSR 2016-17 Rates.
- KPWD Civil Schedule of Rates.

Rates for 33KV System: Rates derived from weighted average of procurement rates and updated rates using IEEMA PV are considered for 33KV system works. Also KPTCL SR 2016 rates have been adopted for some of the materials.

Scrap Materials:

1. The scrap rates are the disposal rates of BESCO through MSTC. These rates are only indicative.
2. The scrap transformers of different make have different sizes of tanks, different weights of coils, cores etc., hence disposal of such scrap transformers have to be made on the basis of rates of individual parts instead of whole transformer.

Deletion of material: The prevailing CSR 2016-17 included some items which are not required to be used due to either becoming obsolete or change in the specifications. (Please see Pg No. 168).

Materials Deleted:

Some of the materials which are obsolete and some of the materials for which specifications are revised have been deleted. The list is furnished in the CSR 2018-19 vide Pg No. 167

1. All Distribution Transformers which are below Star 1 (previous 4 Star rating). The MOP has directed that only Star 1 Transformers shall be used in rural areas and Star 2 in city area.
2. TC Structures and DP Structures: Consequent to increased weights of Star 1 & Star 2 Transformers existing structures have been revised and new Bill of Materials introduced.
3. Usage of flat armoured (strip) HT UG cable is discontinued as round armoured cables are more strong mechanically and can carry higher fault level current.
4. HT Metering cubicle with Load Break Switch, as consumers equipment shall not be integrated with ESCOM assets.
5. 11kV CTs of 0.5 Class (only CTs of accuracy class 0.2 and secondary 1 Amps have to be used).
6. Short Barrel Lugs/Terminals (only Long Barrel Lugs/Terminal have to be used for better electrical contact and mechanical strength).
7. RLMU and Fixed capacitors for DTCs (These works are not being taken up).
8. CFL, Tube light, SV & MV Lamps (LED have to be used).

New Materials: Some of the new items have been considered for inclusion.

5.0 Methodology adopted for revising Labour

- **The Labour Charges:** Labour charges are updated considering the present Labour Index of 7106 published by Directorate of Economics and Statistics, Bengaluru which works out to be +8.75% and rounded off to 10%. Labour Charges include agencies overhead charges, loss of man hours during non LC period, stoppage of works due to rain and any other such conditions. The above overheads are covered in the labour charges while framing CSR 12-13 when Labour charges were increased by 40% against 17.24% admissible as per labour index as one time settlement.
- The following Labour Charges included in CSR 2016-17 are continued.
- **Special Locality allowance**
- Shall be paid for the approved places as indicated in (Please see Pg No. 270).
- The special locality allowance is allowable only on basic labour charges and not on additional labour charges like works at hazardous installation and break down charges etc.
- The following Labour Charges are continued:
 - Revised Labour Charges for LT Re-conductoring of ACSR Conductor and AB Cables with 3% sag.
 - 45% - Special Labour Charges for works under Calamity.
 - 10% - Additional Labour Charges for works under Hazardous Condition.
 - 25% - Additional Labour Charges for works under break down.
 - Erection charges for erecting 11mtr spun poles using machinery.

Special Labour Charges for :

- 1 to 2 Poles Works & 3 to 5 Poles Works in respect of Gangakalyana & Drinking Water Works. (Cost Data Sheet - 44 & 45)
- 1 to 4 Poles works in respect of Service Connection, E&I Works. (Cost Data Sheet - 46)

- Shifting the existing cut point conductor to the newly erected pole and dead ending of ACSR Conductor to the new pole and shifting of the pole, and shifting of the cable and other accessories to newly erected pole included. (Cost Data Sheet - 47)

NOTE: The above special Labour charges are applicable for works awarded on labour contract only and WHEN THE WORKS ARE AWARDED UNDER RATE CONTRACT AND TENDER THESE RATES ARE NOT APPLICABLE

Releasing Labour Charges: 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: 23.10.2007.

Depreciation: 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 BBMP and other civic bodies, then the releasing of the cable need not be resorted to.

6.0 ESCOM Employees Cost/Establishment cost:

The Nomenclature of Employees Cost has been renamed as ESCOMs Establishment Cost to avoid confusion. This cost is a notional amount provided in the estimate to cover ESCOMs Employees Cost to be charged off to works and is not payable to any agencies.

7.0 Cost Data Sheet:

- Cost data sheets for works of providing HT & LT Over Head Lines, Aerial Bunched Cables, erection of Distribution Transformers, Compact RMUs & Compact Sub Stations, Laying of HT UG Cables (both Trenchless Technology and Soil Excavation) have been worked out and included in the Common SR for easy reference. Cost data sheets for providing RLMU and capacitors for DTCs are not provided as these works are not taken up.
- For short lines less than 1 KM, the estimates shall be prepared as per actual requirement.
- 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.
- The Cost Data Sheets prepared is for straight lines and estimates/DPR have to be prepared as per actual field requirement.
- Bills shall be passed for the actual works carried out duly enclosing joint inventory and sketch and not on the basis of Cost Data Sheet.
- 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
- However any modification or addition/deletion may be considered depending on the field conditions.
- The Regular Labour Charges which were being mentioned in the Cost Data Sheets have been discontinued to avoid confusion. This regular labour charges are covered as ESCOMs Employees/Establishment Charges in the abstract of 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, HT 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.

8.0 Statutory Payments:

- a. The prevailing rates of inspection of works revised vide No: E.N.71 EBS 2007, dated: 28.08.2008 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.

Change in Specification:

Specification has been revised for Compact Sub stations duly revising the capacity of ACB, MCCB, No. of LT circuits etc., depending on the capacity of the transformer in the Compact Sub station.

9.0 General Guidelines:

(A) Usage of ACSR Conductor

- 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.
- d) **Returning of the ACSR Conductor:** While executing the re-conductoring work the released conductor shall be returned to stores as credit in accordance with circular No. BESCO/GM (T)/ BC-20/F-664/ 05-06/CYS-174, Dt: 10.01.2006. (See page No. 298)

(B) Usage of Poles:

- a. ESCOMS are/were procuring different types of poles namely RCC, PCC, PSC & PSCC Poles.
- b. The Cost of the RCC Pole was considerably higher and the working load was also less.
- c. BESCO constituted a Committee to study the usage of poles for various types of works. The Committee included members from BESCO, CPRI, Civil Aid, KERC, IISC.
- d. The Committee after deliberation discussion and analysis unanimously opined that the usage of RCC pole can be discontinued and PCC/PSC/PSCC which are the same may be used for dead end, Anchor points, Structures etc., and may be renamed as PSCC Poles duly specifying the working load.
- e. BESCO has already implemented the same and a circular vide CYS-197 dtd: 27.03.2017 is issued which is appended to CSR.

(C) Transformers:

- a. As per MOP directions, only Star 1(Previous 4 Star) rated transformers have to be used in Rural areas and Star 2 (Previous 5 Star) rated transformers have to be used in Urban/City areas.
- b. For Self-execution and layout works only Star 2 (Previous 5 Star) Transformers have to be provided.

(D) 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.,.

(E) Providing of GOS and HG Fuse unit:

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

(F) Providing Distribution Boxes and LT Protection Kit and DTCs:

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 capacities shall be provided with LT Distribution Box with MCCB, the rate has been furnished in the Common SR.

(G) EG Stirrups:

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.

(H) Guy set:

Guy set includes Anchor Rod, Turn buckle, Guy wire, Strain Insulator, Guy clamp with Bolts, Nuts and Washers

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.**

(I) For Self Execution Works & 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 equipment shall be maintained for the entire life time by the consumer. In all Self Execution works provision shall be made for Star 2 (Previously 5 Star) Transformers.

10.0 Material & Labour charges not provisioned

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, BESCO or from the concerned Corporate office of ESCOMs. When the rates are approved at ESCOMs the same shall be intimated to GM(QS&S) BESCO for incorporating the same in the CSR 2016-17.

NOTE:

- a. Estimates shall not be split to show the pole works and Transformers works etc., separately to claim the special labour charges.
- b. Certificate has to be furnished by the section officer who prepares the estimate that the estimates are not split to claim the special labour charges.

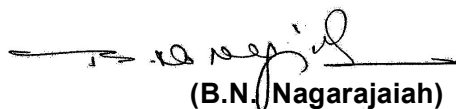
11.0 Preparation of the Estimate for TTK and PTK:

The following additional components have to be included while preparing estimate for Distribution work which are executed on turnkey/partial turnkey basis:

- a. GST as applicable on labour cost.
- b. Transportation cost from Stores to site @ 2% on materials cost.
- c. Watch and ward cost @ 1% on materials cost.
- d. Insurance charges @ 1% on material cost against theft & accidents.
- e. Performance guarantee and loss of interest on margin for bank Guarantee (BG) @ 2.5% of the value of BG.
- f. Statutory charges as per actual (For Inspectorate, Civic body etc.,)
- g. Compensation cost as per approved norms for tree cutting, crop insurance etc.

NOTE:

1. Estimates shall not be split to show the pole works and Transformers works etc., separately to claim these special labour charges.
2. 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.
3. 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**.
4. 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.
5. 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.



(B.N. Nagarajaiah)
CONVENOR SR COMMITTEE &
GENERAL MANAGER (ELE.), Q, S&S, BESCOM.

Index

Non- REC General Works

	Page No.
Part -1	
Cost sheets for 11 kV Distribution Lines and Transformer Centres	
(a) Abstract for preparation of estimates (Typical Cost Data Sheet) for Labour contract, Total Turnkey, Partial Turnkey, Deposit Contribution, Self execution & Service connection Works	11-17
(b) Rates for various Line materials and Labour charges used in cost Data Sheets for General Works	18-25
(c) Abstract of Cost Data Sheet (1 to 71)	26-34
(d) Individual Cost Data Sheet (1 to 71)	35-126
Part - 2	
(a) Schedule of Rates for Standard Stock Materials for 11KV system	127-165
(b) Deleted Items of 11kV Systems	167-179
(c) Bill of Materials (1 to 19)	180-204
Part- 3	
(a) Schedule of Rates for Labour (11KV System)	205-231
Part - 4	
(a) Schedule of Rates for Standard Stock Materials for 33KV system	233-242
(b) Deleted Items of 33kV Systems	243
Part - 5	
(a) Schedule of Rates for Labour (33KV System)	245-267
Part - 6	
(a) Special Locality Allowance	270
(b) Testing, Precommissioning charges and Transformer Repair (Major & Minor) Charges	271-272
Part - 7	
(a) Technical Specification for Overhead and Underground Service Connection Works	273-277
Part - 8	
(a) Scale of Inspection Fees of Electrical Inspectorate Schedule	279-290
Part - 9	
(a) Circulars	291-340

PART - 1

Cost sheets for 11 kV Distribution Lines and
Transformer Centres Common SR 2018-19

A. Abstract for preparation of estimates

SINo	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. 270 of CSR 2018-19)	
4	Head load charges (if applicable)	
5	Total Labour Charges 2+3+4	
6	Break Down Charges at 25% on labour for speedy restoration of power on Sl. No. 5 as above. (To be incorporated after competent approval).	In case of admissibility of 6/7/8 any one of the charges is admissible on 5
7	Additional labour charges at 10% on Sl. No. (5) for working on Hazardous installations. (To be incorporated after competent approval).	
8	Additional Labour Charges for Calamity works at 45% on Sl No.5 after competent approval.	
9	GST @ 18% on Total labour charges.	
10	Contribution towards employees provident fund charge @ 13% & ESI @ 4.75% (wherever applicable) on Total labour charges	
11	**Transportation cost from stores to site (wherever applicable at 2% on material cost)	
12	*Contingencies @ 2% on Total material & labour	
13.	ESCOM Establishment cost @ 20% on labour charges as applicable (This is a “Notional Amount” and not to be collected from the agencies nor payable to any agency)	
14	Statutory charges as per actuals (Inspectorate charges, civic body charges etc.,)	
15	Compensation cost for tree cutting etc., as per approved norms.	
16	Any other charges if applicable	
17	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.
- 3) **It shall not be construed that all the above amounts mentioned in the estimates has to be paid to the contractor. The payment shall be arranged as per actuals.**
- 4) 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.
- 5) **The ESCOM Employees cost vide Sl. No. 11 is for estimate purpose to cover ESCOM establishment cost and is not to be collected from any agency nor payable to any agency.**

B. Abstract for preparation of Estimates for TOTAL TURNKEY

SINo	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. 270 of SR 2018)	
4	Head Load charges (if applicable)	
5	Total Labour Charges 2+3+4	
6	ESCOM Establishment cost @ 20% on labour charges as applicable (This is a “ Notional Amount ” and not to be collected from the agencies nor payable to any agency)	
7	GST @ 18% on Total labour charges.	
8	Contribution towards employees provident fund charge @ 13% & ESI @ 4.75% (wherever applicable) on Total labour charges	
9	Transportation cost from stores to site @ 2% on material cost	
10	Contingencies @ 2% on material + labour cost	
11	Watch and ward cost @ 1% on material cost	
12	Insurance cost against theft & accident @ 1% on material cost	
13	Performance guarantee and loss of interest on margin money for BG @ 2.5% of the value of BG	
14	Statutory charges as per actual (Inspectorate charges, civic body charges etc.,)	
15	Compensation cost for tree cutting etc., as per approved norms	
16	Total Cost of Estimate 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.
- 4) **The ESCOM Employees cost vide Sl. No. 3 is for estimate purpose to cover ESCOM establishment cost and is not to be collected from any agency nor payable to any agency.**

C. Abstract for preparation of Estimates for PARTIAL TURNKEY

SINo	Particulars		Amount in Rs.
1	Materials cost	ESCOM's portion	
		Agency portion	
		Total	
2	Labour charges		
3	Special Locality Allowance @% on labour charges on Sl. No. 2 above (applicable for areas mentioned in page no. 270 of CSR 2018)		
4	Head Load charges (if applicable)		
5	Total Labour Charges 2+3+4		
6	ESCOM Establishment cost @ 20% on labour charges as applicable (This is a "Notional Amount" and not to be collected from the agencies nor payable to any agency)		
7	GST @ 18% on Total labour charges.		
8	Contribution towards employees provident fund charge @ 13% & ESI @ 4.75% (wherever applicable) on Total labour charges		
9	Transportation cost from stores to site @ 2% on material cost		
10	Contingencies @ 2% on material + labour cost		
11	Watch and ward cost @ 1% on material cost		
12	Insurance cost against theft & accident @ 1% on material cost		
13	Performance guarantee and loss of interest on margin money of BG @ 2.5% of the value of BG		
14	Statutory charges as per actuals (Inspectorate charges, civic body charges etc.,		
15	Compensation cost for tree cutting etc., as per approved norms		
16	Total Cost of Estimate 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.
- 4) **The ESCOM Establishment cost vide Sl. No. 3 is for estimate purpose to cover ESCOM employees cost and is not to be collected from any agency nor payable to any agency.**

D. Abstract for preparation of estimates on Deposit Contribution work

SINo	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. 270 of CSR 2018)	
4	Head load charges (if applicable)	
5	Total Labour Charges 2+3+4	
6	ESCOM Establishment cost @ 20% on labour charges as applicable (This is a “ Notional Amount ” and not to be collected from the agencies nor payable to any agency)	
7	GST @ 18% on Total labour charges.	
8	Contribution towards employees provident fund charge @ 13% & ESI @ 4.75% (wherever applicable) on Total labour charges	
9	Transportation cost from stores to site @ 2% on material cost wherever applicable	
10	% *Contingencies @ 2% on Total material & labour	
11	Statutory charges such as Road cutting charges payable to BBMP or local authorities as per actuals	
12	Government electrical inspectorate charges as per actuals	
13	Compensation cost for tree cutting etc., as per approved norms	
14	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 in respect of material, labour and ESCOM establishment cost has to be collected from the applicant before commissioning.

E. Abstract for preparation of estimates on Self execution work

SINo	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. 270 of CSR 2018)	
4	Head load charges (if applicable)	
5	Total Labour Charges 2+3+4	
6	ESCOM Establishment cost @ 20% on labour charges as applicable (This is a “ Notional Amount ” and not to be collected from the agencies nor payable to any agency)	
7	*Contingencies @ 2% on Total material & labour	
8	Employees cost @ 20% on total labour Charges (has to be collected from the agencies)	
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	Any other component if applicable	
13	Total Cost of Estimate in Rs.	

Note :

- 1) Supervision charges shall be as per KERC code.
- 2) All the materials required for execution of works have to be arranged by the agencies.
- 3) No material shall be supplied by ESCOMs.
- 4) 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 respective ESCOM approved vendors. Bills and Test Certificate in respect of the materials procured shall be collected from the prospective consumers/representative before commissioning.

F. Abstract for preparation of Estimates for TOTAL TURNKEY (33kV System)

SINo	Particulars	Amount in Rs.
1	Materials cost	
2	Labour charges	
3	Civil Engineering Charges	
4	Total Material Cost = Material cost + 70% of civil Engineering Charges.	
5	Special Locality Allowance @% on labour charges on SI. No. 2 above (applicable for areas mentioned in page no. 270 of CSR 2018)	
6	Total Labour Charges = Labour charges + Special Locality Allowance + 30% Civil Engineering charges.	
7	ESCOM Establishment cost @ 20% on labour charges as applicable (This is a “Notional Amount” and not to be collected from the agencies nor payable to any agency)	
8	Employees cost at 20% of the labour charges (not to be collected from the agency nor payable to any agency)	
9	GST @ 18% on Total labour charges.	
10	Contribution towards Employee Provident Fund Charges & ESI @ 4.75% (wherever applicable) on Total labour charges at 13%	
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. (if Applicable)	
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.
- 4) **The Employees cost vide SI. No. 7 is for estimate purpose to cover BESCO employees cost and is not to be collected from any agency nor payable to any agency.**

**Rates for various Line Materials and Labour charges
used in Cost Data Sheets for General Works**

Sl. No.	Particulars	Unit	Material Rate in Rs	Labour Charge Complete (Including Erection, Excavation & Fixing) in Rs
1	2	3	4	5
I	RCC Pole			
a)	RCC Pole - 9.5 Mtr Long, 300 Kg WL for 33 kV Lines	No	7627	1510
b)	RCC Pole - 9 Mtr Long, 145 Kg WL	No	6258	1166
c)	RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section	No	7165	1166
d)	RCC Pole - 8 Mtr Long, 115 Kg WL	No	4706	932
II	PSCC Pole			
a)	PSCC Pole - 11 Mtr Long, 365 Kg WL for intermediate poles only	No	7874	1707
b)	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	3689	1166
c)	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	4686	1166
d)	PSCC Pole - 8 Mtr Long, 140 Kg WL	No	2496	932
e)	PSCC Pole - 8 Mtr Long, 200 Kg WL	No	3054	932
III	Pre - Stressed Tubular Spun Pole			
a)	Pre - Stressed Tubular Spun Pole 11 Mtr Long - 500 Kg WL	No	16850	2901
IV	Double Pole Structure complete including 5 Kg, 8 SWG GI Wire for Structure Grounding			
a)	9M RCC Pole	Set	17450	3578
b)	8M RCC Pole	Set	14346	3414
c)	9M PSCC Pole with 300 Kg WL	Set	14306	3578
V	3 Pole structure complete including 5 Kg, 8 SWG GI Wire for Structure Grounding			
a)	9M RCC Pole	Set	28726	6899
b)	8M RCC Pole	Set	24070	6653
c)	9M PSCC Pole with 300 Kg WL	Set	24010	6899
VI	Double Pole Transformer Structure complete with cross arms, braces, clamps, bolts & nuts and washers including 2 No of Poles			
a)	For 25/63/100 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL - MS	Set	23420	4527
b)	For 25/63/100 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL - GI	Set	28577	4527

SI. No.	Particulars	Unit	Material Rates in Rs.	Labour Charge Complete (Including Erection, Excavation & Fixing) in Rs
1	2	3	4	5
c)	For 25/63/100 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 145 Kg WL - MS	Set	26439	4527
d)	For 25/63/100 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 145 Kg WL - GI	Set	31550	4527
e)	For 100/300 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL - MS	Set	27314	4662
f)	For 100/300 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL - GI	Set	33912	4662
g)	For 100/300 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 145 Kg WL - MS	Set	30213	4662
h)	For 100/300 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 145 Kg WL - GI	Set	36721	4662
VII	Single Pole Mounted Transformer (SPMT) Kit for erection of on 9 Mtr Square section RCC/PSCC Pole (Excluding erection of poles)			
a)	For 25/63 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section Without H Frame - MS	Set	4604	1118
b)	For 25/63 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section Without H Frame - GI	Set	6349	1118
c)	For 25/63 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section With H Frame - MS	Set	9180	1118
d)	For 25/63 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section With H Frame - GI	Set	12633	1118
e)	For 25 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL Without H Frame - MS	Set	5584	1733
f)	For 25 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL Without H Frame - GI	Set	7690	1733
g)	For 25kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL With H Frame - MS	Set	9576	1733
h)	For 25kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL With H Frame - GI	Set	13176	1733
VIII	Fixing Single Pole Mounted Transformer (SPMT) Kit on 11 Mtr Spun Pole (Excluding erection of poles)			
a)	Single H Frame with Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 25 kVA (OH Line) - MS	Set	19691	2236

SI. No.	Particulars	Unit	Material Rates in Rs.	Labour Charge Complete (Including Erection, Excavation & Fixing) in Rs
1	2	3	4	5
b)	Single H Frame with Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 25 kVA (OH Line) - GI	Set	27065	2236
c)	Three H Frame with Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 25 kVA (UG Cable) - MS	Set	26734	2236
d)	Three H Frame with Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 25 kVA (UG Cable) - GI	Set	36728	2236
e)	Single H Frame without Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 63/100/250/500 kVA (OH Line) - MS	Set	10171	2236
f)	Single H Frame without Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 63/100/250/500 kVA (OH Line) - GI	Set	13992	2236
g)	Three H Frame without Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 63/100/250/500 kVA (UG Cable) - MS	Set	16352	2236
h)	Three H Frame without Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 63/100/250/500 kVA (UG Cable) - GI	Set	22463	2236
IX	11 kV, Horizontal Cross Arm with HT Single Top supports, clamps, bolts, nuts & washers - MS			
a)	For RCC Pole	Set	444	106
b)	For PSCC Pole 140 KG WL	Set	435	106
c)	For PSCC Pole 200 KG WL	Set	438	106
d)	For PSCC Pole 300 KG WL	Set	447	106
IX	11 kV, Horizontal Cross Arm with HT Single Top supports, clamps, bolts, nuts & washers - GI			
a)	For RCC Pole	Set	586	106
b)	For PSCC Pole 140 KG WL	Set	573	106
c)	For PSCC Pole 200 KG WL	Set	579	106
d)	For PSCC Pole 300 KG WL	Set	589	106
X	11 kV, Horizontal Cross Arm with clamps, bolts, nuts & washers for DC Line - MS			
a)	For RCC Pole	Set	332	89

SI. No.	Particulars	Unit	Material Rates in Rs.	Labour Charge Complete (Including Erection, Excavation & Fixing) in Rs
1	2	3	4	5
b)	For PSCC Pole 140 KG WL	Set	323	89
c)	For PSCC Pole 200 KG WL	Set	326	89
d)	For PSCC Pole 300 KG WL	Set	335	89
XI	11 kV, Horizontal Cross Arm with clamps, bolts, nuts & washers for DC Line - GI			
a)	For RCC Pole	Set	441	89
b)	For PSCC Pole 140 KG WL	Set	428	89
c)	For PSCC Pole 200 KG WL	Set	434	89
d)	For PSCC Pole 300 KG WL	Set	444	89
XII	LT 4 Pin Cross Arm with clamps, bolts, nuts & washers with brace - MS			
a)	For RCC Pole	Set	272	106
b)	For PSCC Pole 140 KG WL	Set	263	106
c)	For PSCC Pole 200 KG WL	Set	266	106
d)	For PSCC Pole 300 KG WL	Set	275	106
XIII	LT 4 Pin Cross Arm with clamps, bolts, nuts & washers with brace - GI			
a)	For RCC Pole	Set	360	106
b)	For PSCC Pole 140 KG WL	Set	347	106
c)	For PSCC Pole 200 KG WL	Set	353	106
d)	For PSCC Pole 300 KG WL	Set	363	106
XIV	LT 2 Pin Cross Arm with clamps, bolts, nuts & washers with braces - MS			
a)	For RCC Pole	Set	168	106
b)	For PSCC Pole 140 KG WL	Set	159	106
c)	For PSCC Pole 200 KG WL	Set	162	106
d)	For PSCC Pole 300 KG WL	Set	171	106
XV	LT 2 Pin Aross Arm with clamps, bolts, nuts & washers with braces - GI			
a)	For RCC Pole	Set	223	106
b)	For PSCC Pole 140 KG WL	Set	210	106

SI. No.	Particulars	Unit	Material Rates in Rs.	Labour Charge Complete (Including Erection, Excavation & Fixing) in Rs
1	2	3	4	5
c)	For PSCC Pole 200 KG WL	Set	216	106
d)	For PSCC Pole 300 KG WL	Set	226	106
XVI	LT Cross Arm for vertical configuration with clamps, bolts, nuts & washers (MS)	Set	645	316
XVII	HT Single Top Support with bolts, nuts & washers (MS)	Set	112	70
XVIII	LT Single Top Support with bolts, nuts & washers (MS)	Set	95	70
XIX	Insulator			
a)	11 kV Ceramic Pin insulator with GI pin	No	105	Included in stringing
b)	No. 15 Strain Insulator	No	35	
c)	No. 8 Strain Insulator	No	16	
d)	1.1 kV Ceramic Pin Insulator With GI pin	No	48	
e)	11 kV, 5 KN Composite/Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	180	
f)	45 KN Disc Insulator	No	301	
g)	70 KN Disc Insulator (Ball & Socket type)	No	431	
h)	90 KN Disc Insulator (Ball & Socket type)	No	493	
i)	11 kV, 45 KN Polymeric Insulator	No	164	
j)	11 kV, 70 KN Polymeric insulator	No	264	
XX	ACSR conductor as per IS : 398 (Part - 2/1996) are the latest revision			
a)	Weasel ACSR (6/2.59 mm Al+1/2.59 mm St), Std Wt: 128 Kg/KM	KM	21552	2104
b)	Rabbit ACSR (6/3.35 mm Al+1/3.35 mm St), Std Wt: 214 Kg/KM	KM	36497	2869
c)	Coyote ACSR (26/2.54 mm Al+7/1.90 mm St), Std Wt: 521 Kg/KM	KM	100111	5011
d)	Lynx ACSR (30/2.79 mm Al + 7/2.79 mm St), Std Wt: 842 Kg/KM	KM	148499	-
XXI	Guy Wire & GI Wire			
a)	7/10 SWG Guy Wire (7/3.251 mm Dia), Std Wt: 128 Kg/KM	MT	65137	-
b)	8 SWG GI Wire (4.064 mm Dia), Std Wt: 125 Kg/KM	MT	63293	-
c)	10 SWG GI Wire (3.251 mm Dia), Std Wt: 128 Kg/KM	MT	66777	-
d)	GI Barbed Wire 12 SWG	MT	78584	-

Sl. No.	Particulars	Unit	Material Rates in Rs.	Labour Charge Complete (Including Erection, Excavation & Fixing) in Rs
1	2	3	4	5
XXII	Guarding			
a)	Providing guarding for HT & LT line at Road crossings, Telephone line crossings etc up to span of 60 Mtr (Including labour for fixing of necessary cross arms)	Per Span	Rs.80 per Mtr	663
b)	Providing guarding between HT & LT line up to a Span of 40 Mtr (Including labour for fixing of necessary cross arms)	Per Span	Rs. 80 per Mtr	663
c)	Providing guarding between HT & LT line above 40 Mtr span (Including labour for fixing of necessary cross arms)	Per Span	Rs. 80 per Mtr	1165
XXIII	Guy Set			
a)	Guy set with No. 15 Strain Insulator & Concreting materials as per Dwg No. BESCO/GM/CP/7 Dt: 24.10.07	Set	830	390
b)	Guy set with 2 Nos of No.15 Strain Insulator & Concreting materials as per Dwg No. BESCO/GM/CP/7 Dt: 24.10.07	Set	865	412
c)	Guy set with No. 8 Strain Insulator & Concreting materials as per Dwg No. BESCO/GM/CP/7 Dt: 24.10.07	Set	811	390
d)	Guy concreting with Boulders, Mud & Sand as per Dwg No. BESCO/GM/CP/7 Dt: 24.10.2007 (with out Cement)	Each	Material + Labour	174
XXIV	EG Stirrup with GI Lacing	Set/2 Nos	191	109
XXV	Spiral Earth Electrode	Set	165	61
XXVI	Anti Climbing Device (12 Mtr GI Barbed wire)	No	76	28
XXVII	Caution/Danger Board	No	146	53
XXVIII	Distribution Transformer - 3 Phase, 11kV/433V - Stacked Core with Oil			
	A. OPEN BUSHING TYPE			
a)	25 kVA, Aluminum Wdg, Star 1 (4 Star)	No	64900	750
b)	25 kVA, Aluminum Wdg, Star 2 (5 Star)	No	74365	750
c)	63 kVA, Aluminum Wdg, Star 1 (4 Star)	No	120360	750
d)	63 kVA, Aluminum Wdg, Star 2 (5 Star)	No	128304	750
e)	100 kVA, Aluminium Wdg, Star 1 (4 Star)	No	148680	1001
f)	100 kVA, Aluminium Wdg, Star 2 (5 Star)	No	155931	1001
g)	250 kVA, Aluminium Wdg, Star 1 (4 Star)	No	336300	1502
h)	250 kVA, Aluminium Wdg, Star 2 (5 Star)	No	386745	1502
i)	500 kVA, Aluminium Wdg, Star 1 (4 Star)	No	566400	2001
j)	500 kVA, Aluminium Wdg, Star 2 (5 Star)	No	651360	2001

Sl. No.	Particulars	Unit	Material Rates in Rs.	Labour Charge Complete (Including Erection, Excavation & Fixing) in Rs
1	2	3	4	5
XXIX	LT Distribution Box for Transformer			
a)	LT Distribution Box for 100 kVA DTC with MCCB's (Sheet Metal)	No	17545	501
b)	LT Distribution Box for 250 kVA DTC with MCCB's (Sheet Metal)	No	17644	501
c)	LT Distribution Box for 250 kVA DTC with MCCB's (SMC)	No	17644	501
XXX	11 kV, GOS			
a)	200 Amps, Single Break	Set	7799	700
b)	400 Amps, Double Break	Set	17545	777
XXXI	11 kV, Solid Core HG Fuse Unit	Set (3 Nos)	882	155
XXXII	11 kV, DOLO Cutout	Set (3 Nos)	4848	155
XXXIII	Lightning Arrester			
a)	9 kV, 5 kA Metal Oxide Ceramic Type with ground disconnecter	Set (3 Nos)	786	78
b)	9 kV, 5 kA Polymeric Type with Ground disconnecter	Set (3 Nos)	1335	78
XXXIV	Transformer grounding			
a)	GI Grounding pipe, B - Class, 42 mm dia, 2.5 Mtr long, 3.2 mm thick with bolts nuts, GI Strips and washers complete Minimum Weight of GI Pipe: 7.3 Kgs	Per Electrode	1501	631
b)	Rod Type	Set	1832	-
XXXV	Concreting with Material & Labour			
A	Base concreting CC 1:4:8			
a)	For 11/9.5/9/8 Mtr Pole	500x650x150 mm		237
b)	For 9 Mtr Square Pole	650x650x150 mm		308
c)	For 11 Mtr Spun Pole	1000x1000x150 mm		730
B	Pole concreting CC 1:2:4 (without coping)			
a)	For 9.5 Mtr Pole	650x500x1850 mm		2988
b)	For 9 Mtr Pole	650x500x1700 mm		2746
c)	For 9 Mtr Square Pole	650x650x1700 mm		3440
d)	For 11 Mtr Spun Pole	1000x1000x2500 mm		12177
e)	For 11 Mtr PSCC Pole	650x500x2000 mm		2912
f)	For 7.5/8 Mtr Pole	400x400x1500 mm		1051

Sl. No.	Particulars	Unit	Material Rates in Rs.	Labour Charge Complete (Including Erection, Excavation & Fixing) in Rs
1	2	3	4	5
g)	Guy concreting with Boulders, Mud & Sand As per Drawing No. BESCO/GM/CP/7 Dt: 24.10.07	Each	-	174
C	Providing Coping for Poles with CC 1:2:4 (As per actuals)			
a)	150 mm around pole for an height of 300 mm for RCC/PSCC Pole	Each	-	471
b)	390 mm all around the pole for an height of 300 mm for Spun Pole	Each	-	1930
D	Guy concreting in Marshy area:			
a)	Providing cement concrete 1:2:4 for Anchor Rod in Marshy/Black Cotton Soil 600x600x450 mm	Each	-	881
XXXVI	11 kV, 3 Core, HTUG Cable for insulations High quality clean XLPE compound shall be used (Free from microvoids, Moisture content, ambers and contaminations) with pressure extruded, inner sheeth ROUND WIRE ARMoured as per IS-7098 (Part-2) Armouring wires dia in average \pm 2.5% and Resistivity 14 Ohms/KM (Max) as per IS-3975			
a)	95 Sqmm, (54 GI Wires - 2.5 mm Dia)	KM	782621	39377
b)	120 Sqmm, (57 GI Wires - 2.5 mm Dia)	KM	999586	39377
c)	150 Sqmm, (59 GI Wires - 2.5 mm Dia)	KM	1149524	39377
d)	185 Sqmm, (51 GI Wires - 3.15 mm Dia)	KM	1201800	41565
e)	240 Sqmm, (55 GI Wires - 3.15 mm Dia)	KM	1471370	41565
f)	300 Sqmm, (58 GI Wires - 3.15 mm Dia)	KM	1692076	43751
g)	400 Sqmm, (51 GI Wires - 4 mm Dia)	KM	2245566	43751
XXXVII	Providing Electronic Trivector Meter with associated CT's Metering Box etc., on LT side of Distribution Transformer Center (including cost of Energy Meter)			
a)	For 15/25 kVA DTC with CT Ratio 50/5 Amps	Set	7812	1260
b)	For 50/63 kVA DTC with CT Ratio 100/5 Amps	Set	7392	1260
c)	For 100 kVA DTC with CT Ratio 150/5 Amps	Set	7089	1260
d)	For 250 kVA DTC with CT Ratio 400/5 Amps	Set	7251	1260
e)	For 500 kVA DTC with CT Ratio 800/5 Amps	Set	7383	1260

ABSTRACT OF COMMON SR 2018-19 COST DATA SHEETS

Cost Data Sheet No.	Particulars	Unit	CSR 2018-19	
			Total cost of Estimate (in Rs.)	Labour Charges ESCOM Establishment Cost (@20% on Labour charges) (In Rs.)
			Material + Labour	Labour
1	Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 40 Mtr Using RABBIT ACSR Conductor	KM	313202	51580
2	Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 50 Mtr Using RABBIT ACSR Conductor	KM	279959	44124
3	Running Single Circuit 11 kV, 3 Phase Power Line on 8 Mtr Supports with an Average Span of 50 Mtr Using RABBIT ACSR Conductor	KM	259267	39518
4	Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 40 Mtr Using COYOTE ACSR Conductor	KM	541888	60494
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 Mtr using RABBIT Conductor for HT and WEASEL for LT Lines	KM	492933	77143
6	Running Single Circuit 11 kV, 3 Phase Power Line & 3 Phase 4 Wire Secondary Line on 9 Mtr Supports with an Average Span of 40 Mtrs Using RABBIT ACSR Conductor for HT & LT Lines	KM	585881	80963
7	Running LT, 3 Phase 4 Wire Power Line on 8 Mtr Supports Using WEASEL ACSR Conductor with an Average Span of 60 Mtr (IP Installations)	KM	196437	33340
8	Running LT, 3 Phase 4 Wire Power Line on 8 Mtr Supports Using RABBIT ACSR Conductor with an Average Span of 40 Mtr	KM	294420	44335
9	Running LT, 3 Phase 4 Wire Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor with an Average Span of 40 Mtr	KM	317062	50185
10	Running LT, 3 Phase 5 Wire for Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor for Phase, Neutral and WEASEL Conductor for Street Light with an Average Span of 40 Mtr (For Cities, Towns and Residential Layouts)	KM	372870	56797
11	Running LT, 3 Phase 5 Wire for Power Line on 8 Mtr Supports Using RABBIT ACSR Conductor for Phase, Neutral and WEASEL Conductor for Street Light with an Average Span of 50 Mtr	KM	318855	44778
12	Running LT Single Phase 3 Wire Power Line on 8 Mtr Supports with an Average Span of 40 Mtr Using WEASEL ACSR Conductor	KM	227412	42896

Cost Data Sheet No.	Particulars	Unit	CSR 2018-19	
			Total cost of Estimate (in Rs.)	Labour Charges ESCOM Establishment Cost (@20% on Labour charges) (In Rs.)
			Material + Labour	Labour
13	Running LT, 3 Phase 5 Wire Power Line with Continuous Earth Wire on 9 Mtr Supports Using RABBIT ACSR for Phase, Neutral and WEASEL Conductor for Street Light and 8 SWG GI Wire for Continuous Earth Wire with an Average Span of 40 Mtr in Vertical Configuration	KM	397070	63468
14	Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor With an Average Span of 40 Mtr in Vertical Configuration in Congested Areas	KM	336608	58417
15	Providing 2 Pole Structure at the Tapping Point Using RCC Pole			
	a) 8 Mtr RCC	Per Unit	49650	5915
	b) 9 Mtr RCC	Per Unit	52918	6079
16	Erection of 3 Pole Structure using RCC Pole - 9 Mtr Long, 145 kg WL	Per Unit	42719	8964
17	Providing Metering to IP Set Installations Using SMC/MS Box	Nos	7011	770
18	For laying of 1 KM Length of 11 kV, 3x95 Sqmm XLPE UG Cable Using Horizontal Drilling with 6" Bore Size Without HDPE Pipe	KM	1514430	686222
19	For Laying of 1 KM Length of 11 kV, 3x95 Sqmm XLPE UG Cable Using Conventional Laying with Excavation of Soil	KM	1203878	228954
20	For Laying of 1 KM Length of 11 kV, 3x240 Sqmm XLPE UG Cable Using Horizontal Drilling with 6" Bore Size Without HDPE Pipe	KM	2202580	686331
21	For Laying of 1 KM Length of 11 kV, 3x240 Sqmm XLPE UG Cable Using Conventional Laying with Excavation in Soil	KM	1901031	231142
22	For Laying of 1 KM Length of 11 kV, 3x400 Sqmm XLPE UG Cable Using Horizontal Drilling with 6" Bore Size Without HDPE Pipe	KM	2982439	686441
23	For laying of 1 KM Length of 11 kV, 3x400 Sqmm XLPE UG Cable Using Conventional Laying with Excavation in Soil	KM	2682966	233328
	Erection of 3 Phase, 11 kV/433V Distribution Transformer center using 9 Mtr DPTS (For 4/5 Star Rated Transformers)			
24	a) 25 kVA 4 Star Rated Transformer	Per Unit	135730	12579
	b) 25 kVA 5 Star Rated Transformer	Per Unit	145195	12579
25	a) 63 kVA 4 Star Rated Transformer	Per Unit	195112	12805
	b) 63 kVA 5 Star Rated Transformer	Per Unit	203056	12805

Cost Data Sheet No.	Particulars	Unit	CSR 2018-19	
			Total cost of Estimate (in Rs.)	Labour Charges ESCOM Establishment Cost (@20% on Labour charges) (In Rs.)
			Material + Labour	Labour
26	a) 100 kVA 4 Star Rated Transformer with LT Protection Kit	Per Unit	226140	13056
	b) 100 kVA 4 Star Rated Transformer with Distribution Box	Per Unit	239097	13105
	c) 100 kVA 5 Star Rated Transformer with LT Protection Kit	Per Unit	232134	13056
	d) 100 kVA 5 Star Rated Transformer with Distribution Box	Per Unit	246426	13105
27	a) 250 kVA 4 Star Rated Transformer	Per Unit	440017	14718
	b) 250 kVA 5 Star Rated Transformer	Per Unit	490462	14718
28	Erection of 11kV/433V, 25 kVA, BEE 4/5 Star Rated, Single pole mounted transformer centre on 9 Mtr RCC pole Square section			
	a) 4 Star Rated Transformer	Per Unit	123226	12835
	b) 5 Star Rated Transformer	Per Unit	132791	12835
29	Erection of 11kV/433V, 63 kVA, BEE 4/5 Star Rated, Single pole mounted transformer centre on 9 Mtr RCC pole Square section	Per Unit] Cost Data Sheets will be prepared after approval of DEI	
30	Erection of 100 kVA, BEE 4/5 Star Rated 11kV/433V, Single pole mounted transformer centre on 9 Mtr RCC pole Square section	Per Unit		
	a) With LT Distribution Box	Per Unit		
	b) With LT Protection Kit	Per Unit		
31	Erection of 250 kVA, BEE 4/5 Star Rated 11kV/433V, Single pole mounted Distribution Transformer on 11 Mtrs spun pole with 3 GOS system			
	a) 4 Star Rated Transformer	Per Unit	510225	29804
	b) 5 Star Rated Transformer	Per Unit	556109	29804
32	Providing Compact RMU 11 kV Class SF6/VCB Type (1 Incomer + 2 Breaker + 1 Outgoing)			
	a) Schenider Make	Per Unit	865817	12724
	b) ABB Make	Per Unit	714450	13109
	c) Seimens Make	Per Unit	764832	12977
	d) MEI Make	Per Unit	626600	13561
33	Providing Compact RMU 11 kV Class SF6/VCB Type (1 Incomer + 1 Breaker +1 Outgoing)			
	a) Schenider Make	Per Unit	624650	9496
	b) ABB Make	Per Unit	509032	9833

Cost Data Sheet No.	Particulars	Unit	CSR 2018-19	
			Total cost of Estimate (in Rs.)	Labour Charges ESCOM Establishment Cost (@20% on Labour charges) (In Rs.)
			Material + Labour	Labour
	c) Seimens Make	Per Unit	548499	9738
	d) MEI Make	Per Unit	446176	10182
34	Providing Compact RMU 11 kV Class SF6/VCB Type (1 OD)			
	a) Schenider Make	Per Unit	220586	3228
	b) ABB Make	Per Unit	181813	3277
	c) Seimens Make	Per Unit	195753	3239
	d) MEI Make	Per Unit	159843	3379
35	Providing Compact RMU 11 kV Class SF6/VCB Type (1 VL)			
	a) Schenider Make	Per Unit	220586	3228
	b) ABB Make	Per Unit	181813	3277
	c) Seimens Make	Per Unit	195753	3239
	d) MEI Make	Per Unit	159843	3379
36	Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 30 Mtr Using 3x95 Sqmm + 1x70 Sqmm Aerial Bunched Cables (ABC)	KM	1026592	90831
37	Running Single Circuit 1.1 kV, 3 Phase 5 Wire Power Line on 9 Mtr Supports with Average Span of 40 Mtr Using 3x95 + 1x16 + 1x70 Sqmm Aerial Bunched Cables (ABC)	KM	790307	96829
38	Installing RLMU for the existing 15/25 kVA Distribution Transformer Center	Per Unit	Deleted as RLMU works are not takenup	
39	Installing RLMU for the existing 63 kVA Distribution Transformer Center	Per Unit		
40	Installing RLMU for the existing 100 kVA Distribution Transformer Center	Per Unit		
41	COMPACT PRE - FABRICATED PACKAGED SUB - STATION Compact Pre - Fabricated Packaged Sub - Station 11kv/433V consisting of 3 way SF6/VCB insulated compact RMU, oil cooled CRGO/Amoprhous Core Star - 2 Rated (5 Star) Transformer and LT section with one MCCB/ACB as incoming and following ougoing MCCB feeders and with enclosure made of electronically Galvanized steel sheet (min 2 mm Thickness) with powder coated finish, Cu bus bar with LT Metering facility			
	a) 100 kVA Aluminium wound transformer, 250 Amps MCCB 50 kA 4 pole fixed type micro processer based for LT incomer and 2 Nos 100 Amps MCCB 4 pole 36 kA TM based for outgoing	set	1293000	10525

Cost Data Sheet No.	Particulars	Unit	CSR 2018-19	
			Total cost of Estimate (in Rs.)	Labour Charges ESCOM Establishment Cost (@20% on Labour charges) (In Rs.)
			Material + Labour	Labour
	b) 250 kVA Aluminium wound transformer, 400 Amps MCCB 50 kA 4 pole fixed type micro processor based for LT incomer and 3 Nos 250 Amps MCCB 4 pole 36 kA TM based for outgoing	set	1655000	10525
	c) 500 kVA Aluminium wound transformer, 800 Amps ACB 50 kA 4 pole fixed type micro processor based for LT incomer and 4 Nos 250 Amps MCCB 4 pole 36 kA TM based for outgoing	set	2176000	10525
	d) 800 kVA Aluminium wound transformer, 1250 Amps ACB 50 kA 4 pole fixed type micro processor based for LT incomer and 6 Nos 250 Amps MCCB 4 pole 36 kA TM based for outgoing	set	2700000	10525
	e) 1000 kVA Aluminium wound transformer, 1600 Amps ACB 50 kA 4 pole fixed type micro processor based for LT incomer and 2 Nos 400 Amps MCCB + 4 Nos 250 Amps MCCB, 4 pole 36 kA TM based for LT outgoing	set	3327000	10525
	f) With 100 kVA Dry Type Transformer	Per Unit	deleted	deleted
	g) With 250 kVA Dry Type Transformer	Per Unit		
	h) With 500 kVA Dry Type Transformer	Per Unit		
	i) With 750 kVA Dry Type Transformer	Per Unit		
	j) With 990 kVA Dry Type Transformer	Per Unit		
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	7812	1260
	ii) 15/25 kVA (without meter)	Per Unit	5287	566
b)	i) 50/63 kVA (with meter)	Per Unit	7392	1260
	ii) 50/63 kVA (without meter)	Per Unit	4867	566
c)	i) 100 kVA (with meter)	Per Unit	7089	1260
	ii) 100 kVA (without meter)	Per Unit	4564	566
d)	i) 250 kVA (with meter)	Per Unit	7251	1260
	ii) 250 kVA (without meter)	Per Unit	4726	566
e)	i) 500 kVA (with meter)	Per Unit	7383	1260
	ii) 500 kVA (without meter)	Per Unit	4858	566

Cost Data Sheet No.	Particulars	Unit	CSR 2018-19	
			Total cost of Estimate (in Rs.)	Labour Charges ESCOM Establishment Cost (@20% on Labour charges) (In Rs.)
			Material + Labour	Labour
43	Providing LT Capacitor to the Distribution Transformer			
	a) 3 kVAr for 15/25KVA DTCs	Per Unit	Deleted as fixed type capacitors are not being used	
	b) 9 kVAr for 63KVA DTCs	Per Unit		
	c) 18 kVAr for 100KVA DTCs	Per Unit		
	d) 27 kVAr for 250KVA DTCs	Per Unit		
	e) 54 kVAr for 300/500KVA DTCs	Per Unit		
44	Carrying Out 1 to 2 (ONE to TWO) Poles Works in respect of Ganga Kalyana and Drinking Water Supply Works only (not applicable for works awarded on tender/RC)	Per Work	-	9712
45	Carrying Out 3 to 5 (THREE to FIVE) Poles Works in respect of Ganga Kalyana and Drinking Water Supply Works only (not applicable for works awarded on tender/RC)	Per Work	-	15344
46	Carrying out 1 to 4 (ONE to FOUR) poles works in respect of Service Main Connection and E&I Works only (not applicable for works awarded on tender/RC)			
	a) Works involving ONE pole	Per Work	-	4662
	b) Works involving TWO poles	Per Work	-	6215
	c) Works involving THREE poles	Per Work	-	7769
	d) Works involving FOUR poles	Per Work	-	9323
47	Consolidated Labour charges for shifting of conductor terminations and all other fittings existing on the deteriorated pole while replacing termination (cut point) poles (Does not include labour chages for releasing and erection of pole) (not applicable for works awarded on tender/RC)	Per Pole	-	3300
48	Consolidated Labour charges for shifting of conductor and all other fittings existing on the deteriorated pole while replacing intermediate poles (Does not include labour chages for releasing and erection of pole) (not applicable for works awarded on tender/RC)	Per Pole	-	2420
49	Standard Requirement of Materials for providing LT Wiring for Distribution Transformer Centers of various capacities	Per Work	-	-

Cost Data Sheet No.	Particulars	Unit	CSR 2018-19	
			Total cost of Estimate (in Rs.)	Labour Charges ESCOM Establishment Cost (@20% on Labour charges) (In Rs.)
			Material + Labour	Labour
	CDS for Distribution Line & Transformer works using 9 Mtr PSCC poles of 300 Kg WL for Dead Ends Anchor points & Structures			
50	Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 40 Mtr Using Rabbit ACSR Conductor and PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and DP structure	Per Unit	308489	51580
51	Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 50 Mtr Using Rabbit ACSR Conductor and PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and DP structure	Per Unit	275246	44124
52	Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 40 Mtr Using COYOTE ACSR conductor and PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and DP structure	Per Unit	534031	60494
53	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 Mtr using RABBIT Conductor for HT and WEASEL for LT Lines and using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and DP structure	Per Unit	488223	77143
54	Running Single Circuit 11 kV, 3 Phase Power Line & 3 Phase 4 Wire Secondary Line on 9 Mtr Supports with an Average Span of 40 Mtr Using RABBIT ACSR conductor for HT & LT Lines and using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and DP structure	Per Unit	581173	80965
55	Running LT, 3 Phase 4 Wire Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor with an Average Span of 40 Mtr and using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and DP structure	Per Unit	315493	50185
55 A	Running LT, 3 Phase 4 Wire Power Line on 8 Mtr Supports Using RABBIT ACSR Conductor with an Average Span of 40 Mtr and Using PSCC Pole - 8 Mtr Long, 200 Kg WL for dead ends, anchor points and DP structure	Per Unit	292762	44335
56	Running LT, 3 Phase 5 Wire for Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor for Phase, Neutral and WEASEL Conductor for Street Light with an Average Span of 40 Mtr and Using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and Anchor Points (For Cities, Towns and Residential Layouts)	Per Unit	363480	56797

Cost Data Sheet No.	Particulars	Unit	CSR 2018-19	
			Total cost of Estimate (in Rs.)	Labour Charges ESCOM Establishment Cost (@20% on Labour charges) (In Rs.)
			Material + Labour	Labour
56 A	Running LT, 3 Phase 5 Wire for Power Line on 8 Mtr Supports Using RABBIT ACSR Conductor for Phase, Neutral and WEASEL Conductor for Street Light with an Average Span of 40 Mtr and using PSCC Pole - 9 Mtr Long, 200 Kg WL for dead ends and Anchor Points (For Cities, Towns and Residential Layouts	Per Unit	334531	50629
57	Running LT, 3 Phase 5 Wire Power Line with Continuous Earth Wire on 9 Mtr Supports Using RABBIT ACSR for Phase, Neutral and WEASEL Conductor for Street Light and 8 SWG GI Wire for Continuous Earth Wire with an Average Span of 40 Mtr in Vertical Configuration and PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and Anchor Points	Per Unit	387638	63468
58	Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor and using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and Anchor Points, With an Average Span of 40 Mtr in Vertical Configuration in Congested Areas	Per Unit	331892	58417
59	Providing 2 Pole Structures at the Tapping Point Using PSCC Pole - 9 Mtr Long, 300 Kg WL	Per Unit	49774	6079
60	Providing 3 Pole Structure using PSCC Pole - 9 Mtr Long, 300 Kg WL	Per Unit	38003	8964
	Erection of 3 Phase, 11 kV/433V, BEE 4/5 Star Rated Distribution Transformer Centre Using DPTS with PSCC Pole - 9 Mtr Long, 300 Kg WL			
61	a) 25 kVA 4 Star Rated Transformer	Per Unit	132711	12579
	b) 25 kVA 5 Star Rated Transformer	Per Unit	142176	12579
62	a) 63 kVA 4 Star Rated Transformer	Per Unit	192469	13181
	b) 63 kVA 5 Star Rated Transformer	Per Unit	200413	13181
63	a) 100 kVA 4 Star Rated Transformer with LT Protection Kit	Per Unit	223497	13432
	b) 100 kVA 4 Star Rated Transformer with Distribution Box	Per Unit	236454	13481
	c) 100 kVA 5 Star Rated Transformer with LT Protection Kit	Per Unit	229491	13432
	d) 100 kVA 5 Star Rated Transformer with Distribution Box	Per Unit	234783	13481
64	a) 250 kVA 4 Star Rated Transformer	Per Unit	437117	14717
	b) 250 kVA 5 Star Rated Transformer	Per Unit	487562	14717

Cost Data Sheet No.	Particulars	Unit	CSR 2018-19	
			Total cost of Estimate (in Rs.)	Labour Charges ESCOM Establishment Cost (@20% on Labour charges) (In Rs.)
			Material + Labour	Labour
65	Erection of 3 Phase, 11 kV/433V, 25 kVA BEE 4/5 Star Rated Single Pole Mounted Transformer Centre Using PSCC Pole - 9 Mtr Long, 300 Kg WL			
	a) 4 Star Rated Transformer	Per Unit	121093	12685
	b) 5 Star Rated Transformer	Per Unit	130558	12685
66	Erection of 3 Phase, 11 kV/433V, 63 kVA BEE 4/5 Star Rated Single Pole Mounted Transformer Centre Using PSCC Pole - 9 Mtr Long, 300 Kg WL			
	a) 4 Star Rated Transformer	Per Unit		
	b) 5 Star Rated Transformer	Per Unit		
67(a)	Erection of 3 Phase, 11 kV/433V, 100 kVA BEE 4/5 Star Rated Single Pole Mounted Transformer Centre Using PSCC Pole - 9 Mtr Long, 300 Kg WL (with LT Distribution Box)			
	a) 4 Star Rated Transformer	Per Unit		
	b) 5 Star Rated Transformer	Per Unit		
67(b)	Erection of 3 Phase, 11 kV/433V, 100 kVA BEE 4/5 Star Rated Single Pole Mounted Transformer Centre Using PSCC Pole - 9 Mtr Long, 300 Kg WL (with LT Protection KIT)			
	a) 4 Star Rated Transformer	Per Unit		
	b) 5 Star Rated Transformer	Per Unit		
68	Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 30 Mtrs Using 3x95 Sqmm + 1x70 Sqmm Aerial Bunched Cables (ABC) using PSCC Pole - 9 Mtr Long, 300 Kg WL for Dead Ends and Anchor Points	Per Unit	1010872	90831
69	Running Single Circuit 1.1 kV, 3 Phase 5 Wire Power Line on 9 Mtr Supports with Average Span of 40 Mtr Using 3x95 + 1x16 + 1x70 Sqmm Aerial Bunched Cables (ABC) using PSCC Pole - 9 Mtr Long, 300 Kg WL for Dead Ends and Anchor Points	Per Unit	768587	96829
70	Running LT, 3 Phase 4 Wire Power Line on 8 Mtr Supports Using WEASELACSR Conductor with an Average Span of 60 Mtr using PSCC Pole - 8 Mtrs Long, 200 Kg WL for dead ends, anchor points and DP structure (IP Installations)	Per Unit	194627	33340
71	Running LT, Single Phase 3 Wire Power Line on 8 Mtr Supports with an Average Span of 40 Mtr Using WEASELACSR Conductor and PSCC Pole - 8 Mtrs Long, 200 Kg WL for dead ends, anchor points and DP structure	Per Unit	219660	42896

Cost Data Sheets will be prepared after approval of DEI

COST DATA SHEET - 1

Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 40 Mtr Using RABBIT ACSR Conductor

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 Kg WL	No	1	6258	6258	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	23	3689	84847	1166	26818
3	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	444	444	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	23	438	10074	106	2438
5	DP Structure with RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	17450	17450	3578	3578
6	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	Nos	72	180	12960	0	0
7	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
8	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	6	830	4980	390	2340
9	Rabbit ACSR Conductor	KM	3.045	36497	111133	2869	8736
10	PG Clamps for Rabbit Conductor	No	6	79	474	0	0
11	Spiral Earth Electrode	No	26	165	4290	61	1586
12	EG Stirrups with GI wire lacing	Set of 2 Nos	24	191	4584	109	2616
13	Guy concreting with Boulders, Mud and Sand	No	6	0	0	174	1044
14	Caution/Danger Board	No	8	146	1168	53	424
15	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	No	26	76	1976	28	728
Total					261622		51580
Total Cost/KM in Rs.				313202			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 2

Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 50 Mtr Using RABBIT ACSR Conductor

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 Kg WL	No	1	6258	6258	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	18	3689	66402	1166	20988
3	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	444	444	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	18	438	7884	106	1908
5	DP Structure with RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	17450	17450	3578	3578
6	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	57	180	10260	0	0
7	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
8	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	6	830	4980	390	2340
9	Rabbit ACSR Conductor	KM	3.045	36497	111133	2869	8736
10	PG Clamps for Rabbit conductor	No	6	79	474	0	0
11	Spiral Earth Electrode	No	21	165	3465	61	1281
12	EG Stirrups with GI wire lacing	Set of 2 Nos	19	191	3629	109	2071
13	Guy concreting with Boulders, Mud and Sand	No	6	0	0	174	1044
14	Caution/Danger Board	No	6	146	876	53	318
15	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	21	76	1596	28	588
Total					235835		44124
Total Cost/KM in Rs.				279959			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 3

Running Single Circuit 11 kV, 3 Phase Power Line on 8 Mtr Supports with an Average Span of 50 Mtr Using RABBIT ACSR Conductor

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 8 Mtr Long, 115 Kg WL	No	1	4706	4706	932	932
2	PSCC Pole - 8 Mtr Long, 200 Kg WL	No	18	3054	54972	932	16776
3	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for RCC Pole - 8 Mtr Long, 115 Kg WL	Set	1	444	444	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 8 Mtr Long, 200 Kg WL	Set	18	438	7884	106	1908
5	DP Structure with RCC Pole - 8 Mtr Long, 115 Kg WL	Set	1	14346	14346	3418	3418
6	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	57	180	10260	0	0
7	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
8	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	6	830	4980	390	2340
9	Rabbit ACSR Conductor	KM	3.045	36497	111133	2869	8736
10	PG Clamps for Rabbit Conductor	No	6	79	474	0	0
11	Spiral Earth Electrode	No	21	165	3465	61	1281
12	EG Stirrups with GI wire lacing	Set of 2 Nos	19	191	3629	109	2071
13	Guy concreting with Boulders, Mud and Sand	No	6	0	0	174	1044
14	Caution/Danger Board	No	6	146	876	53	318
15	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	21	76	1596	28	588
Total					219749		39518
Total Cost/KM in Rs.				259267			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 4

Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 40 Mtr Using COYOTE ACSR Conductor

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 Kg WL	No	1	6258	6258	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	22	3689	81158	1166	25652
3	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	444	444	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	22	438	9636	106	2332
5	DP Structure with RCC Pole - 9 Mtr Long, 145 Kg WL	Set	2	17450	34900	3578	7156
6	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	69	180	12420	0	0
7	70/90 kN Disc Insulator	No	12	431	5172	0	0
8	Strain Clamp 3 bolt type for Disc Insulator	No	12	494	5928	0	0
9	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	6	830	4980	390	2340
10	Coyote ACSR Conductor	KM	3.045	100111	304838	5011	15258
11	PG Clamps for Coyote conductor	No	12	275	3300	0	0
12	Spiral Earth Electrode	No	27	165	4455	61	1647
13	EG Stirrups with GI wire lacing	Set of 2 Nos	23	191	4393	109	2507
14	Guy concreting with Boulders, Mud and Sand	No	6	0	0	174	1044
15	Caution/Danger Board	No	10	146	1460	53	530
16	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	27	76	2052	28	756
Total					481394		60494
Total Cost/KM in Rs.				541888			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate 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 Mtr using RABBIT Conductor for HT and WEASEL for LT Lines

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 Kg WL	No	1	6258	6258	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	18	3689	66402	1166	20988
3	11 kV, Horizontal Cross Arm with clamps, HTST Supports, bolts, nuts and washers for RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	444	444	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST Supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	18	438	7884	106	1908
5	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	272	272	106	106
6	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	19	266	5054	106	2014
7	DP Structure with RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	17450	17450	3578	3578
8	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	57	180	10260	0	0
9	1.1 kV Pin Insulator with GI Pin	No	76	48	3648	0	0
10	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
11	Spiral Earth Electrode	No	8	16	128	0	0
12	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	8	830	6640	390	3120
13	Rabbit ACSR for HT Line	KM	3.045	36497	111133	2869	8736
14	Weasel ACSR for LT line	KM	4.06	21552	87501	2104	8542
15	Spiral Earth Electrode	No	21	165	3465	61	1281
Guarding between HT & LT Line							
16	a) Guarding Material	Span	20	4000	80000	1165	23300
17	b) 4 Pin Cross Arm with clamps, bolts, nuts and washers for guarding	Set	20	266	5320	0	0
18	PG Clamps for Rabbit conductor	No	6	79	474	0	0
19	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
20	Caution/Danger Board	No	6	146	876	53	318
21	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	21	76	1596	28	588
Total					415789		77143
Total Cost/KM in Rs.				492933			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 6

**Running Single Circuit 11 kV, 3 Phase Power Line & 3 Phase 4 Wire Secondary Line
on 9 Mtr Supports with an Average Span of 40 Mtr Using RABBIT ACSR Conductor for HT & LT Lines**

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 Kg WL	No	1	6258	6258	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	23	3689	84847	1166	26818
3	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	444	444	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	23	438	10074	106	2438
5	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	272	272	106	106
6	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	24	266	6384	106	2544
7	DP Structure with RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	17450	17450	3576	3576
8	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	72	180	12960	0	0
9	1.1 kV Pin Insulator with GI Pin	No	96	48	4608	0	0
10	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
11	Spiral Earth Electrode	No	8	16	128	0	0
12	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	8	830	6640	390	3120
13	Rabbit ACSR Conductor	KM	7.105	36497	259311	2869	20384
14	PG Clamps for Rabbit conductor	No	6	79	474	0	0
15	Spiral Earth Electrode	No	26	165	4290	61	1586
	Guarding between HT & LT Line				0		0
16	a) Guarding Material	Span	25	3200	80000	663	16575
17	b) 4 Pin Cross Arm with clamps, bolts, nuts and washers.	Set	25	266	6650	0	0
18	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
19	Caution/Danger Board	No	8	146	1168	53	424
20	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	26	76	1976	28	728
Total					504918		80963
Total Cost/KM in Rs.				585881			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 7

**Running LT, 3 Phase 4 Wire Power Line on 8 Mtr Supports Using WEASEL ACSR Conductor
with an Average Span of 60 Mtr (IP Installations)**

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 8 Mtr Long, 145 Kg WL	No	1	4706	4706	932	932
2	PSCC Pole - 8 Mtr Long, 200 Kg WL	No	17	3054	51918	932	15844
3	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for RCC Pole - 8 Mtr Long, 145 Kg WL	Set	1	272	272	106	106
4	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for RCC Pole - 8 Mtr Long, 145 Kg WL	Set	17	266	4522	106	1802
5	1.1 kV Pin Insulator with GI Pin	No	64	48	3072	0	0
6	No. 8 Strain Insulator	No	8	16	128	0	0
7	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	830	6640	390	3120
8	Weasel ACSR Conductor	KM	4.06	21552	87501	2104	8542
9	Spiral Earth Electrode	No	18	165	2970	61	1098
10	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
11	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	18	76	1368	28	504
Total					163097		33340
Total Cost/KM in Rs.					196437		

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 8

**Running LT, 3 Phase 4 Wire Power Line on 8 Mtr Supports Using RABBIT ACSR Conductor
with an Average Span of 40 Mtr**

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 8 Mtr Long, 145 Kg WL	No	1	4706	4706	932	932
2	PSCC Pole - 8 Mtr Long, 200 Kg WL	No	24	3054	73296	932	22368
3	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for RCC Pole - 8 Mtr Long, 145 Kg WL	Set	1	272	272	106	106
4	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 8 Mtr Long, 200 Kg WL	Set	24	266	6384	106	2544
5	1.1 kV Pin Insulator with GI Pin	No	96	48	4608	0	0
6	No. 8 Strain Insulator	No	8	16	128	0	0
7	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	811	6488	390	3120
8	Rabbit ACSR Conductor	KM	4.06	36497	148177.82	2869	11648.1
9	Spiral Earth Electrode	No	25	165	4125	61	1525
10	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
11	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					250085		44335
Total Cost/KM in Rs.				294420			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 9

**Running LT, 3 Phase 4 Wire Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor
with an Average Span of 40 Mtr**

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 Kg WL	No	1	6258	6258	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	24	3689	88536	1166	27984
3	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	272	272	106	106
4	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	24	266	6384	106	2544
5	1.1 kV Pin Insulator with GI Pin	No	96	48	4608	0	0
6	No. 8 Strain Insulator	No	8	16	128	0	0
7	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	811	6488	390	3120
8	Rabbit ACSR Conductor	KM	4.06	36497	148178	2869	11648.14
9	Spiral Earth Electrode	No	25	165	4125	61	1525
10	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
11	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					266877		50185
Total Cost/KM in Rs.					317062		

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 10

Running LT, 3 Phase 5 Wire for Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor for Phase, Neutral and WEASEL Conductor for Street Light with an Average Span of 40 Mtr (For Cities, Towns and Residential Layouts)

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 Kg WL (for Deadend, Anchor points)	No	6	6258	37548	1166	6996
2	PSCC Pole - 9 Mtr Long, 200 Kg WL (for Intermediate Pole)	No	19	3689	70091	1166	22154
3	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for RCC Pole - 9 Mtr Long, 145 Kg WL	Set	7	272	1904	106	742
4	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	22	266	5852	106	2332
5	LT 2 Pin Cross Arm with clamps, bolts, nuts for RCC Pole - 9 Mtr Long, 145 Kg WL	Set	7	168	1176	106	742
6	LT 2 Pin Cross Arm with clamps, bolts, nuts for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	18	162	2916	106	1908
7	1.1 kV Pin Insulator with GI Pin	No	95	48	4560	0	0
8	No. 8 Strain Insulator	No	50	16	800	0	0
9	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	10	811	8110	390	3900
10	Rabbit ACSR Conductor	KM	4.06	36497	148178	2869	11648
11	Weasel ACSR Conductor	KM	1.015	21552	21875	2104	2136
12	Spiral Earth Electrode	No	25	165	4125	61	1525
13	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
14	Sheet Metal/Deep Drawn Street Lighting Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps Meter & 50/5A CT including wiring	No	1	5954	5954	622	622
15	PVC Pipe 40 mm Dia	Mtr	6	46	276	0	0
16	PVC Insulated wire 25 Sqmm Single Core Multi stranded	Mtr	25	32.31	807.75	0	0
17	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					316073		56797
Total Cost / KM in Rs.				372870			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 11

Running LT 3 Phase 5 Wire for Power Line on 8 Mtr Supports Using RABBIT ACSR Conductor for Phase, Neutral and WEASEL Conductor for Street Light with an Average Span of 50 Mtr

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 8 Mtr Long, 115 Kg WL (for Deadend, Anchor points.)	No	5	4706	23530	932	4660
2	PSCC Pole - 8 Mtr Long, 200 Kg WL (for Intermediate Pole)	No	15	3054	45810	932	13980
3	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for RCC Pole - 8 Mtr Long, 115 Kg WL	Set	5	272	1360	106	530
4	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 8 Mtr Long, 200 Kg WL	Set	20	266	5320	106	2120
5	LT 2 Pin Cross Arm with clamps, bolts, nuts for RCC Pole - 8 Mtr Long, 115 Kg WL	Set	5	168	840	106	530
6	LT 2 Pin Cross Arm with clamps, bolts, nuts for PSCC Pole - 8 Mtr Long, 200 Kg WL	Set	20	162	3240	106	2120
7	1.1 kV Pin Insulator with GI Pin	No	95	48	4560	0	0
8	No. 8 Strain Insulator	No	50	16	800	0	0
9	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	811	6488	390	3120
10	Rabbit ACSR Conductor	KM	4.06	36497	148178	2869	11648
11	Weasel ACSR Conductor	KM	1.015	21552	21875	2104	2136
12	Spiral Earth Electrode	No	20	165	3300	61	1220
13	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
14	Sheet Metal/Deep Drawn Street Lighting Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps Meter & 50/5A CT including wiring	No	1	5954	5954	622	622
15	PVC Pipe 40 mm Dia	Mtr	6	46	276	0	0
16	PVC Insulated wire 25 Sqmm Single Core Multi Stranded	Mtr	20	32.31	646.2	0	0
17	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					274077		44778
Total Cost / KM in Rs.				318855			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 12

Running LT Single Phase 3 Wire Power Line on 8 Mtr Supports with an Average Span of 40 Mtr Using WEASEL ACSR Conductor

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 8 Mtr Long, 115 Kg WL (for Deadend, Anchor points)	No	5	4706	23530	932	4660
2	PSCC Pole - 8 Mtr Long, 200 Kg WL (for Intermediate Pole)	No	20	3054	61080	932	18640
3	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for RCC Pole - 8 Mtr Long, 115 Kg WL	Set	5	272	1360	106	530
4	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 8 Mtr Long, 200 Kg WL	Set	25	266	6650	106	2650
5	LT 2 Pin Cross Arm with clamps, bolts, nuts for RCC Pole - 8 Mtr Long, 115 Kg WL	Set	5	168	840	106	530
6	LT 2 Pin Cross Arm with clamps, bolts, nuts for PSCC Pole - 8 Mtr Long, 200 Kg WL	Set	20	162	3240	106	2120
7	1.1 kV Pin Insulator with GI Pin	No	48	48	2304	0	0
8	No. 8 Strain Insulator	No	21	16	336	0	0
9	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	811	6488	390	3120
10	Weasel ACSR Conductor	KM	3.045	21552	65625.84	2104	6406.68
11	Spiral Earth Electrode	No	25	165	4125	61	1525
12	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
13	Sheet Metal/Deep Drawn Street Lighting Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps Meter & 50/5A CT including wiring	No	1	5954	5954	622	622
14	PVC Pipe 40 mm Dia	Mtr	6	46	276	0	0
15	PVC Insulated wire 25 Sqmm Single Core Multi Stranded	Mtr	25	32.31	807.75	0	0
16	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					184517		42896
Total Cost/KM in Rs.					227412		

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 13

Running LT, 3 Phase 5 Wire Power Line with Continuous Earth Wire on 9 Mtr Supports Using RABBIT ACSR for Phase, Neutral and WEASEL Conductor for Street Light and 8 SWG GI Wire for Continuous Earth Wire with an Average Span of 40 Mtr in Vertical Configuration

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 Kg WL (for Deadend, Anchor points)	No	6	6258	37548	1166	6996
2	PSCC Pole - 9 Mtr Long, 200 Kg WL (for Intermediate Pole)	No	19	3689	70091	1166	22154
3	Fabricated Vertical Cross Arm with clamps, bolts, nuts and washers	Set	30	645	19350	316	9480
4	1.1 kV Pin Insulator with GI Pin	No	100	48	4800	0	0
5	No. 8 Strain Insulator	No	50	16	800	0	0
6	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	12	811	9732	390	4680
7	Rabbit ACSR Conductor	KM	4.06	36497	148178	2869	11648
8	Weasel ACSR Conductor	KM	1.015	21552	21875	2104	2136
9	8 SWG GI wire for continuous earth wire	KM	1.015 (103 Kgs)	63.293 per Kg	6520	2104 per KM	2135
10	8 SWG GI wire for guard loops	Kg	26	63.293	1646	0	0
11	Spiral Earth Electrode	No	25	165	4125	61	1525
12	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
13	Sheet Metal/Deep Drawn Street Lighting Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps Meter & 50/5A CT including wiring	No	1	5954	5954	622	622
14	PVC Pipe 40 mm Dia	Mtr	6	46	276	0	0
15	PVC Insulated wire 25 Sqmm Single Core Multi Stranded	Mtr	25	32.31	808	0	0
16	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					333602		63468
Total Cost/KM in Rs.					397070		

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 14

Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor With an Average Span of 40 Mtr in Vertical Configuration in Congested Areas

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 Kg WL (for Deadend, Anchor points)	No	1	6258	6258	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL (for Intermediate Pole)	No	23	3689	84847	1166	26818
3	DP Structure using RCC Pole - 9 Mtr Long, 145 Kg WL	Set	1	17450	17450	3578	3578
4	Special Cross Arm with Cross Arm for EG Stirrups, braces, clamps, bolts nuts and washers complete	Set	23	1156	26588	348	8004
5	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	69	180	12420	0	0
6	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
7	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	9	830	7470	390	3510
8	Rabbit ACSR Conductor	KM	3.045	36497	111133.365	2869	8736.105
9	Spiral Earth Electrode	No	26	165	4290	61	1586
10	EG Stirrups with GI wire lacing	Set of 2 No's	25	191	4775	109	2725
11	Spiral Earth Electrode	No	9	0	0	174	1566
12	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	26	76	1976	28	728
Total				278191		58417	
Total Cost/KM in Rs.				336608			

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 - 1 No
- e) RCC Pole Clamps - 5 Nos
- f) Cross Arm for fixing EG Stirrup - 1 No

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 15

Providing 2 Pole Structure at the Tapping Point Using RCC Pole

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part-A: LINES							
1	DP Structure using RCC Pole - 9 Mtr Long, 145 Kg WL (Including Cost of Poles)	Set	1	17450	17450	3578	3578
2	DP Structure using RCC Pole - 8 Mtr Long, 115 Kg WL (Including Cost of Poles)	Set	1	14346	14346	3414	3414
3	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	2	830	1660	390	780
5	Spiral Earth Electrode	No	2	165	330	61	122
6	Guy concreting with Boulders, Mud and Sand	No	2	0	0	174	348
7	Caution/Danger Board	No	1	146	146	53	53
8	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
Total Part A							
9	Using 8 Mtr RCC Pole				17618		4773
10	Using 9 Mtr RCC Pole				20722		4937
Part-B: SWITCH GEAR							
11	11 kV, 400 Amps Double Break GOS	Set	1	17545	17545	777	777
12	H-Frame for mounting GOS	No	1	3724	3724	210	210
13	DOLO Cut Out	Set/3 Nos	1	4848	4848	155	155
Total Part B					26117		1142
Total cost (A+B) using 8 Mtr Pole					43735		5915
Total cost (A+B) using 9 Mtr Pole					46839		6079
Total Cost using 8 Mtr RCC Pole in Rs					49650		
Total Cost using 9 Mtr RCC Pole in Rs					52918		

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 16

Erection of 3 Pole Structure using RCC Pole - 9 Mtr Long, 145 Kg WL

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	3 Pole Structure complete using RCC Pole - 9 Mtr Long, 145 Kg WL (Including Cost of Pole)	Set	1	28726	28726	6899	6899
2	Spiral Earth Electrode	No	3	165	495	61	183
3	Guy Set With No. 15 Strain Insulator Complete	Set	3	830	2490	390	1170
4	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
5	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	3	180	540	0	0
6	Guy concreting with Boulders, Mud and Sand	No	3	0	0	174	522
7	Caution/Danger Board	No	2	146	292	53	106
8	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	3	76	228	28	84
Total					33755		8964
Total Cost in Rs.					42719		

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 17

Providing Metering to IP Set Installations Using SMC/MS Box

Sl. No.	Particulars	Unit	Qty.	Material Cost	
				Rate (Rs.)	Amt (Rs.)
1	Whole Current Meter 10-60 Amps 3 Phase (Static Meter) 1.0 Accuracy Class	No	1	3000	3000
2	SMC/MS Meter Housing box with 6 mm Hylam Sheet	No	1	2100	2100
3	16 Sqmm Aluminium Single Core/Multi Core of Grade 650/1100V (16 Mtr) (Rs. 23.41/Mtr)	Set	1	375	375
4	PVC Pipe of 2 mm Thick, 40 mm Dia	Mtr	4	46	184
5	3 Nos Porcelain Cutouts 60 Amps with Wooden Plank	Set	1	432	432
6	Misc materials such as water tight bends and aluminium pins/bullets	LS	LS	-	150
7	Labour Charges (Lumpsum)	LS	LS	-	770
Total Cost in Rs					7011

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 18

For laying of 1 KM Length of 11 kV, 3x95 Sqmm XLPE UG Cable Using Horizontal Drilling with 6" Bore Size Without HDPE Pipe

Sl. No.	Particulars	Unit	Qty.	Material Cost	
				Rate (Rs.)	Amt (Rs.)
1	11 kV, 3x95 Sqmm XLPE UG Cable	KM	1	782621	782621
2	Straight Through Jointing Kit HS Type suitable for 95 Sqmm Cable	No	3	6481	19443
3	Cable Termination Kit Outdoor HS Type suitable for 95 Sqmm Cable	Per Kit	2	3605	7210
4	Cable Termination Kit Indoor HS Type suitable for 95 Sqmm Cable	Per Kit	2	3319	6638
5	RCC Hume Pipe, 2000 mm Long, 150 mm Dia	No	3	300	900
6	Collars for RCC Hume Pipe	No	2	80	160
7	GI Pipe, 100 mm Dia for drain crossing, cable raising etc.,	Mtr	8	1242	9936
8	Route and Joint Indicating Stones	No	10	130	1300
Total Material cost					828208
9	Labour charges				
	a) Spiral Earth Electrode	Mtr	50	39.377	1969
	b) Labour chargers for horizontal drilling with 6" bore size Without HDPE Pipe	Rmtr	950	706	670700
	c) Making of straight through joint	No	3	1865	5595
	d) Making of cable termination	No	2	1709	3418
	e) Laying of RCC Hume pipe	No	60	44	2640
	f) Laying of GI Pipe	Mtr	8	50	400
	g) Laying of Route and Joint indicating stone	No	20	75	1500
Total Labour cost					686222
Total Cost/KM in Rs.					1514430
10	Add Rates for Reinstatement 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.11 of General Guidelines vide a to g in Page No.9
- 2) When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtr x 1 Mtr 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-456/4600-18/3704 Dtd 03.07.2004)
- 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 11 kV, 3x95 Sqmm XLPE UG Cable Using Conventional Laying with Excavation of Soil

Sl. No.	Particulars	Unit	Qty.	Material Cost	
				Rate (Rs.)	Amt (Rs.)
1	11 kV, 3x95 Sqmm XLPE UG Cable	KM	1	782621	782621
2	Straight Through Jointing Kits HS Type suitable for 95 Sqmm Cable	No	3	6481	19443
3	Cable Termination Kit Outdoor HS Type Suitable for 95 Sqmm Cable	Per Kit	1	3605	3605
4	Cable Termination Kit Indoor HS Type Suitable for 95 Sqmm Cable	Per Kit	1	3319	3319
5	Cable covering tiles 250x125x40 mm or 125x125x40 mm	No	4000/8000	10/5	40000
6	Sand	Cmt	60	1700	102000
7	RCC Hume Pipe, 2000 mm Long, 150 mm Dia	No	30	300	9000
8	Collars for RCC Hume Pipe	No	30	80	2400
9	GI Pipe, 100 mm Dia for drain crossing, cable raising etc.,	Mtr	8	1242	9936
10	Route and Joint Indicating Stones	No	20	130	2600
Total Material Cost					974924
11	Labour charges				
	a) Cable trench excavation, 1000x0.6x1=600, Ordinary soil	Cmt	600	226	135600
	b) Laying of cable in trench	KM	1	39377	39377
	c) Refilling and consolidation	Cmt	550	50	27500
	d) Making of straight through joint	No	3	1865	5595
	e) Making of cable termination	No	2	1709	3418
	f) Covering the cable with tile	KM	1	2863	2863
	g) Spreading Sand and forming with Sand round the cable	KM	1	10061	10061
	h) Laying of RCC Hume pipe	Mtr	60	44	2640
	i) Laying of GI Pipe	Mtr	8	50	400
	j) Laying of Route and Joint indicating stone	No	20	75	1500
Total Labour cost					228954
Total Cost/KM in Rs.					1203878
12	Add Rates for Reinstatement 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.11 of General Guidelines vide a to g in Page No.9.
- 2) When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtr x 1 Mtr 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-456/4600-18/3704 Dtd 03.07.2004)
- 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 11 kV, 3x240 Sqmm XLPE UG Cable Using Horizontal Drilling with 6" Bore Size Without HDPE Pipe

Sl. No.	Particulars	Unit	Qty.	Material Cost	
				Rate (Rs.)	Amt (Rs.)
1	11 kV, 3x240 Sqmm XLPE UG Cable	KM	1	1471370	1471370
2	Straight Through Jointing Kits HS Type suitable for 240 Sqmm Cable	No	3	7903	23709
3	Cable Termination Kit Outdoor HS Type Suitable for 240 Sqmm Cable	Per Kit	1	4715	4715
4	Cable Termination Kit Indoor HS Type Suitable for 240 Sqmm Cable	Per Kit	1	4159	4159
5	RCC Hume Pipe, 2000 mm Long, 150 mm Dia	No	3	300	900
6	Collars for RCC Hume pipe	No	2	80	160
7	GI Pipe, 100 mm Dia for drain crossing, cable raising etc.,	Mtr	8	1242	9936
8	Route and Joint Indicating Stones	No	10	130	1300
Total Material Cost					1516249
9	Labour charges				
	a) Spiral Earth Electrode	Mtr	50	41.565	2078
	b) Labour chargers for horizontal drilling with 6" bore size Without HDPE Pipe	Rmtr	950	706	670700
	c) Making of straight through joint	No	3	1865	5595
	d) Making of cable termination	No	2	1709	3418
	e) Laying of RCC Hume pipe	No	60	44	2640
	f) Laying of GI Pipe	Mtr	8	50	400
	g) Laying of Route and Joint indicating stone	No	20	75	1500
Total Labour cost					686331
Total Cost/KM in Rs.					2202580
10.	Add Rates for Reinstatement 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.11 of General Guidelines vide a to g in Page No.9.
 - 2) When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtr x 1 Mtr 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. BESCO/BC-14/F-456/4600-18/3704 Dtd 03.07.2004)
 - 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 11 kV, 3x240 Sqmm XLPE UG Cable Using Conventional Laying with Excavation in Soil

Sl. No.	Particulars	Unit	Qty.	Material Cost	
				Rate (Rs.)	Amt (Rs.)
1	11 kV, 3x240 Sqmm XLPE UG Cable	KM	1	1471370	1471370
2	Straight Through Jointing Kits HS Type suitable for 3x240 Sqmm Cable	No	3	7903	23709
3	Cable termination kit Outdoor HS Type Suitable for 3x240 Sqmm Cable	Per Kit	1	4715	4715
4	Cable termination kit Indoor HS Type Suitable for 3x240 Sqmm Cable	Per Kit	1	4159	4159
5	Cable Covering Tiles 250x125x40 mm or 125x125x40 mm	No	4000/8000	10/5	40000
6	Sand	Cmt	60	1700	102000
7	RCC Hume pipe, 2000 mm Long, 150 mm Dia	No	30	300	9000
8	Collars for RCC Hume Pipe	No	30	80	2400
9	GI Pipe, 100 mm Dia for drain crossing, cable raising etc.,	Mtr	8	1242	9936
10	Route and Joint Indicating Stones	No	20	130	2600
Total Material Cost					1669889
11	Labour charges				
	a) Cable trench excavation, 1000x0.6x1=600, Ordinary soil	Cmt	600	226	135600
	b) Laying of cable in trench	KM	1	41565	41565
	c) Refilling and consolidation	Cmt	550	50	27500
	d) Making of straight through joint	No	3	1865	5595
	e) Making of cable termination	No	2	1709	3418
	f) Covering the cable with tile	KM	1	2863	2863
	g) Spreading Sand and forming with Sand round the cable	KM	1	10061	10061
	h) Laying of RCC Hume pipe	Mtr	60	44	2640
	i) Laying of GI Pipe	Mtr	8	50	400
	j) Laying of Route and Joint indicating stone	No	20	75	1500
Total Labour cost					231142
Total Cost/KM in Rs.				1901031	
12	Add Rates for Reinstatement of Roads	As per prevailing rates prescribed by local bodies (Corporations/Municipalities/VPS as applicable)			

NOTE

- 1) While preparing estimates for turnkey / total turnkey projects please refer to Sl. No.11 of General Guidelines vide a to g in Page No.9.
- 2) When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtr x 1 Mtr 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-456/4600-18/3704 Dtd 03.07.2004)
- 3) Where cables are laid using trenchless technology, there may be a necessity to lay the cable in open trench excavation. Hence provisions shall 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 11 kV, 3x400 Sqmm XLPE UG Cable
Using Horizontal Drilling with 6" Bore Size Without HDPE Pipe**

Sl. No.	Particulars	Unit	Qty.	Material Cost	
				Rate (Rs.)	Amt (Rs.)
1	11 kV, 3x400 Sqmm XLPE UG Cable	KM	1	2245566	2245566
2	Straight Through Jointing Kits HS Type suitable for 400 Sqmm Cable	No	3	9706	29118
3	Cable Termination Kit Outdoor HS Type Suitable for 400 Sqmm Cable	Per Kit	1	4750	4750
4	Cable Termination Kit Indoor HS Type Suitable for 400 Sqmm Cable	Per Kit	1	4268	4268
5	RCC Hume Pipe, 2000 mm Long, 150 mm Dia	No	3	300	900
6	Collars for RCC Hume pipe	No	2	80	160
7	GI Pipe, 150 mm Dia for drain crossing, cable raising etc.,	Mtr	8	1242	9936
8	Route and Joint Indicating Stones	No	10	130	1300
Total Material Cost					2295998
9	Labour charges				
	a) Spiral Earth Electrode	Mtr	50	43.751	2188
	b) Labour charges for horizontal drilling with 6" bore size Without HDPE Pipe	Rmtr	950	706	670700
	c) Making of straight through joint	No	3	1865	5595
	d) Making of cable termination	No	2	1709	3418
	e) Laying of RCC Hume pipe	No	60	44	2640
	f) Laying of GI Pipe	Mtr	8	50	400
	g) Laying of Route and Joint indicating stone	No	20	75	1500
Total Labour cost					686441
Total Cost/KM in Rs.					2982439
12	Add rates for Reinstatement of Roads	As per prevailing rates prescribed by local bodies (Corporations/ Municipalities/VPs)			

NOTE

- 1) While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. 11 of General Guidelines vide a to g in Page No.9.
- 2) When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtr x 1 Mtr 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. BESCO/BC-14/F-456/4600-18/3704 Dtd 03.07.2004)
- 3) Where cables are laid using trenchless technology, there may be a necessity to lay the cable in open trench excavation. Hence provisions shall 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 11 kV, 3x400 Sqmm XLPE UG Cable
Using Conventional Laying with Excavation in Soil**

Sl. No.	Particulars	Unit	Qty.	Material Cost	
				Rate (Rs.)	Amt (Rs.)
1	11 kV, 3x400 Sqmm XLPE UG Cable	KM	1	2245566	2245566
2	Straight Through Jointing Kits HS Type suitable for 3x400 Sqmm Cable	No	3	9706	29118
3	Cable Termination Kit Outdoor HS Type Suitable for 3x400 Sqmm Cable	Per Kit	1	4750	4750
4	Cable Termination Kit Indoor HS Type Suitable for 3x400 Sqmm Cable	Per Kit	1	4268	4268
5	Cable Covering Tiles 250x125x40 mm or 125x125x40 mm	No	4000/ 8000	10/5	40000
6	Sand	Cmt	60	1700	102000
7	RCC Hume Pipe, 2000mm Long, 150mm Dia	No	30	300	9000
8	Collars for RCC Hume Pipe	No	30	80	2400
9	GI Pipe, 150 mm Dia for drain crossing, cable raising etc.,	Mtr	8	1242	9936
10	Route and Joint indicating stones	No	20	130	2600
Total Material Cost					2449638
11	Labour charges				
	a) Cable trench excavation, 1000x0.6x1=600, Ordinary soil	Cmt	600	226	135600
	b) Laying of cable in trench	KM	1	43751	43751
	c) Refilling and consolidation	Cmt	550	50	27500
	d) Making of straight through joint	No	3	1865	5595
	e) Making of cable termination	No	2	1709	3418
	f) Covering the cable with tile	KM	1	2863	2863
	g) Spreading Sand and forming with Sand round the cable	KM	1	10061	10061
	h) Laying of RCC Hume pipe	Mtr	60	44	2640
	i) Laying of GI Pipe	Mtr	8	50	400
	j) Laying of Route and Joint indicating stone	No	20	75	1500
Total Labour cost					233328
Total Cost/KM in Rs.					2682966
12	Add rates for Reinstatement of Roads	As per prevailing rates prescribed by local bodies (Corporations/ Municipalities/VPs)			

- NOTE :**
- 1) While preparing estimates for turnkey / total turnkey projects please refer to Sl. No.11 of General Guidelines vide a to g in Page No.9.
 - 2) When multiples cables have to be laid in the common trench the following excavation is to be followed: a) 0.75 Mtr x 1 Mtr 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. BESCO/BC-14/F-456/4600-18/3704 Dtd 03.07.2004)
 - 3) Where cables are laid using trenchless technology, there may be a necessity to lay the cable in open trench excavation. Hence provisions shall 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, 25 kVA BEE – 4/5 Star Rated Distribution Transformer Centre
Using 9 Mtr RCC Pole DPTS**

Sl. No.	Particulars	Unit	Qty.	25 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part - A: TRANSFORMER							
1	DP Transformer Structure using RCC Pole - 9 Mtr Long, 145 Kg WL	No	1	26439	26439	4527	4527
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	Set	3	180	540	0	0
3	11 kV, 45 KN Polymeric Insulator	Set	3	164	492	0	0
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	No	4	830	3320	390	1560
5	11kV/433V, 25 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1	64900	64900	750	750
6	11kV/433V, 25 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1	74365	74365	750	750
7	Earthing materials pipe type for grounding Single Electrode with accessories		3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
10	Guy concreting with Boulders, Mud and Sand	No	4	0	0	174	696
11	GI Wire 8 SWG	Kg	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kg	10	65.137	651.37	0	0
Total using 4 Star Rated Transformer					101460		9535
Total using 5 Star Rated Transformer					110925		9535
Total for Part - A (Material + Labour)							
i) Using 4 Star Rated Transformer					110995		
ii) Using 5 Star Rated Transformer					120460		
Part - B:							
13	11 kV Lightning Arrester, Metal oxide, 9 kV, 5 kA Polymeric Type with ground disconnecter	Set/3 Nos	1	1335	1335	78	78
Total					1335		78
Total for Part - B (Material + Labour)					1413		

Sl. No.	Particulars	Unit	Qty.	25 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
14	Part - C: SWITCH GEAR						
	a) LT Protection Kit for 25 kVA	No	1	1651	1651	226	226
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) SINGLE CIRCUIT						
	i) Al Lead Wire - 50 Sqmm	Mtr	25	44.31	1107.75	}	625
	ii) Heavy Duty Long Barrel Copper Lug - 50 Sqmm	No	4	40	160		
	iii) PG Clamp - Rabbit to 50 Sqmm	No	4	79	316		
	iv) Spacer for DTC Wiring	No	8	41	328		
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2	150	300		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	5287	5287	566	566
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694
15	11 kV, Solid Core Type HG Fuse Unit	Set/3 Nos	1	882	882	155	155
16	11 kV, 200 Amps, Single Break GOS	No	1	7799	7799	700	700
Total Cost (Material) for Part - C					20356		2966
Total for Part - C (Material + Labour)					23322		
Total (A+B+C)							
i) Using 4 Star Rated Transformer					123151		12579
ii) Using 5 Star Rated Transformer					132616		12579
Total (A+B+C) = (Material & Labour)							
i) Using 4 Star Rated Transformer				135730			
ii) Using 5 Star Rated Transformer				145195			

Note : Provision for actual quantity of additional materials viz 45 kN 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 as per field requirement.

COST DATA SHEET - 25

**Erection of 3 Phase, 11kV/433V, 63 kVA BEE – 4/5 Star Rated Distribution Transformer Centre
Using 9 Mtr RCC Pole DPTS**

Sl. No.	Particulars	Unit	Qty.	63 KVA				
				Material Cost (Rs.)		Labour Cost (Rs.)		
				Rate	Amt	Rate	Amt	
Part - A: TRANSFORMER								
1	DP Transformer Structure using RCC Pole - 9 Mtr Long, 145 Kg WL	No	1	26439	26439	4527	4527	
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	Set	3	180	540	0	0	
3	11 kV, 45 KN Polymeric Insulator	Set	3	164	492	0	0	
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	No	4	830	3320	390	1560	
5	11kV/433V, 63 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1	120360	120360	750	750	
6	11kV/433V, 63 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1	128304	128304	750	750	
7	Earthing materials pipe type for grounding Single Electrode with accessories	3	1501	4503	631	1893		
8	Caution/Danger Board	No	1	146	146	53	53	
9	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56	
10	Guy concreting with Boulders, Mud and Sand	No	4	0	0	174	696	
11	GI Wire 8 SWG	Kg	5	63.293	316.465	0	0	
12	Guy wire 7/10 SWG	Kg	10	65.137	651.37	0	0	
Total using 4 Star Rated Transformer						156920		9535
Total using 5 Star Rated Transformer						164864		9535
Total for Part - A (Material + Labour)								
i) Using 4 Star Rated Transformer						166455		
ii) Using 5 Star Rated Transformer						174399		
Part - B:								
13	11 kV Lightning Arrester, Metal Oxide 9 kV, 5 kA, Polymetic type with ground disconnector	Set/3 Nos	1	1335		78		
Total						1335		78
Total for Part - B: (Material+Labour)						1413		

Sl. No.	Particulars	Unit	Qty.	63 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part - C: SWITCH GEAR							
14	a) LT Protection Kit for 63 kVA	No	2	1651	3302	226	452
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) SINGLE CIRCUIT	No					
	i) Al Lead Wire - 95 Sqmm	Mtr	40	81.63	3265.2	}	625
	ii) Heavy Duty Long Barrel Copper Lug - 95 Sqmm	No	4	88	352		
	iii) PG Clamp - Rabbit to 95 Sqmm	No	4	108	432		
	iv) Spacer for DTC Wiring	No	8	41	328		
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2	150	300		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	4867	4867	566	566
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694
15	11 kV, Solid Core Type HG Fuse Unit	Set/ 3 Nos	1	882	882	155	155
16	11 kV, 200 Amps, Single Break GOS	No	1	7799	7799	700	700
Total Cost (Material) for Part - C					24052.2		3192
Total for Part - C (Material+Labour)					27244		
Total (A+B+C)							
i) Using 4 Star Rated Transformer					182307		12805
ii) Using 5 Star Rated Transformer					190251		12805
Total (A+B+C) = (Material & Labour)							
i) Using 4 Star Rated Transformer					195112		
ii) Using 5 Star Rated Transformer					203056		

Note : Provision for actual quantity of additional materials viz 45 kN 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 as per field requirement.

COST DATA SHEET - 26

**Erection of 3 Phase, 11kV/433 V, 100 kVA BEE – 4/5 Star Rated Distribution Transformer Centre
Using 9 Mtr RCC Pole DPTS**

Sl. No.	Particulars	Unit	Qty.	100 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part - A : TRANSFORMER							
1	DP Transformer Structure using RCC Pole - 9 Mtr Long, 145 Kg WL	No	1	26439	26439	4527	4527
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	Set	3	180	540	0	0
3	11 kV, 45 KN Polymeric Insulator	Set	3	164	492	0	0
4	Guy Set Complete with No.15 Strain Insulator & Concreting materials	No	4	830	3320	390	1560
5	11kV/433V, 100 kVA, 3 Phase 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1	148680	148680	1001	1001
6	11kV/433V, 100 kVA, 3 Phase 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1	155931	155931	1001	1001
7	Earthing materials pipe type for grounding Single Electrode with accessories		3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
10	Guy concreting with Boulders, Mud and Sand	No	4	0	0	174	696
11	GI Wire 8 SWG	Kg	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kg	10	65.137	651.37	0	0
Total using 4 Star Rated Transformer					185240		9786
Total using 5 Star Rated Transformer					192491		9786
Total for Part - A (Material + Labour)							
i) Using 4 Star Rated Transformer					195026		
ii) Using 5 Star Rated Transformer					202277		
Part - B:							
13	11 kV Lightning Arrester, Metal Oxide 9 kV, 5 kA Polymetic Type with ground disconnecter	Set/3 Nos	1	1335	1335	78	78
Total for Part - B					1335		78
Total for Part - B (Material+Labour)					1413		

Sl. No.	Particulars	Unit	Qty.	100 KVA				
				Material Cost (Rs.)		Labour Cost (Rs.)		
				Rate	Amt	Rate	Amt	
Part - C: SWITCH GEAR								
14	a) LT Protection Kit for 100 kVA	No	2	1651	3302	226	452	
	b) LT Distribution box for 100 kVA with MCB	No	1	17545	17545	501	501	
	c) LT Wiring (From DTC to LT Line Through Merering Box & LT Protection Kit/LT Distribution Box) SINGLE CIRCUIT	No						
	i) Al Lead Wire - 120 Sqmm	Mtr	45	107.04	4816.8			
	ii) Heavy Duty Long Barrel Copper Lug - 120 Sqmm	No	12	96	1152			
	iii) PG Clamp - Rabbit to 120 Sqmm	No	4	210	840			625
	iv) Spacer for DTC Wiring	No	8	41	328			
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2	150	300			
	d) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	4564	4564	566	566	
	e) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694	
15	11 kV, Solid Core Type HG Fuse Unit	Set/3 Nos	1	882	882	155	155	
16	11 kV, 200 Amps, Single Break GOS	No	1	7799	7799	700	700	
		With LT Protection kit		With Distribution Box				
Total Cost Part - C (Material)				26509		40752		
Total for Part - C (Labour)				3192		3241		
		Material	Labour	Material	Labour			
Total (A+B+C)								
i) Using 4 Star Rated Transformer		213084	13056	225992	13105			
ii) Using 5 Star Rated Transformer		219078	13056	233321	13105			
Total (A+B+C) (Material + Labour)								
i) Using 4 Star Rated Transformer		226140		239097				
ii) Using 5 Star Rated Transformer		232134		246426				

Note : Provision for actual quantity of additional materials viz 45 kN 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 as per field requirement.

COST DATA SHEET - 27

**Erection of 3 Phase, 11kV/433V, 250 kVA 4/5 Star Rated Distribution Transformer Centre
Using 9 Mtr RCC Pole DPTS**

Sl. No.	Particulars	Unit	Qty.	250 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part - A : TRANSFORMER							
1	DP Transformer Structure using RCC Pole - 9 Mtr Long, 145 Kg WL	No	1	30213	30213	4662	4662
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	Set	3	180	540	0	0
3	11 kV, 45 KN Polymeric Insulator	Set	3	164	492	0	0
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	No	4	830	3320	390	1560
5	11kV/433V, 250 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with oil	No	1	336300	336300	1502	1502
6	11kV/433V, 250 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with oil	No	1	386745	386745	1502	1502
7	Earthing materials pipe type for grounding	Single Electrode with accessories	3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
10	Guy concreting with Boulders, Mud and Sand	No	4	0	0	174	696
11	GI Wire 8 SWG	Kg	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kg	10	65.137	651.37	0	0
Total using 4 Star Rated Transformer					376634		10422
Total using 5 Star Rated Transformer					427079		10422
Total for Part - A (Material + Labour)							
i) Using 4 Star Rated Transformer					387056		
ii) Using 5 Star Rated Transformer					437501		
Part - B:							
13	11 kV Lightning Arrester, Metal Oxide 9 kV, 5 kA Polymeric type with ground disconnector	Set/3 Nos	1	1335	1335	78	78
Total for Part - B					1335		78

Sl. No.	Particulars	Unit	Qty.	250 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part - C: SWITCH GEAR							
14	a) LT Distribution box for 250 kVA with MCCB	No	1	17644	17644	501	501
	b) LT Wiring (From DTC to LT Line via Metering Box & LT Protection Kit) SINGLE CIRCUIT	No					
	i) Al Lead Wire - 240 Sqmm	Mtr	45	198.54	8934.3	}	1602
	ii) Heavy Duty Long Barrel Copper Lug - 240 Sqmm	No	12	244	2928		
	iii) PG Clamp - Rabbit to 240 Sqmm	No	4	316	1264		
	iv) Spacer for DTC Wiring	No	8	41	328		
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2	150	300		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	4726	4726	566	566
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694
15	11 kV, Solid Core Type HG Fuse Unit	Set/ 3 Nos	1	882	882	155	155
16	11 kV, 200 Amps, Single Break GOS	No	1	7799	7799	700	700
Total Cost (Material) for Part - C					47330		4218
Total for Part - C (Material + Labour)					51548		
Total (A+B+C)							
i) Using 4 Star Rated Transformer					425299		14718
ii) Using 5 Star Rated Transformer					475744		14718
Total (A+B+C) = (Material & Labour)							
i) Using 4 Star Rated Transformer					440017		
ii) Using 5 Star Rated Transformer					490462		

Note : Provision for actual quantity of additional materials viz 45 kN 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 as per field requirement.

COST DATA SHEET - 28

Erection of 3 Phase, 11kV/433V, 25 kVA BEE 4/5 Star Rated Single Pole Mounted Transformer Centre on RCC Pole - 9 Mtr Long (Square Section)

Sl. No.	Materials	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr long (Square Section)	No	1	7165	7165	1166	1166
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	3	180	540	0	0
3	11 kV, 45 KN Polymeric Insulator	No	3	164	492	0	0
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	1	830	830	390	390
5	Single Pole TC Set suitable for 25 kVA Transformer	Set	1	9180	9180	1118	1118
6	11 kV/433V, 25 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1	64900	64900	750	750
7	11 kV/433V, 25 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1	74365	74365	750	750
8	Earthing materials pipe type for grounding	Single Electrode with accessories	3	1501	4503	631	1893
9	Concreting materials for 9 Mtr RCC Pole						
	a) Base concreting 1:4:8, 650x650x150 mm	Each	1	0	0	308	308
	b) Pole concreting 1:2:4, 650x650x1700	Each	1	0	0	3440	3440
	c) Coping 1:2:4 (as per actuals)	Each	1	0	0	471	471
10	Guy concreting with Boulders, Mud and Sand	No	1	0	0	174	174
11	GI Wire 8 SWG	Kg	5	63.293	316.465	0	0
12	Guy Wire 7/10 SWG	Kg	10	65.137	651.37	0	0
13	11 kV Lightning Arrester, Metal Oxide 9 kV, 5 kA Polymeric Type with ground disconnecter	Set/3 Nos	1	1335	1335	78	78
14	a) LT Protection Kit for 25 kVA	No	1	1651	1651	226	226
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) SINGLE CIRCUIT	No					
	i) Al Lead Wire - 50 Sqmm	Mtr	25	44.31	1107.8		
	ii) Heavy Duty Long Barrel Copper Lug - 50 Sqmm	No	4	40	160		
	iii) PG Clamp - Rabbit to 50 Sqmm	No	4	79	316		625
	iv) Spacer for DTC Wiring	No	8	41	328		
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2	150	300		

Sl. No.	Materials	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	5287	5287	566	566
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694
15	11 kV, Solid Core Type HG Fuse Unit	Set/3 Nos	1	882	882	155	155
16	11 kV, 200 Amps, Single Break GOS	No	1	7799	7799	700	700
17	Caution/Danger Board	No	1	146	146	53	53
18	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	1	76	76	28	28
Total Cost							
i) Using 4 Star Rated Transformer					110491		12835
ii) Using 5 Star Rated Transformer					119956		12835
Total Cost (Material + Labour)							
i) Using 4 Star Rated Transformer		123326					
ii) Using 5 Star Rated Transformer		132791					

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 as per field requirement.

COST DATA SHEET - 29

Erection of 3 Phase, 11kV/433V, 63 kVA BEE 4/5 Star Rated Single Pole Mounted Transformer Centre on 9 Mtr RCC Pole (Square Section)

Sl. No.	Materials	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	9 Mtr long RCC pole (Square Section)	No	1	CDS Will be prepared after approval of DEI			
2	11 KV, 5 KN Polymeric Pin Insulator (24mm Dia FRP Rod)	Nos	3				
3	11 kV, 45 KN Polymeric Insulator	Nos	3				
4	Guy Set Complete with No. 15 Strain Insulator Concreting materials	Set	1				
5	Single Pole TC set suitable for 63 kVA Transformer	Set	1				
6	11kV/433V, 63 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1				
7	11kV/433V, 63 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1				
8	Earthing materials pipe type for grounding	Single Electrode with accessories	3				
9	Concreting materials for 9 Mtr RCC Pole						
	a) Base concreting 1:4:8, 650x650x150 mm	Each	1				
	b) Pole concreting 1:2:4, 500x500x1650	Each	1				
	c) Coping 1:2:4 (as per actuals)	Each	1				
10	Concreting materials for Guy sets (without cement)	No	1				
11	GI Wire 8 SWG	Kgs	5				
12	Guy Wire 7/10 SWG	Kgs	10				
13	11 kV Lightning Arrester, Metal oxide, 9kV, 5kA Polymeric Type with ground disconnector	Set/3 Nos	1				
13	a) LT Protection Kit for 63 kVA	Nos	2				
	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				
	ii) Heavy Duty Long Barrel Copper Lug - 95 Sqmm	Nos	4				
	iii) PG Clamp - Rabbit to 95 Sqmm	Nos	4				

Sl. No.	Materials	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
	iv) Spacer for DTC Wiring	Nos	8				
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	Nos	2				
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1				
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1				
14	11 kV, Solid Core Type HG Fuse Unit	Set/3 Nos	1				
15	11kV, 200 Amps, Single Break GOS	Nos	1				
16	Caution/Danger Board	No	1				
17	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	1				
Total material cost					0		0
Total Cost in Rs					0		

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 as per field requirement.

COST DATA SHEET - 30

Erection of 3 Phase, 11kV/433V, 100 kVA BEE 4/5 Star Rated Single Pole Mounted Transformer Centre on 9 Mtr RCC Pole (Square Section)

Sl. No.	Materials	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	9 Mtr long RCC pole (Square Section)	No	1	CDS Will be prepared after approval of DEI			
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	3				
3	11 kV, 45 KN Polymeric Insulator	No	3				
4	Guy Set Complete with No. 15 strain insulator & Concreting materials	Set	1				
5	Single Pole TC set suitable for 100 kVA Transformer	Set	1				
6	11kV/433V, 100 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1				
7	11kV/433V, 100 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1				
8	Earthing materials pipe type for grounding	No	3				
9	Providing Concreting for 9 Mtr RCC Pole						
	a) Base concreting 1:4:8, 500x650x150 mm	Each	1				
	b) Pole concreting 1:2:4, 500x500x1700	Each	1				
	c) Coping 1:2:4 (as per actuals)	Each	1				
10	Concreting materials for Guy sets (without cement)	No	1				
11	GI Wire 8 SWG	Kg	5				
12	Guy Wire 7/10 SWG	Kg	10				
13	11 kV Lightning Arrester, Metal oxide, 9 kV, 5 kA Polymeric Type with ground disconnector	Set/ 3 Nos	1				
14	a) LT Protection Kit	No	2				
	b) LT Distribution Box for 100 kVA with MCB	No	1				
	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	Mtr	45				
	ii) Heavy Duty Long Barrel Copper Lug - 120 Sqmm	No	12				
	iii) PG Clamp - Rabbit to 120 Sqmm	No	4				
	iv) Spacer for DTC Wiring	No	8				
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2				

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
	d) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1				
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1				
15	11 kV, Solid Core Type HG Fuse Unit	Set/3 Nos	1				
16	11kV, 200 Amps, Single Break GOS	Nos	1				
17	Caution/Danger Board	No	1				
18	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	1				
	Total Material Cost						
	a) With LT Distribution Box						
	b) With LT Protection Kit						
	Labour Charges			for LT Distribution Box		for LT Protection Kit	
	a) Casual		0			0	
			0			0	
	Total						
	Total Cost with LT Distribution Box in Rs				0		
	Total Cost with LT Protection KIT in Rs				0		

Note : Provision for actual quantity of additional materials viz 45 kN 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 as per field requirement.

COST DATA SHEET - 31

Erection of 3 Phase, 11 kV/433V, 250 kVA Transformer mounting structure on 11 Mtr Spun Pole with 3 GOS System and Transformer mounted on Plinth (Cost of Separate Masonry Platform for mounting transformer shall be extra)

Sl. No.	Materials	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	Spun pole 11 Mtr Long	No	1	16850	16850	2901	2901
2	Single Pole Transformer Structure Kit with Three H Frames without tranformer seating and seating Angle support cross arm for 63/100/250/500 kVA (UG Cable) MS	Set	1	16352	16352	2236	2236
3	HT Single Top Support with bolts, nuts & washers	Set	9	112	1008	70	630
4	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	9	180	1620	0	0
5	Rabbit ACSR Conductor for jumps	Mtr	50	36.50	1825	0	0
6	Alkathene Tube 19 mm Dia and in coils of 30 Mtr	Coil	2	458	916	0	0
7	Concreting materials for 11 Mtrs Spun Pole						
	a) Base concreting 1:4:8, 1000x1000x150 mm	Each	1	0	0	730	730
	b) Pole concreting 1:2:4, 1000x1000x2500 mm	Each	1	0	0	12177	12177
	c) Coping 1:2:4 (as per actuals)	Each	1	0	0	1930	1930
8	GI Wire 10 SWG	Kg	5	66.78	333.9	0	0
9	Guy Wire 7/10 SWG	Kg	10	63.14	631.4	0	0
10	GI Pipe 100 mm Dia	Mtr	10	1243	12430	0	0
11	PVC Pipe 150 mm Dia	Mtr	20	267	5340	0	0
12	PVC Bend 150 mm Dia	No	8	183	1464	0	0
13	PVC Pipe 25 mm Dia	Mtr	40	25	1000	0	0
14	11 kV/433V, 250 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with oil	No	1	336300	336300		
15	11 kV/433V, 250 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with oil	No	1	386745	386745	1502	1502
16	11 kV, Solid Core Type HG Fuse Unit	Set/3 Nos	1	882	882	155	155
17	11 kV, 200 Amps, Single Break GOS	Nos	3	7799	23397	700	2100
18	Earthing materials pipe type for grounding	Single Electrode with accessories	3	1501	4503	631	1893
19	a) LT Distribution Box for 250 kVA with MCCB	No	1	17644	17644	501	501
	b) LT Wiring (From DTC to LT Line via Metering Box & LT Protection Kit) DOUBLE CIRCUIT						

Sl. No.	Materials	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
	i) Al Lead Wire - 240 Sqmm	Mtr	90	198.54	17869		
	ii) Heavy Duty Long Barrel Copper Lug - 240 Sqmm	No	24	244	5856		
	iii) PG Clamp - Rabbit to 240 Sqmm	No	8	316	2528		1602
	iv) Spacers for DTC Wiring	No	16	41	656		
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	4	150	600		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	4726	4726	566	566
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694
20	11 kV, Lightning Arrester, Metal oxide, 9 kV, 5 kA Polymeric Type with ground disconnecter	Set/3 Nos	1	1335	1335	78	78
21	PVC Insulation Tape in rolls of 10 Mtr	Roll	3	14	42	0	0
22	Horizontal Cross Arm	No	4	251	1004	0	0
23	MS Fish plate	No	9	54	486	0	0
24	Caution/Danger Board	No	1	146	146	53	53
25	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
	Total using 4 Star Rated Transformer				480421		29804
	Total using 5 Star Rated Transformer				526305		
	Total cost (Material+Labour)						
	Total using 4 Star Rated Transformer				510225		
	Total using 5 Star Rated Transformer				556109		
	Providing Platform for seating transformer						shall be added as per actuals

Note:

1. Cost of providing separate masonry/concrete platform for mounting the Distribution Transformer shall be added as per site requirements.
2. Provision for actual quantity of additional materials viz 45 kN 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 as per field requirement.

COST DATA SHEET - 32

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

Sl. No.	Materials	Unit	Rate (Rs.)	At Common CSR Rate							
				Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)
1	RMU 4 Way, (2OD + 2VL), One Incomer + Two Breaker + One out going, 350 MVA, 630 Amps	Set	600000	1	600000	1	600000	1	600000	1	600000
Sl. No.	Materials	Unit	Rate (Rs.)	Schenider Make		ABB Make		Siemens Make		MEI Make	
				Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)
2	Bed Concreting with CC 1:2:4 as per Labour Charges	Cmt	5441	0.15	816	0.37	2013	0.53	2884	0.64	3482
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges	Cmt	5441	0.65	3537	1.44	7835	0.56	3047	0	0
4	Providing Reinforcement as per Labour Charges	Kg	6048	40	241920	14	84672	23	139104	0	0
5	Providing Plinth with CC 1:2:4 on the Stone Masonary	Cmt	5441	0	0	0	0	0	0	0.08	435
6	Construction of Stone Masonary	Cmt	4037	0	0	0	0	0	0	0.57	2301
7	Supplying of Frame of MS Channel 100x50 mm and MS angle 40x40x5 mm welding etc., complete.	Kg	50	50	2500	50	2500	50	2500	50	2500
8	Rod type earthing with 40 mm Dia, 3 Mtr long MS rod as per specification & drawing (enclosed)	No	1832	2	3664	2	3664	2	3664	2	3664
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	656	1	656	1	656	1	656	1	656
Total cost of material					853093		701340		751855		613039
Labour Charges											
1	Earth Excavation for RMU Foundation depositing of earth on bank up to a lead of 50 Mtr and with a lift up to 1.5 Mtr	Cmt	189	1.29	244	3.33	629	2.63	497.07	5.72	1081

Sl. No.	Materials	Unit	Rate	At Common CSR Rate							
				Schneider Make		ABB Make		Siemens Make		MEI Make	
				Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
2	Labour charges for Fixing foundation frame of MS channel 100x50 mm and MS angle 40x40x5 mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel etc., complete.	No	3120	4	12480	4	12480	4	12480	4	12480
Labour Charges					12724		13109		12977		13561
Total Cost (Material+Labour)					865817		714450		764832		626600

Note :

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 BESCO.

COST DATA SHEET - 33

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

Sl. No.	Materials	Unit	Rate (Rs.)	Schenider Make		ABB Make		Siemens Make		MEI Make	
				Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)
1	RMU 3 Way, (2OD + 1VL,) One Incomer + One Breaker + One outgoing, 350 MVA, 630 Amps	Set	425000	1	425000	1	425000	1	425000	1	425000
Sl. No.	Materials	Unit	Rate (Rs.)	Schenider Make		ABB Make		Siemens Make		MEI Make	
				Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)
2	Bed Conceting with CC 1:2:4 as per Labour Charges	Cmt	5441	0.08	435	0.28	1523	0.43	2340	0.48	2612
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges	Cmt	5441	0.36	1959	1.08	5876	0.42	2285	0	0
4	Providing Reinforcement as per Labour Charges	Kg	6048	30	181440	10	60480	17	102816	0	0
5	Providing Plinth with CC 1:2:4 on the Stone Masonary	Cmt	5441	0	0	0	0	0	0	0.06	326
6	Construction of Stone Masonary	Cmt	4037	0	0	0	0	0	0	0.43	1736
7	Supplying of Frame of MS Channel 100x50 mm and MS angle 40x40x5 mm welding etc., complete.	Kg	50	40	2000	40	2000	40	2000	40	2000
8	Rod type earthing with 40 mm Dia, 3 Mtr long MS rod as per specification & drawing (enclosed)	No	1832	2	3664	2	3664	2	3664	2	3664
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	656	1	656	1	656	1	656	1	656
Total cost of material					615154		499200		538761		435994
Labour Charges											
1	Earth Excavation for RMU Foundation depositing of earth on bank up to a lead of 50 Mtr and with a lift up to 1.5 Mtr	Cmt	189	0.72	136.08	2.5	472.5	2	378	4.35	822

Sl. No.	Materials	Unit	Rate	At Common CSR Rate							
				Schenider Make		ABB Make		Siemens Make		MEI Make	
				Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
2	Labour charges for Fixing foundation frame of MS channel 100x50 mm and MS angle 40x40x5 mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel etc., complete.	No	3120	3	9360	3	9360	3	9360	3	9360
Labour Charges					9496		9833		9738		10182
Total Cost (Material+Labour)					624650		509032		548499		446176

Note:-
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.

COST DATA SHEET - 34

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

Sl. No.	Materials	Unit	Rate (Rs.)	Schenider Make		ABB Make		Siemens Make		MEI Make	
				Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)
1	RMU 1 OD, 350 MVA, 630 Amps	No.	150000	1	150000	1	150000	1	150000	1	150000
2	Bed Conceting with CC 1:2:4 as per Labour Charges	Cmt	5441	0.07	380.87	0.09	489.69	0.1	544.1	0.16	870.56
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges	Cmt	5441	0.29	1577.89	0.36	1958.76	0.14	761.74	0	0
4	Providing Reinforcement as per Labour Charges	Kgs	6048	10	60480	3.5	21168	6	36288	0	0
5	Providing Plinth with CC 1:2:4 on the Stone Masonary	Cmt	5441	0	0	0	0	0	0	0.02	108.82
6	Construction of Stone Masonary	Cmt	4037	0	0	0	0	0	0	0.14	565.18
7	Supplying of Frame of MS Channel 100x50 mm and MS angle 40x40x5 mm welding etc., complete.	Kgs	50	12	600	12	600	12	600	12	600
8	Rod type earthing with 40 mm Dia, 3 Mtr long MS rod as per specification & drawing (enclosed)	No	1832	2	3664	2	3664	2	3664	2	3664
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	656	1	656	1	656	1	656	1	656
Total cost of material					217359		178536		192514		156465
Labour Charges											
1	Earth Excavation for RMU Foundation depositing of earth on bank up to a lead of 50 Mtr and with a lift up to 1.5 Mtr	cmt	189	0.57	108	0.83	157	0.63	119	1.37	259

Sl. No.	Materials	Unit	Rate	At Common CSR Rate							
				Schneider Make		ABB Make		Siemens Make		MEI Make	
				Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
2	Labour charges for Fixing foundation frame of MS channel 100x50 mm and MS angle 40x40x5 mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel etc., complete.	No.	3120	1	3120	1	3120	1	3120	1	3120
Labour Charges					3228		3277		3239		3379
Total Cost (Material + Labour)					220586		181813		195753		159843

Note:-
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 BESCO.

COST DATA SHEET - 35

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

Sl. No.	Materials	Unit	Rate (Rs.)	Schneider Make		ABB Make		Siemens Make		MEI Make	
				Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)	Qty	Amt (Rs.)
1	RMU 1 VL, 350 MVA, 630 Amps	No	150000	1	150000	1	150000	1	150000	1	150000
2	Bed Conceting with CC 1:2:4 as per Labour Charges	Cmt	5441	0.07	380.87	0.09	489.69	0.1	544.1	0.16	870.56
3	Foundation with Reinforcement CC 1:2:4 as per Labour Charges	Cmt	5441	0.29	1577.89	0.36	1958.76	0.14	761.74	0	0
4	Providing Reinforcement as per Labour Charges	Kg	6048	10	60480	3.5	21168	6	36288	0	0
5	Providing Plinth with CC 1:2:4 on the Stone Masonary	Cmt	5441	0	0	0	0	0	0	0.02	108.82
6	Construction of Stone Masonary	Cmt	4037	0	0	0	0	0	0	0.14	565.18
7	Supplying of Frame of MS Channel 100x50mm and MS angle 40x40x5mm welding etc., complete.	Kg	50	12	600	12	600	12	600	12	600
8	Rod type earthing with 40 mm Dia, 3 Mtr long MS rod as per specification & drawing (enclosed)	No	1832	2	3664	2	3664	2	3664	2	3664
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	656	1	656	1	656	1	656	1	656
Total cost of material.					217359		178536		192514		156465
Labour Charges											
1	Earth Excavation for RMU Foundation depositing of earth on bank up to a lead of 50 Mtr and with a lift up to 1.5 Mtr	Cmt	189	0.57	107.73	0.83	156.87	0.63	119.07	1.37	258.93

Sl. No.	Materials	Unit	Rate	At Common CSR Rate							
				Schenider Make		ABB Make		Siemens Make		MEI Make	
				Qty	Amt	Qty	Amt	Qty	Amt	Qty	Amt
2	Labour charges for Fixing foundation frame of MS channel 100x50 mm and MS angle 40x40x5 mm welding, fixing in concrete, aligning the RMU on foundation bed, assembly of units, connecting Bus Bars from panel to panel etc., complete.	No	3120	1	3120	1	3120	1	3120	1	3120
Labour Charges					3228		3277		3239		3379
Total Cost (Material+Labour)					220586		181813		195753		159843

Note:-
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.

COST DATA SHEET - 36 (AB CABLE)

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

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 kg WL	No	10	6258	62580	1166	11660
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	24	3689	88536	1166	27984
3	11 kV, 3 Phase Aerial Bunched Cable 3x95 + 70 Sqmm	KM	1.03	680510	700925.3	22469	23143.1
4	Cable Straight thru' joint kits suitable for 95 Sqmm	Set/3 Nos	6	6813	40878	911	5466
5	11 kV AB Cable Termination Kits for 95 to 120 Sqmm	Set/3 Nos	6	2532	15192	770	4620
6	Suspension Clamp Assembly 16 to 70 mm (Excluding pole clamp & Eye Hook)	Set	30	196	5880	127	3810
7	Pole clamp for HT/LT AB cable	Set	30	103	3090	211	6330
8	Eye Hook (Flat type) for fixing Clamps	Set	30	90	2700	0	0
9	Dead End Clamp/Anchor Clamp Assembly 16 to 70 Sqmm (excluding pole clamps and Eye hook)	Set	12	206	2472	169	2028
10	End cap for 50/70 Sqmm	No	10	20	200	6	60
11	11 kV Lightning Arrester, Metal Oxide 9 kV, 5 kA Polymeric Type with ground disconnecter	Set/3 Nos	2	1335	2670	78	156
12	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	6	830	4980	390	2340
13	Guy concreting with Boulders, Mud and Sand	Set	6	0	0	174	1044
14	Grounding connection for messenger wire	No	4	12	48	29	116
15	Spiral Earth Electrode	No	34	165	5610	61	2074
Total Cost of Material & Labour					935761		90831
Total Cost/KM in Rs.		1026592					

Note

1. While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. 11 To general guidelines vide a to g page No.9.
2. Any other item required as per filed requirement may be included/deleted.

COST DATA SHEET - 37 (AB CABLE)

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

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	RCC Pole - 9 Mtr Long, 145 kg WL	No	10	6858	68580	1166	11660
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	15	3689	55335	1166	17490
3	1.1 kV, 3 Phase Aerial Bunched Cable of size 3x95+1x16+1x70 Sqmm	KM	1.03	435622	448697	22469	23143
4	Three Phase Distribution box for 6 Connections	No	20	2128	42560	592	11840
5	Piercing connector suitable for 16 Sqmm - 95 Sqmm AB Cable - Service Connections	No	80	235	18800	85	6800
6	Piercing connector suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connections	No	50	165	8250	59	2950
7	Suspension Clamp Assembly 16 to 70 mm (Excluding pole clamp & Eye Hook)	Set	20	196	3920	127	2540
8	Pole clamp for HT/LT AB cable	Set	20	103	2060	211	4220
9	Eye Hook (Flat type) for fixing Clamps	Set	20	90	1800	0	0
10	Dead End Clamp/Anchor Clamp Assembly 25 to 95 Sqmm (excluding pole clamps and Eye hook)	Set	16	135	2160	169	2704
11	Universal Hook, Bolts & nuts	No	16	314	5024	127	2032
12	T-connector KZ3 95	No	20	348	6960	143	2860
13	Cable Straight thru' joints suitable for 95 Sqmm LT ABC	No	5	373	1865	169	845
14	Pre-Insulated lugs - CPTAU for 95 Sqmm	No	8	348	2784	176	1408
15	End cap for 50/70 Sqmm	No	50	20	1000	6	300
16	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	830	6640	390	3120
17	Guy concreting with Boulders, Mud and Sand	Set	8	0	0	174	1392
18	PVC Insulated wire 25 Sqmm	Mtr	400	32.31	12924	0	0
19	Spiral Earth Electrode	No	25	165	4125	61	1525
Total Cost of Material & Labour				693478		96829	
Total Cost/KM in Rs.				790307			

Note :

1. While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. 11 To general guidelines vide a to g page No.9.
2. Any other item required as per filed requirement may be included/deleted.

COST DATA SHEET - 38 (RLMU)

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

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)	
				Rate	Amt
1	Metallic Enclosure with Busbars	No	1	Proposed for Deletion has RLMU works are not taken up	
2	Programmable Logic Controllers with communication port	No	1		
3	GSM Modem	No	1		
4	MCCB - 40 Amps for 15/25 kVA DTC	No	1		
5	MCB 6 Amps	No	1		
6	Contactors - 40 Amps for 15/25 kVA DTC	No	2		
7	Current Transformers 50/5 Amps for 15/25 kVA DTC	No	3		
8	Electronic Trivector Meter 3 Phase, 4 Wire, Accuracy 0.5 Cl	No	1		
9	Transformer wiring kit to Connect RLM Unit box to the transformer using PVC sheathed aluminium lead wire, Lugs etc.,	Kit	1		
10	Miscellaneous materials	LS	LS		
Total Cost of Material					0
Labour Charges					
Total Cost in Rs.			0		

Note: (1) For 15 /25 kVA Transformer feeding to individual IP sets, use only one contactor & without MCCB.

COST DATA SHEET - 39

Installing RLMU for the Existing 63 kVA Distribution Transformer Center

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)	
				Rate	Amt
1	Metallic Enclosure with Busbars	No	1	Proposed for Deletion has RLMU works are not taken up	
2	Programmable Logic Controllers with communication ports	No	1		
3	GSM Modem	No	1		
4	MCCB - 100 Amps for 63 kVA DTC	No	1		
5	MCB 6 amps	No	1		
6	Contactors - 100 Amps for 63 kVA DTC	No	2		
7	Current Transformers 100/5 Amps for 63 kVA DTC	No	3		
8	Electronic Trivector Meter 3 Phase, 4 Wire, Accuracy 0.5 Cl	No	1		
9	Transformer wiring kit to Connect RLM Unit box to the transformer using PVC sheathed aluminium lead wire, Lugs etc.,	Kit	1		
10	Miscellaneous materials	LS	LS		
Total Cost (Material)					0
Labour Charges					
Total Cost in Rs.			0		

COST DATA SHEET - 40

Installing RLMU for the Existing 100 kVA Distribution Transformer Center

Sl. No.	Particulars	Unit	Qty.	Material Cost	
				Rate	Amt
1	Metallic Enclosure with Busbars	No	1	Proposed for Deletion has RLMU works are not taken up	
2	Programmable Logic Controllers with communication ports	No	1		
3	GSM Modem	No	1		
4	MCCB - 150 Amps for 100 kVA DTC	No	1		
5	MCB 6 amps	No	1		
6	Contactors - 160 Amps for 100 kVA DTC	No	2		
7	Current Transformers 150/5 Amps for 100 kVA DTC	No	3		
8	Electronic Trivector Meter 3 Phase, 4 Wire, Accuracy 0.5 Cl	No	1		
9	Transformer wiring kit to Connect RLM Unit box to the transformer using PVC sheathed aluminium lead wire, Lugs etc.,	Kit	1		
10	Miscellaneous materials	LS	LS		
Total Cost (Material)					0
Labour Charges					
Total Cost in Rs.			0		

COST DATA SHEET - 41

Providing Compact Pre - Fabricated Packaged Sub - Station 11kV/433V

Sl. No.	Particulars	Unit	Total Cost
1	COMPACT PRE - FABRICATED PACKAGED SUB - STATION		
	Compact Pre - Fabricated Packaged Sub - Station 11kv/433V consisting of 3 way SF6/VCB insulated compact RMU, oil cooled CRGO/Amoprhous Core Star - 2 Rated (5 Star) Transformer and LT section with one MCCB/ACB as incoming and following ougoing MCCB feeders and with enclosure made of electronically Galvanized steel sheet (min 2 mm Thickness) with powder coated finish, Cu busbar with LT Metering facility	Set	
a	100 kVA Al. Wound Transformer, 250 Amps MCCB 50 kA 4 pole fixed type micro processor based for LT incomer and 2 Nos. 100 Amps MCCB 4 pole 36 kA TM Based for out going	Set	1293000
b	250 kVA Al. Wound Transformer, 400 Amps MCCB 50 kA 4 pole fixed type micro processor based for LT incomer and 3 Nos. 250 Amps MCCB 4 pole 36 kA TM Based for out going	Set	1655000
c	500 kVA Al. Wound Transformer, 800 Amps ACB 50 kA 4 pole fixed type micro processor based for LT incomer and 4 Nos. 250 Amps MCCB 4 pole 36 kA TM Based for out going	Set	2176000
d	800 kVA Copper Wound Transformer, 1250 Amps ACB 50 kA 4 pole fixed type micro processor based for LT incomer and 6 Nos. 250 Amps MCCB 4 pole 36 kA TM Based for LT out going	Set	2700000
e	1000 kVA Copper Wound Transformer, 1600 Amps ACB 50 kA 4 pole fixed type micro processor based for LT incomer and 2 Nos. 400 Amps MCCB + 4 No. 250 Amps MCCB 4 pole 36 kA TM Based for LT out going.	Set	3327000
2	Installing & fixing the compact pre-fabricated packaged sub-station with 100/250/500/800/1000 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)	Lumpsum	10525

Note :

1. Labour charges and installing the CSS is not furnished as the platform size cable duct Laying & Termination varies from Make/Capacity and hence estimate has to be prepared as per actual field/site condition.
2. While preparing estimates for turnkey/total turnkey projects please refere to Sl. No. 11 To general guidelines vide a to g page No.9.

COST DATA SHEET - 42

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

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	LT CT's - 0.5 Accuracy Class Ring Type Ratio 50/5 for 15/25 kVA DTC	No	3	541	1623	69	207
2	LT CT's 0.5 Accuracy Class Ring Type Ratio 100/5 for 50/63 kVA DTC	No	3	401	1203	69	207
3	LT CT's 0.5 Accuracy Class Ring Type Ratio 150/5 for 100 kVA DTC	No	3	300	900	69	207
4	LT CT's 0.5 Accuracy Class Ring Type Ratio 400/5 for 250 kVA DTC	No	3	354	1062	69	207
5	LT CT's 0.5 Accuracy Class Ring Type Ratio 800/5 for 500 kVA DTC	No	3	398	1194	69	207
6	Electronic Trivector Meter 3 Phase, 4 Wire, 0.5 Accuracy Class	No	1	2525	2525	694	694
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	3664	3664	359	359
Total Cost in Rs.				With Meter		Without Meter	
	a) 15/25 kVA DTC		7812	1260	5287	566	
	b) 63 kVA DTC		7392	1260	4867	566	
	c) 100 kVA DTC		7089	1260	4564	566	
	d) 250 kVA DTC		7251	1260	4726	566	
	e) 500 kVA DTC		7383	1260	4858	566	

Note :
While preparing estimates for turnkey/total turnkey projects please refer to Sl. No. 11 To general guidelines vide a to g page No.9.

COST DATA SHEET - 43

Providing LT Capacitor to the Distribution Transformer

Sl. No.	Materials	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				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	Proposed for deletion has fixed KVAR capacitors are not to be installed on DTC's			
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				
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				
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				
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				
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				
Total				Material + Labour	Material	Labour	
a)	For 25KVA Transformer			0	0	0	
b)	For 63KVA Transformer			0	0	0	
c)	For 100KVA Transformer			0	0	0	
d)	For 250KVA Transformer			0	0	0	
e)	For 300/500 KVA Transformer			0	0	0	

COST DATA SHEET - 44

**Carrying Out 1 to 2 (ONE to TWO) Poles Works in respect of Ganga Kalyana and Drinking Water Supply Works only (not applicable for works awarded on tender/RC)
(Not applicable for any other type of work)**

Sl. No.	Particulars	Unit	Qty	Consolidated Amount in Rs.
1	PART - A (Material) Material cost Estimate shall be prepared as per site requirement			
2	PART - B (Labour) Consolidated labour charges involving 1 to 2 (ONE to TWO) pole works for Ganga Kalyana and Drinking Water supply works only.	Lumpsum	Lumpsum	9712

Note:-

1. The labour charges includes all works such as digging of pits, Erection of Poles, Fixing of Cross Arms, Stringing of conductor, fixing of Conductor 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.
5. The above rates are not applicable for works awarded on tender.

COST DATA SHEET- 45

**Carrying Out 3 to 5 (THREE to FIVE) Poles Works in respect of Ganga Kalyana and Drinking Water Supply Works only (not applicable for works awarded on tender/RC)
(Not applicable for any other type of work)**

Sl. No.	Particulars	Unit	Qty	Consolidated Amount in Rs.
1	PART - A (Material) Material cost Estimate shall be prepared as per site requirement			
2	PART - B (Labour) Consolidated labour charges involving 3 to 5 (THREE to FIVE) pole works for Ganga Kalyana and Drinking Water supply works only.	Lumpsum	Lumpsum	15344

Note:-

1. The labour charges includes all works such as digging of pits, Erection of Poles, Fixing of Cross Arms, Stringing 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
5. The above rates are not applicable for works awarded on tender

COST DATA SHEET- 46

**Carrying out 1 to 4 (ONE to FOUR) poles works in respect of Service Main Connection and E&I Works only (not applicable for works awarded on tender/RC)
(Not applicable for any other type of work)**

Sl. No.	Particulars	Unit	No. of Pole Works Involved	Consolidated Amount in Rs.
	PART - A (Material)			
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	4662
		Nos	2	6215
		Nos	3	7769
		Nos	4	9323
				5 & Above

Note:-

1. The labour charges includes all works such as digging of pits, Erection of Poles, Fixing of Cross Arms, Stringing 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
5. The above rates are not applicable for works awarded on tender

COST DATA SHEET- 47

Consolidated Labour charges for shifting of conductor terminations and all other fittings existing on the deteriorated pole while replacing termination (cut point) poles (Does not include labour chages for releasing and erection of pole) (not applicable for works awarded on tender/RC)

Sl. No.	Description of the work	Unit	Labour charges of the work
1	Consolidated Labour charges for shifting of the conductor terminations (existing cut points) in deteriorated existing poles to new poles erected. Work includes all works associated with shifting of the terminations, like shifting of aerial fuse boards, cut outs, service main (UG cable and over head) and any other existing fitting.	Per Pole	3300

Note:-

The above rates are not applicable for works awarded on tender/RC.

COST DATA SHEET- 48

**Consolidated Labour charges for shifting of conductor and all other fittings existing on the deteriorated pole while replacing intermediate poles
(Does not include labour chages for releasing and erection of pole)
(not applicable for works awarded on tender/RC)**

Sl. No.	Description of the work	Unit	Labour charges of the work
1	Consolidated Labour charges for shifting of the existing conductor, including all works associated with shifting of the conductor such as any fittings, aerial fuse boards, cut outs, service main (UG cable and over head) etc., on the existing deteriorated intermediate pole to new pole erected.	Per Pole	2420

NOTE:

1. The above rates are not applicable for works awarded on tender/RC

COST DATA SHEET - 49

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	Mtr	199
2	Heavy Duty Long Barrel Copper Lug - 240 Sqmm	No	244
3	PG Clamps - Rabbit to 240 Sqmm	No	316
4	Spacers for DTC Wiring	No	41
5	Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	150

LT Wiring for - 100 KVA

1	Al Lead Wire - 120 Sqmm	Mtr	107
2	Heavy Duty Long Barrel Copper Lug - 120 Sqmm	No	96
3	PG Clamps - Rabbit to 120 Sqmm	No	210
4	Spacers for DTC Wiring	No	41
5	Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	150

LT Wiring for - 63 KVA

1	Al Lead Wire - 95 Sqmm	Mtr	82
2	Heavy Duty Long Barrel Copper Lug - 95 Sqmm	No	88
3	PG Clamps - Rabbit to 95 Sqmm	No	108
4	Spacers for DTC Wiring	No	41
5	Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	150

LT Wiring for - 25 KVA

1	Al Lead Wire - 50 Sqmm	Mtr	44
2	Heavy Duty Long Barrel Copper Lug - 50 Sqmm	No	40
3	PG Clamps - Rabbit to 50 Sqmm	No	79
4	Spacers for DTC Wiring	No	41
5	Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	150

NOTE :

1. The size of the lead wire provisioned are as per Standard requirement depending on the Ampere rating of the transformer.
2. The Size of the cable mabe modified to suite field requirement where ever necessary.
3. Estimate shall be prepared for actual quantity as per field requirements.

COST DATA SHEET- 50

**Running Single Circuit 11 kV, 3 Phase Power Line On 9 Mtr Supports
With An Average Span Of 40 Mtr Using Rabbit ACSR Conductor and PSCC Pole
- 9 Mtr Long, 300 Kg WL for dead ends and DP structure**

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	1	4686	4686	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	23	3689	84847	1166	26818
3	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	447	447	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	23	438	10074	106	2438
5	DP Structure using PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	14306	14306	3578	3578
6	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	72	180	12960	0	0
7	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
8	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	6	830	4980	390	2340
9	Rabbit ACSR Conductor	KM	3.045	36497	111133	2869	8736
10	PG Clamps for Rabbit Conductor	No	6	79	474	0	0
11	Spiral Earth Electrode	No	26	165	4290	61	1586
12	EG Stirrups with GI wire lacing	Set of 2 Nos	24	191	4584	109	2616
13	Guy concreting with Boulders, Mud and Sand	No	6	0	0	174	1044
14	Caution/Danger Board	No	8	146	1168	53	424
15	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	No	26	76	1976	28	728
Total					256909		51580
Total Cost/KM in Rs.				308489			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 51

Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 50 Mtr Using Rabbit ACSR Conductor and PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and DP structure

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	1	4686	4686	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	18	3689	66402	1166	20988
3	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	447	447	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	18	438	7884	106	1908
5	DP Structure using PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	14306	14306	3578	3578
6	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	57	180	10260	0	0
7	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
8	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	6	830	4980	390	2340
9	Rabbit ACSR Conductor	KM	3.045	36497	111133	2869	8736
10	PG Clamps for Rabbit conductor	No	6	79	474	0	0
11	Spiral Earth Electrode	No	21	165	3465	61	1281
12	EG Stirrups with GI wire lacing	Set of 2 Nos	19	191	3629	109	2071
13	Guy concreting with Boulders, Mud and Sand	No	6	0	0	174	1044
14	Caution/Danger Board	No	6	146	876	53	318
15	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	21	76	1596	28	588
Total					231122		44124
Total Cost/KM in Rs.				275246			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 52

**Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports
with an Average Span of 40 Mtr Using COYOTE ACSR conductor and PSCC Pole
- 9 Mtr Long, 300 Kg WL for dead ends and DP structure**

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 kg WL	No	1	4686	4686	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 kg WL	No	22	3689	81158	1166	25652
3	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 300 kg WL	Set	1	447	447	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 kg WL	Set	22	438	9636	106	2332
5	DP Structure using PSCC Pole - 9 Mtr Long, 300 kg WL	Set	2	14306	28612	3578	7156
6	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	69	180	12420	0	0
7	70/90 kN Disc Insulator	No	12	431	5172	0	0
8	Strain Clamp 3 bolt type for Disc Insulator	No	12	494	5928	0	0
9	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	6	830	4980	390	2340
10	Coyote ACSR Conductor	KM	3.045	100111	304838	5011	15258
11	PG Clamps for Coyote Conductor	No	12	275	3300	0	0
12	Spiral Earth Electrode	No	27	165	4455	61	1647
13	EG Stirrups with GI wire lacing	Set of 2 Nos	23	191	4393	109	2507
14	Guy concreting with Boulders, Mud and Sand	No	6	0	0	174	1044
15	Caution/Danger Board	No	10	146	1460	53	530
16	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	27	76	2052	28	756
Total					473537		60494
Total Cost/KM in Rs.				534031			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 53

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 Mtr using RABBIT Conductor for HT and WEASEL for LT Lines and using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and DP structure

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	1	4686	4686	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	18	3689	66402	1166	20988
3	11 kV, Horizontal Cross Arm with clamps, HTST Supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	447	447	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST Supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	18	438	7884	106	1908
5	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	275	275	106	106
6	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	19	266	5054	106	2014
7	DP Structure using PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	14306	14306	3578	3578
8	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	57	180	10260	0	0
9	1.1 kV Pin Insulator with GI Pin	No	76	48	3648	0	0
10	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
11	No. 8 Strain Insulator	No	8	16	128	0	0
12	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	8	830	6640	390	3120
13	Rabbit ACSR for HT Line	KM	3.045	36497	111133	2869	8736
14	Weasel ACSR for LT line	KM	4.06	21552	87501	2104	8542
15	Spiral Earth Electrode	No	21	165	3465	61	1281
16	Guarding between HT & LT Line				0		0
	a) Guarding Material	Span	20	4000	80000	1165	23300
	b) 4 Pin Cross Arm with clamps, bolts, nuts and washers for guarding	Set	20	266	5320	0	0
17	PG Clamps for Rabbit conductor	No	6	79	474	0	0
18	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
19	Caution/Danger Board	No	6	146	876	53	318
20	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	21	76	1596	28	588
Total					411079		77143
Total Cost/KM in Rs.				488223			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 54

Running Single Circuit 11 kV, 3 Phase Power Line & 3 Phase 4 Wire Secondary Line on 9 Mtr Supports with an Average Span of 40 Mtr Using RABBIT ACSR conductor for HT & LT Lines and using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and DP structure

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	1	4686	4686	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	23	3689	84847	1166	26818
3	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	447	447	106	106
4	11 kV, Horizontal Cross Arm with clamps, HTST supports, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	23	438	10074	106	2438
5	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	275	275	106	106
6	LT 4 Pin cross arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	24	266	6384	106	2544
7	DP Structure using PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	14306	14306	3578	3578
8	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	72	180	12960	0	0
9	1.1 kV Pin Insulator with GI Pin	No	96	48	4608	0	0
10	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
11	No. 8 Strain Insulator	No	8	16	128	0	0
12	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	8	830	6640	390	3120
13	Rabbit ACSR Conductor	KM	7.105	36497	259311	2869	20384
14	PG Clamps for Rabbit conductor	No	6	79	474	0	0
15	Spiral Earth Electrode	No	26	165	4290	61	1586
16	Guarding between HT & LT Lines				0		0
	a) Guarding Materials	Span	25	3200	80000	663	16575
	b) 4 Pin cross arm with clamps, bolts, nuts and washers.	Set	25	266	6650	0	0
17	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
18	Caution/Danger Board	No	8	146	1168	53	424
19	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	26	76	1976	28	728
Total					500208		80965
Total Cost/KM in Rs.				581173			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 55

Running LT, 3 Phase 4 Wire Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor with an Average Span of 40 Mtr and using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and DP structure

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	1	4686	4686	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	24	3689	88536	1166	27984
3	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	1	275	275	106	106
4	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	24	266	6384	106	2544
5	1.1 kV Pin Insulator with GI Pin	No	96	48	4608	0	0
6	No. 8 Strain Insulator	No	8	16	128	0	0
7	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	811	6488	390	3120
8	Rabbit ACSR Conductor	KM	4.06	36497	148178	2869	11648
9	Spiral Earth Electrode	No	25	165	4125	61	1525
10	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
11	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					265308		50185
Total Cost / KM in Rs.				315493			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 55 (A)

**Running LT, 3 Phase 4 Wire Power Line on 8 Mtr Supports Using RABBIT ACSR Conductor
with an Average Span of 40 Mtr and Using PSCC Pole - 8 Mtr Long, 200 Kg WL
for dead ends, anchor points and DP structure**

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 8 Mtr Long, 200 Kg WL	No	25	3054	76350	932	23300
2	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers	Set	25	266	6650	106	2650
3	1.1 kV Pin Insulator with GI Pin	No	96	48	4608	0	0
4	No. 8 Strain Insulator	No	8	16	128	0	0
5	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	811	6488	390	3120
6	Rabbit ACSR Conductor	KM	4.06	36497	148178	2869	11648
7	Spiral Earth Electrode	No	25	165	4125	61	1525
8	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
9	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					248427		44335
Total Cost/KM in Rs.					292762		

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 56

**Running LT, 3 Phase 5 Wire for Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor for Phase, Neutral and WEASEL Conductor for Street Light with an Average Span of 40 Mtr and Using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and Anchor Points
(For Cities, Towns and Residential Layouts)**

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL (for Deadend, Anchor points)	No	6	4686	28116	1166	6996
2	PSCC Pole - 9 Mtr Long, 200 Kg WL (for Intermediate Pole)	No	19	3689	70091	1166	22154
3	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	7	275	1925	106	742
4	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	22	266	5852	106	2332
5	LT 2 Pin Cross Arm with clamps, bolts, nuts for PSCC Pole - 9 Mtr Long, 300 Kg WL	Set	7	171	1197	106	742
6	LT 2 Pin Cross Arm with clamps, bolts, nuts for PSCC Pole - 9 Mtr Long, 200 Kg WL	Set	18	162	2916	106	1908
7	1.1 kV Pin Insulator with GI Pin	No	95	48	4560	0	0
8	No. 8 Strain Insulator	No	50	16	800	0	0
9	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	10	811	8110	390	3900
10	Rabbit ACSR Conductor	KM	4.06	36497	148178	2869	11648
11	Weasel ACSR Conductor	KM	1.015	21552	21875	2104	2136
12	Spiral Earth Electrode	No	25	165	4125	61	1525
13	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
14	Sheet Metal/Deep Drawn Street Light Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps meter & 50/5A CT including wiring	No	1	5954	5954	622	622
15	PVC Pipe 40 mm Dia	Mtr	6	46	276	0	0
16	PVC Insulated wire 25 Sqmm Single Core Multi stranded	Mtr	25	32.31	807.75	0	0
17	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					306683		56797
Total Cost/KM in Rs.				363480			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 56A

Running LT, 3 Phase 5 Wire for Power Line on 8 Mtr Supports Using RABBIT ACSR Conductor for Phase, Neutral and WEASEL Conductor for Street Light with an Average Span of 40 Mtr and using PSCC Pole - 8 Mtrs Long, 200 Kg WL for dead ends and Anchor Points (For Cities, Towns and Residential Layouts)

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 8 Mtr Long, 200 Kg WL	No	25	3054	76350	932	23300
2	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers	Set	26	266	6916	106	2756
3	LT 2 Pin Cross Arm with clamps, bolts, nuts and washers	Set	25	162	4050	106	2650
4	1.1 kV Pin Insulator with GI Pin	No	95	48	4560	0	0
5	No. 8 Strain Insulator	No	50	16	800	0	0
6	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	10	811	8110	390	3900
7	Rabbit ACSR Conductor	KM	4.06	36497	148178	2869	11648
8	Weasel ACSR Conductor	KM	1.015	21552	21875	2104	2136
9	Spiral Earth Electrode	No	25	165	4125	61	1525
12	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
13	Sheet Metal/Deep Drawn Street Light Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps meter & 50/5A CT including wiring	No	1	5954	5954	622	622
14	PVC Pipe 40 mm Dia	Mtr	6	46	276	0	0
16	PVC Insulated wire 25 Sqmm Single Core Multi stranded	Mtr	25	32.31	807.75	0	0
17	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					283902		50629
Total Cost/KM in Rs.				334531			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 57

Running LT, 3 Phase 5 Wire Power Line with Continuous Earth Wire on 9 Mtr Supports Using RABBIT ACSR for Phase, Neutral and WEASEL Conductor for Street Light and 8 SWG GI Wire for Continuous Earth Wire with an Average Span of 40 Mtr in Vertical Configuration and using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and Anchor Points

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL (for Deadend, Anchor points)	No	6	4686	28116	1166	6996
2	PSCC Pole - 9 Mtr Long, 200 Kg WL (for Intermediate Pole)	No	19	3689	70091	1166	22154
3	Fabricated Vertical Cross Arms with clamps, bolts, nuts and washers	Set	30	645	19350	316	9480
4	1.1 kV Pin Insulator with GI Pin	No	100	48	4800	0	0
5	No. 8 Strain Insulator	No	50	16	800	0	0
6	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	12	811	9732	390	4680
7	Rabbit ACSR Conductor	KM	4.06	36497	148178	2869	11648
8	Weasel ACSR Conductor	KM	1.015	21552	21875	2104	2136
9	8 SWG GI wire for continuous earth wire	KM	1.015 (103 Kgs)	63.293 per Kg	6520	2104 per KM	2135
10	8 SWG GI wire for guard loops	Kgs	26	63.293	1646	0	0
11	Spiral Earth Electrode	Nos	25	165	4125	61	1525
12	Guy concreting with Boulders, Mud and Sand	Nos	8	0	0	174	1392
13	Sheet Metal/Deep Drawn Street Light Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps meter & 50/5A CT including wiring	Nos	1	5954	5954	622	622
14	PVC Pipe 40 mm Dia	Mtrs	6	46	276	0	0
15	PVC Insulated wire 25 Sqmm Single Core Multi Stranded	Mtrs	25	32.31	808	0	0
16	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kgs	25	76	1900	28	700
Total					324170		63468
Total Cost/KM in Rs.				387638			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 58

Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports Using RABBIT ACSR Conductor and using PSCC Pole - 9 Mtr Long, 300 Kg WL for dead ends and Anchor Points, With an Average Span of 40 Mtr in Vertical Configuration in Congested Areas

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 kg WL (for Deadend, Anchor points)	Nos	1	4686	4686	1166	1166
2	PSCC Pole - 9 Mtr Long, 200 kg WL (for Intermediate Poles)	Nos	23	3689	84847	1166	26818
3	DP Structure with 9 Mtrs PSCC Poles of 300Kg WL	Set	1	14306	14306	3578	3578
4	Special cross arm with cross arm for EG Stirrups, braces, clamps, bolts nuts and washers complete	Sets	23	1156	26588	348	8004
5	11 KV, 5KN Polymeric Pin Insulator (24mm Dia FRP Rod)	Nos	69	180	12420	0	0
6	11KV 45 KN Polymeric Insulator	Nos	6	164	984	0	0
7	Guy Set Complete with No. 15 strain insulator & Concreting materials	Sets	9	830	7470	390	3510
8	Rabbit ACSR Conductor	Kms	3.045	36497	111133	2869	8736.105
9	Spiral Earth Electrode	Nos	26	165	4290	61	1586
10	EG Stirrups with GI wire lacing	Set of 2 No's	25	191	4775	109	2725
11	Guy concreting with Boulders, Mud and Sand	Nos	9	0	0	174	1566
12	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kgs	26	76	1976	28	728
Total cost of Material & Labour					273475		58417
Total Estimate Cost/Km in Rs.					331892		

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 - 1 No
- e) RCC Pole Clamps - 5 Nos
- f) Cross Arm for fixing EG Stirrup - 1 No

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 59

Providing 2 Pole Structures at the Tapping Point Using PSCC Pole - 9 Mtr Long, 300 Kg WL

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part - A : LINES							
1	DP Structure using PSCC Pole - 9 Mtr Long, 300 Kg WL (Including Cost of Poles)	Set	1	14306	14306	3578	3578
2	11 kV, 45 KN Polymeric Insulator	No	6	164	984	0	0
3	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	2	830	1660	390	780
4	Spiral Earth Electrode	No	2	165	330	61	122
5	Guy concreting with Boulders, Mud and Sand	No	2	0	0	174	348
6	Caution/Danger Board	No	1	146	146	53	53
7	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
Total Part - A					17578		4937
Part - B : SWITCH GEAR							
8	11 kV, 400 Amps Double Break GOS	Set	1	17545	17545	777	777
9	H-Frame for mounting GOS	No	1	3724	3724	210	210
10	DOLO Cut Out	Set/3 Nos	1	4848	4848	155	155
Total Part - B					26117		1142
Total Material Cost (A+B)					43695		6079
Total Cost/Unit in Rs.					49774		

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 60

Providing 3 Pole Structure using PSCC Pole - 9 Mtr Long, 300 Kg WL

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	3 Pole Structure complete using PSCC Pole - 9 Mtr Long, 300 Kg WL (Including Cost of Poles)	Set	1	24010	24010	6899	6899
2	Spiral Earth Electrode	No	3	165	495	61	183
3	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	3	830	2490	390	1170
4	11 kV, 45 kN Polymeric Insulator	No	6	164	984	0	0
5	11 kV, 5 kN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	3	180	540	0	0
6	Guy concreting with Boulders, Mud and Sand	No	3	0	0	174	522
7	Caution/Danger Board	No	2	146	292	53	106
8	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	3	76	228	28	84
Total Material cost				29039			
Total Cost/Unit in Rs.				38003			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET - 61

**Erection of 3 Phase, 11kV/433V, 25 kVA BEE – 4/5 Star Rated Distribution Transformer Centre
Using DPTS Using PSCC Pole - 9 Mtr Long, 300 Kg WL**

Sl. No.	Particulars	Unit	Qty.	25 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part - A : TRANSFORMER							
1	DP Transformer Structure using PSCC Pole - 9 Mtr Long, 300 Kg WL (Including Cost of Poles)	No	1	23420	23420	4527	4527
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	Set	3	180	540	0	0
3	11 kV, 45 KN Polymeric Insulator	Set	3	164	492	0	0
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	No	4	830	3320	390	1560
5	11 kV/433V, 25 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1	64900	64900	750	750
6	11 kV/433V, 25 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1	74365	74365	750	750
7	Earthing materials pipe type for grounding	Single Electrode with accessories	3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
10	Concreting for Guy sets without cement	No	4	0	0	174	696
11	GI Wire 8 SWG	Kg	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kg	10	65.137	651.37	0	0
Total using 4 Star Rated Transformer					98441		9535
Total using 5 Star Rated Transformer					107906		9535
Total for Part - A (Material + Labour)							
i) Using 4 Star Rated Transformer					107976		
ii) Using 5 Star Rated Transformer					117441		
13	Part - B: 11 kV Lightning Arrester, Metal oxide, 9 kV, 5 kA Polymeric Type with ground disconnecter	Set/3 Nos	1	1335	1335	78	78
Total for Part - B					1335		78
Total of Part - B (Material + Labour)					1413		

Sl. No.	Particulars	Unit	Qty.	25 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part - C: SWITCH GEAR							
14	a) LT Protection Kit for 25 kVA	No	1	1651	1651	226	226
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) SINGLE CIRCUIT	No	1				
	i) Al Lead Wire - 50 Sqmm	Mtr	25	44.31	1107.75	}	
	ii) Heavy Duty Long Barrel Copper Lug - 50 Sqmm	No	4	40	160		
	iii) PG Clamp - Rabbit to 50 Sqmm	No	4	79	316		625
	iv) Spacer for DTC Wiring	No	8	41	328		
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2	150	300		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	5287	5287	566	566
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694
15	11 kV, Solid Core Type HG Fuse Unit	Set/ 3 Nos	1	882	882	155	155
16	11 kV, 200 Amps, Single Break GOS	No	1	7799	7799	700	700
Total Cost (Material) for Part - C					20356		2966
Total for Part - C (Material + Labour)						23322	
Total (A+B+C)							
i) Using 4 Star Rated Transformer					120132		12579
ii) Using 5 Star Rated Transformer					129597		12579
Total (A+B+C) = (Material & Labour)							
i) Using 4 Star Rated Transformer					132711		
ii) Using 5 Star Rated Transformer					142176		

Note : Provision for actual quantity of additional materials viz 45 kN 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

COST DATA SHEET - 62

**Erection of 3 Phase, 11kV/433V, 63 kVA BEE – 4/5 Star Rated Distribution Transformer Centre
Using DPTS Using PSCC Pole - 9 Mtr Long, 300 Kg WL**

Sl. No.	Particulars	Unit	Qty.	63 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	Part - A : TRANSFORMER						
	DP Transformer Structure using PSCC Pole -9 Mtr Long, 300 Kg WL (Including Cost of Poles)	No	1	23420	23420	4527	4527
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	Set	3	180	540	0	0
3	11 kV, 45 KN Polymeric Insulator	Set	3	164	492	0	0
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	No	4	830	3320	390	1560
5	11 kV/433V, 63 kVA, 3 Phase, 50 Cys Distribution Transformer BEE- 4 Star Rated with Oil	No	1	120360	120360	750	750
6	11 kV/433V, 63 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1	128304	128304	750	750
7	Earthing materials pipe type for grounding	Single Electrode with accessories	3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
10	Guy concreting with Boulders, Mud and Sand	No	4	0	0	174	696
11	GI Wire 8 SWG	Kg	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kg	10	65.137	651.37	0	0
	Total using 4 Star Rated Transformer				153901		9535
	Total using 5 Star Rated Transformer				161845		9535
	Total for Part - A (Material + Labour)						
	i) Using 4 Star Rated Transformer				163436		
	ii) Using 5 Star Rated Transformer				171380		

Sl. No.	Particulars	Unit	Qty.	63 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
13	Part - B:						
	11 kV Lightning Arrester, Metal Oxide 9 kV, 5 kA Polymeric type with ground disconnector	Set/3 Nos	1	1335		78	
	Total			1335		78	
	Total for Part - B (Material+Labour)			1413			
14	Part - C: SWITCH GEAR						
	a) LT Protection Kit for 63 kVA	No	2	1651	3302	226	452
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) SINGLE CIRCUIT	No					
	i) Al Lead Wire - 95 Sqmm	Mtr	40	81.63	3265.2	}	1001
	ii) Heavy Duty Long Barrel Copper Lug - 95 Sqmm	No	4	88	352		
	iii) PG Clamp - Rabbit to 95 Sqmm	No	4	108	432		
	iv) Spacer for DTC Wiring	No	8	41	328		
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2	150	300		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	4867	4867	566	566
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694
15	11 kV, Solid Core Type HG Fuse Unit	Set/ 3 Nos	1	882	882	155	155
16	11 kV, 200 Amps, Single Break GOS	No	1	7799	7799	700	700
	Total Cost (Material) for Part - C				24052.2		3568
	Total for Part - C (Material+Labour)					27620	
	Total (A+B+C)						
	i) Using 4 Star Rated Transformer				179288		13181
	ii) Using 5 Star Rated Transformer				187232		13181
	Total (A+B+C) = (Material & Labour)						
	i) Using 4 Star Rated Transformer				192469		
	ii) Using 5 Star Rated Transformer				200413		

Note: Provision for actual quantity of additional materials viz 45 kN 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 as per field requirement.

COST DATA SHEET - 63

**Erection of 3 Phase, 11kV/433V, 100 kVA BEE – 4/5 Star Rated Distribution Transformer Centre
Using DPTS Using PSCC Pole - 9 Mtr Long, 300 Kg WL**

Sl. No.	Particulars	Unit	Qty.	100 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part - A : TRANSFORMER							
1	DP Transformer Structure using PSCC Pole - 9 Mtr Long, 300 Kg WL (Including Cost of Poles)	No	1	23420	23420	4527	4527
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	Set	3	180	540	0	0
3	11 kV, 45 KN Polymeric Insulator	Set	3	164	492	0	0
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	No	4	830	3320	390	1560
5	11 kV/433V, 100 kVA, 3 Phase 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1	148680	148680	1001	1001
6	11 kV/433V, 100 kVA, 3 Phase 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1	155931	155931	1001	1001
7	Earthing materials pipe type for grounding	Single Electrode with accessories	3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
10	Guy concreting with Boulders, Mud and Sand	No	4	0	0	174	696
11	GI Wire 8 SWG	Kg	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kg	10	65.137	651.37	0	0
Total using 4 Star Rated Transformer					182221		9786
Total using 5 Star Rated Transformer					189472		9786
Total for Part - A (Material + Labour)							
i) Using 4 Star Rated Transformer					192007		
ii) Using 5 Star Rated Transformer					199258		
Part - B:							
13	11 kV Lightning Arrester, Metal Oxide 9 kV, 5 kA Polymeric Type with ground disconnecter	Set/3 Nos	1	1335	1335	78	78
Total for Part - B					1335		78
Total for Part - B (Material + Labour)						1413	

Sl. No.	Particulars	Unit	Qty.	100 KVA				
				Material Cost (Rs.)		Labour Cost (Rs.)		
				Rate	Amt	Rate	Amt	
	Part - C: SWITCH GEAR							
14	a) LT Protection Kit for 100 kVA	No	2	1651	3302	226	452	
	b) LT Distribution box for 100 kVA with MCB	No	1	17545	17545	501	501	
	c) LT Wiring (From DTC to LT Line Through Merering Box & LT Protection Kit/ LT Distribution Box) SINGLE CIRCUIT	No						
	i) Al Lead Wire - 120 Sqmm	Mtr	45	107.04	4816.8	}		
	ii) Heavy Duty Long Barrel Copper Lug - 120 Sqmm	No	12	96	1152			
	iii) PG Clamp - Rabbit to 120 Sqmm	No	4	210	840			1001
	iv) Spacer for DTC Wiring	No	8	41	328			
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2	150	300			
	d) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	4564	4564	566	566	
	e) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694	
15	11 kV, Solid Core Type HG Fuse Unit	Set/3 Nos	1	882	882	155	155	
16	11 kV, 200 Amps, Single Break GOS	No	1	7799	7799	700	700	
				With LT Protection kit	With Distribution Box			
	Total Cost Part - C (Material)		26509		40752			
	Total for Part - C (Labour)		3568		3617			
		Material	Labour	Material	Labour			
	Total (A+B+C)							
	i) Using 4 Star Rated Transformer	210065	13432	222973	13481			
	ii) Using 5 Star Rated Transformer	216059	13432	230302	13481			
	Total (A+B+C) (Material + Labour)							
	i) Using 4 Star Rated Transformer	223497		236454				
	ii) Using 5 Star Rated Transformer	229491		243783				

Note: Provision for actual quantity of additional materials viz 45 kN 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 as per field requirement.

COST DATA SHEET - 64

**Erection of 3 Phase, 11kV/433V, 250 kVA BEE – 4/5 Star Rated Distribution Transformer Centre
Using DPTS Using PSCC Pole - 9 Mtr Long, 300 Kg WL**

Sl. No.	Particulars	Unit	Qty.	250 KVA			
				Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
Part-A: TRANSFORMER							
1	DP Transformer Structure using PSCC Pole - 9 Mtr Long, 300 Kg WL (Including Cost of Poles)	No	1	27314	27314	4662	4662
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	Set	3	180	540	0	0
3	11 kV, 45 KN Polymeric Insulator	Set	3	164	492	0	0
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	No	4	830	3320	390	1560
5	11 kV/433V, 250 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with oil	No	1	336300	336300	1502	1502
6	11 kV/433V, 250 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with oil	No	1	386745	386745	1502	1502
7	Earthing materials pipe type for grounding	Single Electrode with accessories	3	1501	4503	631	1893
8	Caution/Danger Board	No	1	146	146	53	53
9	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	2	76	152	28	56
10	Guy concreting with Boulders, Mud and Sand	No	4	0	0	174	696
11	GI Wire 8 SWG	Kg	5	63.293	316.465	0	0
12	Guy wire 7/10 SWG	Kg	10	65.137	651.37	0	0
Total using 4 Star Rated Transformer					373735		10422
Total using 5 Star Rated Transformer					424180		10422
Total for Part - A (Material + Labour)							
i) Using 4 Star Rated Transformer					384157		
ii) Using 5 Star Rated Transformer					434602		
Part - B:							
13	11 kV Lightning Arrester, Metal Oxide 9 kV, 5 kA Polymeric type with ground disconnector	Set/3 Nos	1	1335	1335	78	78
Total for Part - B					1335		78
Total of Part B (Material + Labour)					1413		

Sl. No.	Particulars	Unit	Qty.	250 KVA				
				Material Cost (Rs.)		Labour Cost (Rs.)		
				Rate	Amt	Rate	Amt	
	Part - C: SWITCH GEAR							
14	a) LT Distribution box for 250kVA with MCCB	No	1	17644	17644	500	500	
	b) LT Wiring (From DTC to LT Line via Metering Box & LT Protection Kit) SINGLE CIRCUIT	No						
	i) Al Lead Wire - 240 Sqmm	Mtr	45	198.54	8934.3	}	}	
	ii) Heavy Duty Long Barrel Copper Lug - 240 Sqmm	No	12	244	2928			
	iii) PG Clamp - Rabbit to 240 Sqmm	No	4	316	1264			1602
	iv) Spacer for DTC Wiring	No	8	41	328			
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2	150	300			
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	4726	4726	566	566	
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694	
15	11 kV, Solid Core Type HG Fuse Unit	Set/ 3 Nos	1	882	882	155	155	
16	11 kV, 200 Amps, Single Break GOS	No	1	7799	7799	700	700	
	Total Cost for Part - C				47330		4217	
	Total for Part - C (Material + Labour)					51547		
	Total (A+B+C)							
	i) Using 4 Star Rated Transformer				422400		14717	
	ii) Using 5 Star Rated Transformer				472845		14717	
	Total (A+B+C) = (Material & Labour)							
	i) Using 4 Star Rated Transformer				437117			
	ii) Using 5 Star Rated Transformer				487562			

Note:

1. Provision for actual quantity of additional materials viz 45 kN 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 as per field requirement.
2. While preparing estimates for turnkey / total tunkey projects please refer to Sl. No.11 of General Guidelines vide a to g in Page No.9.

COST DATA SHEET- 65

Erection of 3 Phase, 11kV/433V, 25 kVA BEE 4/5 Star Rated Single Pole Mounted Transformer Centre Using PSCC Pole - 9 Mtr Long, 300 Kg WL

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	1	4686	4686	1166	1166
2	11 kV, 5 kN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	3	180	540	0	0
3	11 kV, 45 KN Polymeric Insulator	No	3	164	492	0	0
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	1	830	830	390	390
5	Single Pole TC set suitable for 25 kVA Transformer	Set	1	9576	9576	1733	1733
6	11 kV/433V, 25 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1	64900	64900	750	750
7	11 kV/433V, 25 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1	74365	74365	750	750
8	Earthing materials pipe type for grounding	Single Electrode with accessories	3	1501	4503	631	1893
9	Concreting materials for 9 Mtr PSCC Pole						
	a) Base concreting 1:4:8, 500x650x150 mm	Each	1	0	0	237	237
	b) Pole concreting 1:2:4, 650x500x1700	Each	1	0	0	2746	2746
	c) Coping 1:2:4 (as per actuals)	Each	1	0	0	471	471
10	Guy concreting with Boulders, Mud and Sand	No	1	0	0	174	174
11	GI Wire 8 SWG	Kg	5	63.293	316.465	0	0
12	Guy Wire 7/10 SWG	Kg	10	65.137	651.37	0	0
13	11 kV Lightning Arrester, Metal Oxide 9 kV, 5 kA Polymeric Tpe with ground disconnecter	Set/3 Nos	1	1335	1335	78	78
14	a) LT Protection Kit for 25 kVA	No	1	1651	1651	226	226
	b) LT Wiring (From DTC to LT Line Through Metering Box & LT Protection Kit) SINGLE CIRCUIT	No					

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
	i) Al Lead Wire - 50 Sqmm	Mtr	25	44.31	1107.75		
	ii) Heavy Duty Long Barrel Copper Lug - 50 Sqmm	No	4	40	160		
	iii) PG Clamp - Rabbit to 50 Sqmm	No	4	79	316		625
	iv) Spacer for DTC Wiring	No	8	41	328		
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2	150	300		
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1	5287	5287	566	566
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1	2525	2525	694	694
15	11 kV, Solid Core Type HG Fuse Unit	Set/3 Nos	1	882	882	155	155
16	11 kV, 200 Amps, Single Break GOS	No	1	7799	7799	700	700
17	Caution/Danger Board	No	1	146	146	53	53
18	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	1	76	76	28	28
Total Cost							
i) Using 4 Star Rated Transformer					108408		12685
ii) Using 5 Star Rated Transformer					117873		12685
Total Cost (Material + Labour)							
i) Using 4 Star Rated Transformer				121093			
ii) Using 5 Star Rated Transformer				130558			

Note: Provision for actual quantity of additional materials viz 45 kN 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 as per field requirement.

COST DATA SHEET- 66

**Erection of 3 Phase, 11kV/433V, 63 kVA BEE 4/5 Star Rated Single Pole Mounted Transformer
Centre Using PSCC Pole - 9 Mtr Long, 300 Kg WL**

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	1	CDS Will be prepared after approval of DEI			
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	3				
3	11 kV, 45 KN Polymeric Insulator	No	3				
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	1				
5	Single Pole TC set suitable for 63 kVA Transformer	Set	1				
6	11 kV/433V, 63 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1				
7	11kV/433V, 63 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1				
8	Earthing materials pipe type for grounding	Single Electrode with accessories	3				
9	Concreting materials for 9 Mtr PSCC Pole						
	a) Base concreting 1:4:8, 500x650x150 mm	Each	1				
	b) Pole concreting 1:2:4, 650x500x1700	Each	1				
	c) Coping 1:2:4 (as per actuals)	Each	1				
10	Concreting materials for Guy sets (without cement)	No	1				
11	GI Wire 8 SWG	Kg	5				
12	Guy Wire 7/10 SWG	Kg	10				
13	11 kV, Lightning Arrester, Metal oxide, 9 kV, 5 kA Polymeric Type with ground disconnector	Set/ 3 Nos	1				
14	a) LT Protection Kit for 63 kVA	No	2				
	b) LT Wiring (From DTC to LT Line Through Merering Box & LT Protection Kit) SINGLE CIRCUIT	No	1				

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
	i) Al Lead Wire - 95 Sqmm	Mtr	40				
	ii) Heavy Duty Long Barrel Copper Lug - 95 Sqmm	No	4				
	iii) PG Clamp - Rabbit to 95 Sqmm	No	4				
	iv) Spacer for DTC Wiring	No	8				
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2				
	c) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1				
	d) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1				
15	11 kV, Solid Core Type HG Fuse Unit	Set/ 3 Nos	1				
16	11 kV, 200 Amps, Single Break GOS	No	1				
17	Caution/Danger Board	No	1				
18	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	1				
Total material cost					0		
Total cost for Erection of a Single Pole Mounted 63kVA Transformer in Rs					0		

COST DATA SHEET- 67

Erection of 3 Phase, 11kV/433V, 100 kVA BEE 4/5 Star Rated Single Pole Mounted Transformer Centre Using PSCC Pole - 9 Mtr Long, 300 Kg WL

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	1	CDS Will be prepared after approval of DEI			
2	11 kV, 5 KN Polymeric Pin Insulator (24 mm Dia FRP Rod)	No	3				
3	11 kV, 45 KN Polymeric Insulator	No	3				
4	Guy Set Complete with No. 15 Strain Insulator & Concreting materials	Set	1				
5	Single Pole TC set suitable for 100 kVA Transformer	Set	1				
6	11 kV/433V, 100 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 4 Star Rated with Oil	No	1				
7	11kV/433V, 100 kVA, 3 Phase, 50 Cys Distribution Transformer BEE - 5 Star Rated with Oil	No	1				
8	Earthing materials pipe type for grounding	Single Electrode with accessories	3				
9	Providing Concreting for 9 Mtr PSCC Pole						
	a) Base concreting 1:4:8, 500x650x150 mm	Each	1				
	b) Pole concreting 1:2:4, 650x500x1700	Each	1				
	c) Coping 1:2:4 (as per actuals)	Each	1				
10	Concreting materials for Guy Set (without cement)	No	1				
11	GI Wire 8 SWG	Kg	5				
12	Guy Wire 7/10 SWG	Kg	10				
13	11 kV, Lightning Arrester, Metal oxide, 9 kV, 5 kA Polymeric Type with ground disconnector	Set/ 3 Nos	1				
14	a) LT Protection Kit	No	2				
	b) LT Distribution Box for 100kVA with MCB	No	1				
	c) LT Wiring (From DTC to LT Line Through Merering Box & LT Protection Kit/ LT Distribution Box) SINGLE CIRCUIT	No	1				

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)		
				Rate	Amt	Rate	Amt	
	i) Al Lead Wire - 120 Sqmm	Mtr	45					
	ii) Heavy Duty Long Barrel Copper Lug -120 Sqmm	No	12					
	iii) PG Clamp - Rabbit to 120 Sqmm	No	4					
	iv) Spacer for DTC Wiring	No	8					
	v) Fish Plate with necessary Clamps, bolts & nuts etc complete (Galvanised)	No	2					
	d) LT Metering box with CTs and necessary wiring for housing ETV Meter (Please see CDS - 42)	No	1					
	e) LT Electronic Tri-Vector Meter 5 Amps, -0.5/1.0 Accuracy Class	No	1					
15	11 kV, Solid Core Type HG Fuse Unit	Set/ 3 Nos	1					
16	11 kV, 200 Amps, Single Break GOS	No	1					
17	Caution/Danger Board	No	1					
18	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	1					
	Total Material Cost							
	a) With LT Distribution Box							
	b) With LT Protection Kit							
	Labour Charges			for LT Distribution Box		for LT Protection Kit		
	a) Casual		0			0		
	b) Regular		0			0		
	Total							
	Total Cost with LT Distribution Box in Rs					0		
	Total Cost for with LT Protection KIT in Rs					0		

COST DATA SHEET- 68

Running Single Circuit 11 kV, 3 Phase Power Line on 9 Mtr Supports with an Average Span of 30 Mtr Using 3x95 Sqmm + 1x70 Sqmm Aerial Bunched Cables (ABC) using PSCC Pole - 9 Mtr Long, 300 Kg WL for Dead Ends and Anchor Points

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	10	4686	46860	1166	11660
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	24	3689	88536	1166	27984
3	11 kV, 3 Phase Aerial Bunched Cable 3x95 + 1x70 Sqmm	KM	1.03	680510	700925	22469	23143
4	Cable Straight thru' joint kits suitable for 95 Sqmm	Set/3 Nos	6	6813	40878	911	5466
5	11 kV AB Cable Termination Kits for 95 to 120 Sqmm	Set/3 Nos	6	2532	15192	770	4620
6	Suspension Clamp Assembly 16 to 70 mm (Excluding pole clamp & Eye Hook)	Set	30	196	5880	127	3810
7	Pole clamp for HT/LT AB cable	Set	30	103	3090	211	6330
8	Eye Hook (Flat type) for fixing Clamps	Set	30	90	2700	0	0
9	Dead End Clamp/Anchor Clamp Assembly 25 to 95 Sq mm (excluding pole clamps and Eye hook)	Set	12	206	2472	169	2028
10	End Caps	No	10	20	200	6	60
11	11 kV Lightning Arrester, Metal Oxide 9 kV, 5 kA Polymeric Type with ground disconnecter	Set/3 Nos	2	1335	2670	78	156
12	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	6	830	4980	390	2340
13	Guy concreting with Boulders, Mud and Sand	Set	6	0	0	174	1044
14	Grounding connection for messenger wire	No	4	12	48	29	116
15	Spiral Earth Electrodes	No	34	165	5610	61	2074
Total Cost of Material & Labour					920041		90831
Total Cost in Rs.				1010872			

Note

1. While preparing estimates for turnkey / total turnkey projects please refer to Sl. No.11 To general guidelines vide a to g page No.9.
2. Any other item required as per filed requirement may be included/deleted.

COST DATA SHEET- 69

Running Single Circuit 1.1 kV, 3 Phase 5 Wire Power Line on 9 Mtr Supports with Average Span of 40 Mtr Using 3x95 + 1x16 + 1x70 Sqmm Aerial Bunched Cables (ABC) using PSCC Pole - 9 Mtr Long, 300 Kg WL for Dead Ends and Anchor Points

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 9 Mtr Long, 300 Kg WL	No	10	4686	46860	1166	11660
2	PSCC Pole - 9 Mtr Long, 200 Kg WL	No	15	3689	55335	1166	17490
3	1.1 kV, 3 Phase Aerial Bunched Cable of size 3x95 + 1x16 + 1x70 Sqmm	KM	1.03	435622	448690	22469	23143
4	Three Phase Distribution box for 6 Connections	No	20	2128	42560	592	11840
5	Piercing connector suitable for 16 Sqmm - 95 Sqmm AB Cable - Service Connection	No	80	235	18800	85	6800
6	Piercing connector suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connection	No	50	165	8250	59	2950
7	Suspension Clamp Assembly 16 to 70 mm (Excluding pole clamp & Eye Hook)	Set	20	196	3920	127	2540
8	Pole clamp for HT/LT AB cable	Set	20	103	2060	211	4220
9	Eye Hook (Flat type) for fixing Clamps	Set	20	90	1800	0	0
10	Dead End Clamp/Anchor Clamp Assembly 25 to 95 Sq mm (excluding pole clamps and Eye hook)	Set	16	135	2160	169	2704
11	Universal Hook, Bolts & nuts	No	16	314	5024	127	2032
12	T-connector KZ3 95	No	20	348	6960	143	2860
13	Cable Straight thru' joints suitable for 95 Sqmm LT ABC	Set	5	373	1865	169	845
14	Pre-Insulated lug - CPTAU for 95 Sqmm	No	8	348	2784	176	1408
15	End cap for 50/70 Sqmm	No	50	20	1000	6	300
16	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	830	6640	390	3120
17	Guy concreting with Boulders, Mud and Sand	Set	8	0	0	174	1392
18	PVC Insulated wire 25 Sqmm	Mtr	400	32.31	12924	0	0
19	Spiral Earth Electrode	No	25	165	4125	61	1525
Total Cost of Material & Labour					671758		96829
Total Cost in Rs.				768587			

Note

1. While preparing estimates for turnkey / total turnkey projects please refer to Sl. No. 11 To general guidelines vide a to g page No.9.
2. Any other item required as per filed requirement may be included/deleted.

COST DATA SHEET- 70

Running LT, 3 Phase 4 Wire Power Line on 8 Mtr Supports Using WEASEL ACSR Conductor with an Average Span of 60 Mtr using PSCC Pole - 8 Mtr Long, 200 Kg WL for dead ends, anchor points and DP structure (IP Installations)

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 8 Mtrs Long, 200 Kg WL	No	18	3054	54972	932	16776
2	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers	Set	18	266	4788	106	1908
3	1.1 kV Pin Insulator with GI Pin	No	64	48	3072	0	0
4	No. 8 Strain Insulator	No	8	16	128	0	0
5	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	811	6488	390	3120
6	Weasel ACSR Conductor	KM	4.06	21552	87501	2104	8542
7	Spiral Earth Electrode	No	18	165	2970	61	1098
8	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
9	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	18	76	1368	28	504
Total				161287		33340	
Total Cost/KM in Rs.		194627					

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

COST DATA SHEET- 71

Running LT, Single Phase 3 Wire Power Line on 8 Mtr Supports with an Average Span of 40 Mtr Using WEASEL ACSR Conductor and PSCC Pole - 8 Mtr Long, 200 Kg WL for dead ends, anchor points and DP structure

Sl. No.	Particulars	Unit	Qty.	Material Cost (Rs.)		Labour Cost (Rs.)	
				Rate	Amt	Rate	Amt
1	PSCC Pole - 8 Mtr Long, 200 Kg WL	No	25	3054	76350	932	23300
2	LT 4 Pin Cross Arm with clamps, bolts, nuts and washers	Set	30	266	7980	106	3180
3	LT 2 Pin Cross Arm with clamps, bolts, nuts	Set	25	162	4050	106	2650
4	1.1 kV Pin Insulator with GI Pin	No	48	48	2304	0	0
5	No. 8 Strain Insulator	No	21	16	336	0	0
6	Guy Set Complete with No. 8 Strain Insulator & Concreting materials	Set	8	882	7056	390	3120
7	Weasel ACSR Conductor	KM	3.045	21552	65626	2104	6407
8	Spiral Earth Electrode	No	25	165	4125	61	1525
9	Guy concreting with Boulders, Mud and Sand	No	8	0	0	174	1392
10	Sheet Metal/Deep Drawn Street Light Meter Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps meter & 50/5A CT including wiring	No	1	5954	5954	622	622
11	PVC Pipe 40 mm Dia	Mtr	6	46	276	0	0
12	PVC Insulated wire 25 Sqmm Single Core Multi Stranded	Mtr	25	32.31	807.75	0	0
13	Anti Climbing Device (12 Mtr GI Barbed Wire) Lumpsum	Kg	25	76	1900	28	700
Total					176765		42896
Total Cost/KM in Rs.				219660			

Note : Other charges such as GST, ESI, PF and other applicable charges shall be loaded as per Abstract of Estimate Cost Data Sheet.

PART - 2

**Schedule of Rate
for Standard Stock Materials Common
SR 2018-19 (11KV System)**

Schedule of Rate for Standard Stock Materials Common SR 2018-19 (11KV System)

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
	1	Line Supports (Pole)				
1	1.01	RCC Pole - 9 Mtr Long, 145 Kg WL (Dwg No. BESCOM/GM/QS&S/02 Dtd 24.11.2018) as per IS-785	200105	No	5904	6258
2	1.02	RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section (Dwg No. BESCOM/GM/QS&S/51 Dtd 24.11.2018) as per IS-785	200106	No	7165	7165
3	1.03	RCC Pole - 8 Mtr Long, 115 Kg WL (Dwg No. BESCOM/GM/QS&S/05 Dtd 24.11.2018) as per IS-785	200103	No	4324	4706
4	1.04	PSCC Pole - 8 Mtr Long, 140 Kg WL (Dwg No. BESCOM/GM/QS&S/17 Dtd 24.11.2018) as per REC Standards	200003	No	2479	2496
5	1.05	PSCC Pole - 8 Mtr Long, 200 Kg WL (Dwg No. BESCOM/GM/QS&S/49 Dtd 24.11.2018) as per REC Standards	200004	No	2923	3054
6	1.06	PSCC Pole - 9 Mtr Long, 200 Kg WL (Dwg No. BESCOM/GM/QS&S/50 Dtd 24.11.2018) as per REC Standards	200006	No	3380	3689
7	1.07	Pre - Stressed Tubular Spun Pole - 11 Mtr Long, 500 Kg WL (Dwg No. BESCOM/GM/QS&S/45 Dtd 24.11.2018) as per IS-13158: 1991	200120	No	15700	16850
8	1.08	RCC Pole - 9.5 Mtr Long, 350 Kg WL for 33kV Lineas per REC Standards	200107	No	7627	7627
9	1.09	PSCC Pole - 11 Mtr Long, 365 Kg WL for Intermediate Poles only as per REC Standards	200010	No	7874	7874
10	1.10	PSCC Pole - 9 Mtr Long, 300 Kg WL (Dwg No. BESCOM/GM/QS&S/55 Dtd 24.11.2018) as per REC Standards	200005	No	4549	4686
		Note: PCC, PSC & PSCC Poles are one and the same and pre-stressed wire/cable/strand is used for prestressing in the manufacture of Poles. Hence PCC & PSC Poles are referred as PSCC Poles.				
	2	Cross Arms (MS & GI) as per IS-1977				
11	2.01	11 kV, Horizontal Cross Arm - Mild Steel (MS) (Dwg No. BESCOM/GM/QS&S/04 Dtd 24.11.2018)	279020	No	245	251

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
12	2.02	11 kV, Horizontal Cross Arm - Galvanised Iron (GI)	280020	No	325	333
13	2.03	11 kV, Special 3 Pin Cross Arm - MS (Dwg No. BESCO/GM/QS&S/03 Dtd 24.11.2018)	279013	No	578	590
14	2.04	11 kV, Special 3 Pin Cross Arm - GI	280013	No	768	787
15	2.05	LT 4 Pin Cross Arm - MS (Dwg No. BESCO/GM/QS&S/32 Dtd 24.11.2018)	279014	No	191	191
16	2.06	LT 4 Pin Cross Arm - GI	280014	No	252	252
17	2.07	LT 2 Pin Cross Arm - MS (Dwg No. BESCO/GM/QS&S/32 Dtd 24.11.2018)	279012	No	87	87
18	2.08	LT 2 Pin Cross Arms - GI	280012	No	115	115
19	2.09	LT ST Support 50x6 mm Flat - MS (Dwg No. BESCO/GM/QS&S/32 Dtd 24.11.2018)	279091	No	44	44
20	2.10	LT ST Support 50x6 mm Flat - GI	280091	No	58	58
21	2.11	HT ST Support 50x6 mm Flat - MS (Dwg No. BESCO/GM/QS&S/04 Dtd 24.11.2018)	279092	No	61	61
22	2.12	HT ST Support 50x6 mm Flat - GI	280092	No	78	78
23	2.13	LT Cross Arm for vertical Configuration - MS	279017	No	645	645
24	2.14	LT Cross Arm for vertical Configuration - GI	280017	No	808	808
25	2.15	EG Stirrup (MS) with GI wire lacing	279130	No	191	191
26	2.16	Spiral Earth Electrode	281683	No	213	165
	3	SMC Line Materials				
27	3.01	11 kV, Cross Arm with HT Top Support (glass reinforced hot pressed SMC compound)	279090	No	746	746
	4	Anticlimbing Device				
28	4.01	Spike type GI About 3.0 Kg in weight	278910	No	131	155
29	4.02	GI Barbed wire (12 Mtr/Kg)	278911	Each	64	76
30	4.03	Guarding for Road crossing, Telephone Line Crossing, between HT & LT Line Crossing	278916	Mtr	68	80
	5	Clamps A Type (MS & GI) as per IS-1977				
31	5.01	RCC Pole Clamp - MS (Dwg No. BESCO/GM/QS&S/30 Dtd 24.11.2018)	279523	No	52	53
32	5.02	RCC Pole Clamp - GI	280523	No	69	71
33	5.03	PSCC Pole (140 Kg WL) Clamp - MS (Dwg No. BESCO/GM/QS&S/31 Dtd 24.11.2018)	279503	No	43	44

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
34	5.04	PSCC Pole (140 Kg WL) Clamp - GI	280503	No	57	58
35	5.05	PSCC Pole (200 Kg WL) Clamp - MS (Dwg No. BESCOM/GM/QS&S/31 Dtd 24.11.2018)	279510	No	46	47
36	5.06	PSCC Pole (200 Kg WL) Clamp - GI	280510	No	62	64
37	5.07	PSCC Pole (300 Kg WL) Clamp - MS (Dwg No. BESCOM/GM/QS&S/59 Dtd 24.11.2018)	279511	No	New Item	56
38	5.08	PSCC Pole (300 Kg WL) Clamp - GI	280511	No	New Item	74
39	5.09	Guy Clamp - MS (Dwg No. BESCOM/GM/QS&S/07 Dtd 24.11.2018)	279650	No	52	53
40	5.1	Guy Clamp - GI	280650	No	68	70
41	5.11	Turn Buckle (GI) (Dwg No. BESCOM/GM/QS&S/07 Dtd 24.11.2018)	279146	No	164	168
42	5.12	Anchor Rod using 12 mm rounds/Guy Rod - MS (Dwg No. BESCOM/GM/QS&S/07 Dtd 24.11.2018)	279140	No	167	194
43	5.13	Anchor Rod using 12 mm rounds/Guy Rod - GI	280140	No	222	266
44	5.14	MS Fish Plate	279800	No	53	54
45	5.15	GI Fish Plate	280800	No	60	62
46	5.16	Strain Clamp, 3 Bolt type for 70/90 kN Disc Insulator	285076	No	482	494
	6	Insulator as per IS-1445 for Ceramic, IS-7935 for GI Pin, IEC-61109 for Polymeric				
47	6.01	11 kV Ceramic Pin Insulator (Shell only)	283005	No	47	49
48	6.02	11 kV GI Pin for 11 kV Ceramic Shell Insulator	283055	No	47	56
49	6.03	1.1 kV Ceramic Pin Insulator (Shell only)	283003	No	15	18
50	6.04	1.1 kV GI Pin for 1.1 kV Ceramic Shell Insulator	283053	No	23	30
51	6.05	11 kV, 5 kN Composite/Polymeric Pin Insulator (24 mm dia FRP Rod)	283008		194	180
52	6.06	No. 8 Strain Insulator	283158	No	14	16
53	6.07	No. 15 Strain Insulator	283166	No	33	35
54	6.08	DISC Insulator 45 kN Porcelain	283040	No	288	301
55	6.09	DISC Insulator 70 kN, Ball & Socket type porcelain	283017	No	487	431
56	6.1	DISC Insulator 90 kN, Ball & Socket type porcelain	283018	No	487	493
57	6.11	DISC Insulator 120 kN, Ball & Socket type porcelain	283021	No	487	568

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
58	6.12	11 kV, 45 kN Polymeric Insulator	283320	No	169	164
59	6.13	11 kV, 70 kN Composite/Polymeric Insulator	283045	No	285	264
	7	ACSR Conductor as per IS-398 (Part - 2/1996)				
60	7.01	Weasel ACSR (6/2.59 mm Al + 1/2.59 mm St), Std Wt: 128 Kg/KM	284105	KM	19387	21552
61	7.02	Rabbit ACSR (6/3.35 mm Al + 1/3.35 mm St), Std Wt: 214 Kg/KM	284108	KM	32884	36497
62	7.03	Coyote ACSR (26/2.54 mm Al + 7/1.90 mm St), Std Wt: 521 Kg/KM	284116	KM	91177	100111
63	7.04	Lynx ACSR (30/2.79 mm Al + 7/2.79 mm St), Std Wt: 842 Kg/KM	284120	KM	135003	148499
	8	Guy Wire & GI Wire as per IS-2141				
64	8.01	7/10 SWG Guy Wire (7/3.251 mm Dia), Std Wt: 128 Kg/KM	281110	MT	56277	65137
65	8.02	8 SWG GI Wire (4.064 mm Dia), Std Wt: 125 Kg/KM	281008	MT	54684	63293
66	8.03	10 SWG GI Wire (3.251 mm Dia), Std Wt: 128 Kg/KM	281010	MT	57694	66777
67	8.04	GI Barbed Wire 12 SWG	281205	MT	67895	78584
	9	PG Clamp				
68	9.01	Lynx ACSR	285518	No	239	269
69	9.02	Coyote to Coyote	285515	No	245	275
70	9.03	Rabbit to Rabbit	285508	No	70	79
71	9.04	Weasel to Rabbit	285549	No	60	67
72	9.05	Weasel to Weasel	285509	No	48	54
73	9.06	Squirrel to Weasel	285548	No	44	49
	10	PG Clamp Rabbit to Insulated Wire				
74	10.01	95 Sqmm (Dwg No. BESCOM/GM/QS&S/43 Dtd 24.11.2018)	285555	No	96	108
75	10.02	120 Sqmm	285557	No	187	210
76	10.03	150 Sqmm	285559	No	221	248
77	10.04	185 Sqmm (Dwg No. BESCOM/GM/QS&S/43 Dtd 24.11.2018)	285562	No	242	272

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
78	10.05	240 Sqmm (Dwg No. BESCOM/GM/QS&S/43 Dtd 24.11.2018)	285565	No	281	316
79	10.06	T - Clamp for Rabbit conductor with hot dipped galvanized bolts, nuts and washers	285600	Set	217	244
80	10.07	T - Clamp for Coyote conductor with hot dipped galvanized bolts, nuts and washers	285605	Set	288	324
81	10.08	T - Clamp for Lynx to Lynx with hot dipped galvanized bolts, nuts and washers	285610	Set	300	337
82	10.09	Single Tension Clamp Suitable for Rabbit	285068	No	446	501
83	10.10	Single Tension Clamp Suitable for Coyote	285079	No	628	706
84	10.11	Pad Clamp for Rabbit ACSR	285723	No	344	387
85	10.12	Pad Clamp for Lynx ACSR	285726	No	476	535
86	10.13	Pad Clamp for Coyote ACSR	285724	No	428	481
87	10.14	C - Type wedge connector + 2 hole padle for Rabbit ACSR	285661	No	324	364
88	10.15	C - Type wedge connector + 2 hole padle for Coyote ACSR	285662	No	1345	1512
89	10.16	C - Type wedge connector + 4 hole padle for Coyote ACSR	285663	No	1544	1736
90	10.17	C - Type wedge connector + 2 hole padle for Lynx ACSR	285664	No	2043	2297
91	10.18	C - Type wedge connector + 4 hole padle for Lynx ACSR	285665	No	2242	2521
	11	C - Type Wedge Connector				
92	11.01	Rabbit to Rabbit ACSR	285670	No	112	126
93	11.02	Rabbit to Coyote ACSR	285671	No	585	654
94	11.03	Rabbit to Lynx ACSR	285673	No	582	654
95	11.04	Coyote to Coyote ACSR	285676	No	582	654
96	11.05	Rabbit to 240 Sqmm Lead Wire	285694	No	582	654
97	11.06	Coyote to 240 Sqmm Lead Wire	285695	No	582	654
98	11.07	Coyote to Lynx ACSR	285678	No	1026	1154
99	11.08	Lynx to Lynx ACSR	285680	No	1026	1154

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
100	11.09	C wedge connector for connecting main wire of size 2.5/4/6/10 Sqmm from OH Squirrel/ Weasel line to AFB/Cutout	285691	No	61	69
101	11.10	C wedge connector for connecting main wire of size 16/25 Sqmm from OH Rabbit line to AFB/Cutouts	285692	No	79	89
	12	Distribution Transformer - 3 Phase, 11 kV/433V - Stacked Core with Oil as per IS-1180 (Part-1): 2014				
	A.	OPEN BUSHING TYPE				
102	12.01	25 kVA, Aluminum Wdg, Star 1 (4 Star)	321437	No	64900	64900
103	12.02	25 kVA, Aluminum Wdg, Star 2 (5 Star)	321465	No	New Item	74635
104	12.03	63 kVA, Aluminum Wdg, Star 1 (4 Star)	321438	No	120360	120360
105	12.04	63 kVA, Aluminum Wdg, Star 2 (5 Star)	321466	No	New Item	128304
106	12.05	100 kVA, Aluminium Wdg, Star 1 (4 Star)	321439	No	148680	148680
107	12.06	100 kVA, Aluminium Wdg, Star 2 (5 Star)	321467	No	New Item	155931
108	12.07	250 kVA, Aluminium Wdg, Star 1 (4 Star)	321440	No	336300	336300
109	12.08	250 kVA, Aluminium Wdg, Star 2 (5 Star)	321468	No	New Item	386745
110	12.09	500 kVA, Aluminium Wdg, Star 1 (4 Star)	321449	No	566400	566400
111	12.10	500 kVA, Aluminium Wdg, Star 2 (5 Star)	321469	No	New Item	651360
	B.	CABLE ENTRY TYPE				
112	12.11	25 kVA, Aluminum Wdg, Star 1 (4 Star)	321446	No	56838	67400
113	12.12	25 kVA, Aluminum Wdg, Star 2 (5 Star)	321470	No	New Item	77135
114	12.13	63 kVA, Aluminum Wdg, Star 1 (4 Star)	321447	No	94249	122860
115	12.14	63 kVA, Aluminum Wdg, Star 2 (5 Star)	321471	No	New Item	130804
116	12.15	100 kVA, Aluminium Wdg, Star 1 (4 Star)	321448	No	124607	151180
117	12.16	100 kVA, Aluminium Wdg, Star 2 (5 Star)	321472	No	New Item	158431
118	12.17	250 kVA, Aluminium Wdg, Star 1 (4 Star)	321451	No	New Item	338800
119	12.18	250 kVA, Aluminium Wdg, Star 2 (5 Star)	321473	No	New Item	389245
120	12.19	500 kVA, Aluminium Wdg, Star 1 (4 Star)	321452	No	New Item	568900
121	12.20	500 kVA, Aluminium Wdg, Star 2 (5 Star)	321474	No	New Item	653860

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
	13	Distribution Transformer - 3 Phase, 11kV/433V - Amorphous Core with Oil as per IS-1180 (Part-1): 2014				
		A. OPEN BUSHING TYPE				
122	13.01	25 kVA, Aluminium Wdg, Star 2 (5 Star)	321383	No	77880	77880
123	13.02	63 kVA, Aluminium Wdg, Star 2 (5 Star)	321384	No	133930	133930
124	13.03	100 kVA, Aluminium Wdg, Star 2 (5 Star)	321385	No	162840	162840
125	13.04	250 kVA, Aluminium Wdg, Star 2 (5 Star)	321386	No	466100	466100
126	13.05	500 kVA, Aluminium Wdg, Star 2 (5 Star)	321387	No	719800	719800
		B. CABLE ENTRY TYPE				
127	13.06	25 kVA, Aluminium Wdg, Star 2 (5 Star)	321460	No	New Item	80380
128	13.07	63 kVA, Aluminium Wdg, Star 2 (5 Star)	321461	No	New Item	136430
129	13.08	100 kVA, Aluminium Wdg, Star 2 (5 Star)	321462	No	New Item	165340
130	13.09	250 kVA, Aluminium Wdg, Star 2 (5 Star)	321463	No	New Item	468600
131	13.10	500 kVA, Aluminium Wdg, Star 2 (5 Star)	321464	No	New Item	722300
	14	11kV/433V, 3 Phase, Dry Type Transformer (CRGO) losses confirming to 5 Star rating as per IS-11171				
132	14.01	25 kVA	321483	No	197914	197914
133	14.02	63 kVA	321484	No	245315	245315
134	14.03	100 kVA	321485	No	321938	321938
135	14.04	250 kVA	321486	No	549055	549055
136	14.05	500 kVA	321487	No	796956	796956
	15	Transformer Oil as per IS-335:1993				
137	15.01	EHV Grade Transformer Oil - New	601400	KL	57716	68415
138	15.02	Reclaimed Oil	601410	KL	30352	41049
139	15.03	Contaminated Oil	601420	KL	18799	20525
140	15.04	Biodegradable Natural Ester Dielectric Fluid	601401	KL	New Item	123200
	16	LT Protection				
141	16.01	LT Protection Kit (Dwg No. BESCOM/GM/QS&S/10 Dtd 24.11.2018)	301107	No	1651	1651

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
	17	LT Distribution Box as per IS-13947 Part-1&2				
142	17.01	LT Distribution Box for 100 kVA DTC with MCCB's (Sheet Metal) (Dwg No. BESCOM/GM/QS&S/58 Dtd 24.11.2018)	301055	No	16600	17545
143	17.02	LT Distribution Box for 250 kVA DTC with MCCB's (Sheet Metal) (Dwg No. BESCOM/GM/QS&S/08 Dtd 24.11.2018)	301056	No	New Item	17644
144	17.03	LT Distribution Box for 100/250 kVA DTC with MCCB's (SMC)	301060	No	24559	24559
	18	Lightning Arrester as per IEC-60099-4				
145	18.01	9 kV, 5 kA Lightning Arrester Metal Oxide Ceramic type with GROUND DISCONNECTOR (Dwg No. BESCOM/GM/QS&S/26 Dtd 24.10.2007)	303201	No	New Item	786
146	18.02	9 kV, 5 kA Lightning Arrester Polymeric type with GROUND DISCONNECTOR	303202	No	New Item	1335
	19	HG Fuse Unit as per IS-5350 Part-2				
147	19.01	11 kV, HG Fuse Unit with Solid Core Insulator (Dwg No. BESCOM/GM/QS&S/21 Dtd 24.11.2018)	302122	Set (3 Nos)	852	882
	20	Double Pole TC Set for erection of Transformer on RCC/PSCC 9 Mtr Long Poles as per IS-1977				
148	20.01	For 25/63/100 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL - MS (Dwg No. BESCOM/GM/QS&S/62 Dtd 24.11.2018)	279111	Set	10976	13732
149	20.02	For 25/63/100 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL - GI	280111	Set	13947	18889
150	20.03	For 25/63/100 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 145 Kg WL - MS	279112	Set	New Item	13607
151	20.04	For 25/63/100 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 145 Kg WL - GI	280112	Set	New Item	18718
152	20.05	For 100/300 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL - MS (Dwg No. BESCOM/GM/QS&S/65 Dtd 24.11.2018)	279120	Set	13081	17626
153	20.06	For 100/300 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL - GI	280120	Set	16654	24224
154	20.07	For 100/300 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 145 Kg WL - MS	279113	Set	New Item	17381

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
155	20.08	For 100/300 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 145 Kg WL - GI	280113	Set	New Item	23889
	21	Single Pole Mounted Transformer (SPMT) Kit for erection of Transformer on 11 Mtr Spun Pole as per IS-1977				
156	21.01	Single H Frame with Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 25 kVA (OH Line) - MS (Dwg No. BESCOM/GM/QS&S/66 Dtd 24.11.2018)	279127	Set	17502	19691
157	21.02	Single H Frame with Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 25 kVA (OH Line) - GI	280117	Set	22250	27065
158	21.03	Three H Frame with Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 25 kVA (UG Cable) - MS (Dwg No. BESCOM/GM/QS&S/67 Dtd 24.11.2018)	279128	Set	23739	26734
159	21.04	Three H Frame with Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 25 kVA (UG Cable) - GI	280128	Set	30208	36728
160	21.05	Single H Frame without Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 63/100/250/500 kVA (OH Line) - MS (Dwg No. BESCOM/GM/QS&S/68 Dtd 24.11.2018)	279129	Set	9055	10171
161	21.06	Single H Frame without Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 63/100/250/500kVA (OH Line) - GI	280129	Set	11492	13992
162	21.07	Three H Frame without Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 63/100/250/500 kVA (UG Cable) - MS (Dwg No. BESCOM/GM/QS&S/69 Dtd 24.11.2018)	279131	Set	14518	16352
163	21.08	Three H Frame without Transformer Seating and Seating angle support cross arm for 11 Mtr Spun Pole for 63/100/250/500 kVA (UG Cable) - GI	280131	Set	18477	22463
164	21.09	Prefabricated Platform for erection of 250 kVA Transformer on 11 Mtr Spun Pole Structure involving Rectangular hollow Sections 96x48x4.87 Thk and 66x3x4.5 Thk, Circular hollow section of 165.6 OD x 10 Thk, MS Stiffner plate 12 mm	280132	Set	New Item	45600

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
		Thk, MS plate Base Plate 16 mm Thk, J Blots 12 mm dia, Gusset Plates, Clamps, 15 mm rods 2.5 Mtr length as per drawing details. Tor Steel Rods cut of Dia 8 mm, 10 mm, 12 mm, 16 mm and 20 mm bent as per drawing & tied inclusive of labour for Reinforced foundation (Total 380 kgs) (Dwg No. BESCOM/GM/QS&S/70 Dtd 24.11.2018)				
165	21.10	FRP grating sheet (30 mm thick, 1.8 Mtr x 1.5) for Prefabricated structure	280133	Set	New Item	8446
	22	Single Pole Mounted Transformer (SPMT) Kit for erection of Transformer on Square Section RCC/PSCC 9 Mtr Long Pole as per IS-1977				
166	22.01	For 25/63 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section without H Frame - MS	279115	Set	4213	4604
167	22.02	For 25/63 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section without H Frame - GI	280115	Set	5354	6349
168	22.03	For 25/63 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section with H Frame - MS (Dwg No. BESCOM/GM/QS&S/37 Dtd 24.11.2018)	279116	Set	New Item	9180
169	22.04	For 25/63 kVA 4/5 Star Rated Transformer on RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section with H Frame - GI	280116	Set	New Item	12633
170	22.05	For 25 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL without H Frame - MS	279118	Set	6356	5584
171	22.06	For 25 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL without H Frame-GI	280118	Set	8400	7690
172	22.07	For 25 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL with H Frame - MS (Dwg No. BESCOM/GM/QS&S/64 Dtd 24.11.2018)	279119	Set	New Item	9576
173	22.08	For 25 kVA 4/5 Star Rated Transformer on PSCC Pole - 9 Mtr Long, 300 Kg WL with H Frame - GI	280119	Set	New Item	13176
	23	GOS as per IS-9921, IS-1977				
174	23.01	11 kV, 200 Amps Single Break GOS (Dwg No. BESCOM/GM/QS&S/23 Dtd 24.11.2018)	304212	Set	7163	7799

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175	23.02	11 kV, 200 Amps Single Break GOS, Vertically Operated	304213	Set	10405	11328
176	23.03	11 kV, 400 Amps Double Break GOS (Dwg No. BESCOM/GM/QS&S/22 Dtd 24.11.2018)	304224	Set	16115	17545
177	23.04	H - Frame Set for fixing 11 kV, 200 Amps Single Break GOS - (For DP structure for providing New GOS for sectionalisation) - MS (Dwg No. BESCOM/GM/QS&S/61 Dtd 24.11.2018)	279149	Set	2983	3724
178	23.05	H - Frame Set for fixing 11 kV, 200 Amps Single Break GOS - (For DP structure for providing New GOS for sectionalisation) - GI	280149	Set	3786	5121
179	23.06	Fixed and Moving contacts with B&N for 11 kV, 200 Amps GOS (1 Fixed & 1 Moving contacts each)	503000	Each	2595	865
180	23.07	11 kV, 400 Amps Special Roaster GOS	304204	Set	12343	12343
181	23.08	Insulated GOS Operating Rods	503211	No	352	352
	24	DOLO Cutout as per IS-9385, Part-1 to 3				
182	24.01	11 kV, DOLO Cutout Conventional to Erstwhile KEB Specification (Dwg No. BESCOM/GM/QS&S/20 Dtd 24.11.2018)	302011	Set (3 Nos)	4631	4848
183	24.02	11 kV, DOLO Cutout REC Specification	302021	Set (3 Nos)	3500	3500
	25	DP Set (2 Pole Structure Kit) as per IS-1977				
184	25.01	For RCC Pole - 9 Mtr Long, 145KG WL/PSCC Pole - 9 Mtr Long, 300Kg WL - MS (Dwg No. BESCOM/GM/QS&S/35 & 63 Dtd 24.11.2018)	279100	Set	3870	4618
185	25.02	For RCC Pole - 9 Mtr Long, 145KG WL/PSCC Pole - 9 Mtr Long, 300Kg WL - GI	280100	Set	5086	6031
	26	3 Pole Structure Kit as per IS-1977				
186	26.01	For RCC Pole - 9 Mtr Long, 145KG WL/PSCC Pole - 9 Mtr Long, 300Kg WL - MS	279015	Set	9636	9636
187	26.02	For RCC Pole - 9 Mtr Long, 145KG WL/PSCC Pole - 9 Mtr Long, 300Kg WL - GI	280015	Set	12217	12217
	27	C - Type Wedge Connector (Fired)				
188	27.01	Rabbit to Rabbit ACSR	285570	Set	310	349
189	27.02	Coyote to Coyote ACSR	285575	Set	766	861

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190	27.03	Rabbit to Coyote ACSR	285571	Set	771	867
	28	H - Clamps				
191	28.01	Rabbit to Rabbit ACSR	285585	No	63	71
192	28.02	Coyote to Coyote ACSR	285587	No	315	354
193	28.03	Rabbit to Coyote ACSR	285586	No	298	335
194	28.04	Two Hole Paddle (Rabbit ACSR)	285590	No	246	277
195	28.05	Microwedge Connector	285594	No	81	91
	29	LT Feeder Piller Box with Poreclain Rewireable Cutout and & 1 No of 630 Amps Load Break Switch with Copper Busbar as per IS-13947 Part-1&2				
196	29.01	8 Way (Refer Dwg No. BESCOM/GM/QS&S/41Dtd 24.11.2018)	300308	No	36642	40307
197	29.02	12 Way (Dwg No. BESCOM/GM/QS&S/41 Dtd 24.11.2018)	300312	No	43971	48368
	30	LT Line Spacer				
198	30.01	For 4 Wire	284502	No	67	70
199	30.02	For 2 Wire	281504	No	40	42
200	30.03	For TC Wiring (Dwg No. BESCOM/GM/QS&S/38 Dtd 24.11.2018)	284503	No	39	41
	31	1.1 kV, XLPE or Heat resistant PVC insulated, PVC extruded Inner Seath Armoured LTUG Cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average \pm 5% and resistivity 14 Ohms/KM (Max) as per IS-3975				
201	31.01	6 Sqmm, 2 Core, (24 GI Wire - 1.4 mm)	287054	KM	50367	55596
202	31.02	10 Sqmm, 2 Core, (9 GI Strips - 4 x 0.8 mm)	287055	KM	63570	69745
203	31.03	10 Sqmm, 4 Core, (10 GI Strips - 4 x 0.8 mm)	287205	KM	90000	95737
204	31.04	16 Sqmm, 2 Core, (9 GI Strips - 4 x 0.8 mm)	287056	KM	68639	73355
205	31.05	16 Sqmm, 4 Core, (11 GI Strips - 4 x 0.8 mm)	287206	KM	106000	113268
206	31.06	25 Sqmm, 2 Core, (12 GI Strips - 4 x 0.8 mm)	287057	KM	95858	102220
207	31.07	25 Sqmm, 3.5 Core, (12 GI Strips - 4 x 0.8 mm)	287058	KM	New Item	120968
208	31.08	25 Sqmm, 4 Core, (13 GI Strips - 4 x 0.8 mm)	287207	KM	128440	138249

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209	31.09	35 Sqmm, 3.5 Core, (14 GI Strips - 4 x 0.8 mm)	287059	KM	New Item	139113
210	31.10	35 Sqmm, 4 Core, (15 GI Strips - 4 x 0.8 mm)	287060	KM	New Item	158986
211	31.11	50 Sqmm, 3.5 Core, (16 GI Strips - 4 x 0.8 mm)	287208	KM	New Item	161607
212	31.12	50 Sqmm, 4 Core, (17 GI Strips - 4 x 0.8 mm)	287209	KM	169172	184694
213	31.13	70 Sqmm, 3.5 Core, (18 GI Strips - 4 x 0.8 mm)	287210	KM	270000	289007
214	31.14	95 Sqmm, 3.5 Core, (21 GI Strips - 4 x 0.8 mm)	287211	KM	311000	335046
215	31.15	120 Sqmm, 3.5 Core, (23 GI Strips - 4 x 0.8 mm)	287212	KM	374000	403282
216	31.16	150 Sqmm, 3.5 Core, (25 GI Strips - 4 x 0.8 mm)	287213	KM	461000	495040
217	31.17	185 Sqmm, 3.5 Core, (28 GI Strips - 4 x 0.8 mm)	287214	KM	574000	615501
218	31.18	240 Sqmm, 3.5 Core, (30 GI Strips - 4 x 0.8 mm)	287216	KM	718000	768443
219	31.19	300 Sqmm, 3.5 Core, (32 GI Strips - 4 x 0.8 mm)	287217	KM	New Item	990080
220	31.20	400 Sqmm, 3.5 Core, (39 GI Strips - 4 x 0.8 mm)	287218	KM	1218000	1297875
	32	Compression type Aluminium Tubular in Line Connector for Aluminum Conductor				
221	32.01	10 Sqmm	288605	No	3	3
222	32.02	16 Sqmm	288606	No	3	3
223	32.03	25 Sqmm	288607	No	4	4
224	32.04	35 Sqmm	288608	No	4	4
225	32.05	50 Sqmm	288609	No	5	6
226	32.06	70 Sqmm	288610	No	9	10
227	32.07	95 Sqmm	288611	No	10	11
228	32.08	120 Sqmm	288612	No	15	16
229	32.09	150 Sqmm	288613	No	22	24
230	32.10	185 Sqmm	288614	No	27	29
231	32.11	240 Sqmm	288616	No	44	48
232	32.12	400 Sqmm	288617	No	92	100
	33	Straight Through Jointing Kit Suitable for 1.1 kV Class LTUG Cable as per IS-13573 Epoxy Type				
233	33.01	10 Sqmm, 2 Core	288170	Set	619	619
234	33.02	10 Sqmm, 4 Core	288174	Set	619	619
235	33.03	16 Sqmm, 2 Core	288171	Set	619	619

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
236	33.04	16 Sqmm, 4 Core	288175	Set	619	619
237	33.05	25 Sqmm, 2 Core	288172	Set	619	619
238	33.06	25 Sqmm, 4 Core	288176	Set	665	665
239	33.07	50 Sqmm, 4 Core	288178	Set	758	758
240	33.08	70 Sqmm, 3.5/4 Core	288179	Set	935	935
241	33.09	95 Sqmm, 3.5/4 Core	288180	Set	935	935
242	33.10	120 Sqmm, 3.5/4 Core	288181	Set	1475	1475
243	33.11	185 Sqmm, 3.5/4 Core	288183	Set	1522	1522
244	33.12	240 Sqmm, 3.5/4 Core	288185	Set	1942	1942
245	33.13	400 Sqmm, 3.5/4 Core	288187	Set	2877	2877
		HS Type				
246	33.14	up to 6 Sqmm	288190	Set	559	559
247	33.15	10 to 16 Sqmm	288191	Set	559	559
248	33.16	25 to 35 Sqmm	288192	Set	727	727
249	33.17	50 to 95 Sqmm	288193	Set	1118	1118
250	33.18	120 to 225 Sqmm	288194	Set	1341	1341
251	33.19	240 to 300 Sqmm	288195	Set	1565	1565
252	33.20	400 Sqmm	288196	Set	2236	2236
	34	Epoxy Terminating Kit (Pothead) suitable for 1.1 kV, LTUG Cable				
253	34.01	Up to 4C x 50 Sqmm	288150	Set	316	316
254	34.02	3.5 x 70/95/120 Sqmm	288159	Set	373	373
255	34.03	3.5 x 150/185 Sqmm	288163	Set	469	469
256	34.04	3.5 x 225/240/300 Sqmm	288165	Set	574	574
257	34.05	3.5 x 400/500 Sqmm	288166	Set	699	699
	35	11 kV, 3 Core, HTUG Cable for insulations High quality clean XLPE compound shall be used (Free from microvoids, Moisture content, ambers and contaminations) with pressure extruded, inner sheath ROUND WIRE ARMoured as per IS-7098 (Part-2) Armouring wires dia in average \pm 2.5% and Resistivity 14 Ohms/KM (Max) as per IS-3975				

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258	35.01	95 Sqmm, (54 GI Wires - 2.5 mm Dia)	287400	KM	728081	782621
259	35.02	120 Sqmm, (57 GI Wires - 2.5 mm Dia)	287402	KM	939341	999586
260	35.03	150 Sqmm, (59 GI Wires - 2.5 mm Dia)	287403	KM	New Item	1149524
261	35.04	185 Sqmm, (51 GI Wires - 3.15 mm Dia)	287404	KM	New Item	1201800
262	35.05	240 Sqmm, (55 GI Wires - 3.15 mm Dia)	287405	KM	1380378	1471370
263	35.06	300 Sqmm, (58 GI Wires - 3.15 mm Dia)	287406	KM	New Item	1692076
264	35.07	400 Sqmm, (51 GI Wires - 4 mm Dia)	287410	KM	2109472	2245566
265	35.08	11 kV, Cables Fault Locating Equipment	440300	Set	4554131	4554131
	36	11 kV, Auto Reclosures and Sectionalizers with Remote Communication Facility as per IEC-62271				
266	36.01	11 kV, 630 Amps, 12.5 KA Auto reclosures with control pannel including necessary hardware structure protection system etc., as per specification	302510	Set	914174	582000
267	36.02	11 kV, 12.5 KA Sectionalizer with control box having control logic with necessary hardware etc., as per specification	312550	Set	674414	378000
268	36.03	11 kV, 230 V, 2 Phase, 300 VA control transformer for providing auxillary power	312551	Set	12886	12886
269	36.04	11 kV/ $\sqrt{3}$ /110V/ $\sqrt{3}$, 1 Phase metering PT class - 1, 100 VA per Phase for measurement of voltage	312552	Set	35142	35412
270	36.05	GSM modem with connecting cable for remote communicating capabilities	312553	Set	14057	14057
271	36.06	Fabrication & supply of structural steel including painting etc.,	312554	Set	7789	7789
272	36.07	9.6 kV, 200 Amps long duration porcelain housed Surge arrestors	312555	Each	1562	1562
	37	Conventional RMU (VCB Type) with Copper Busbar, 350 MVA, 630 Amps as per IEC-62271/IS-3427				
273	37.01	3 Way RMU, 2OD + 1VL (One Incomer + One Breaker + One Outgoing)	302480	Unit	1091151	1091151
274	37.02	4 Way RMU, 2OD + 2VL (One Incomer + Two Breaker + One Outgoing)	302481	Unit	1451508	1451508

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275	37.03	5 Way RMU, 2OD + 3VL (One Incomer + Three Breakers + One Outgoing)	302482	Unit	1811864	1811864
276	37.04	6 Way RMU, 2OD + 4VL (One Incomer + Four Breakers + One Outgoing)	302483	Unit	2172221	2172221
277	37.05	One Breaker (VL) Panel with Copper Busbar	302315	Unit	Will be Intimated	360357
278	37.06	One Breaker (OD) Panel with Copper Busbar	302316	Unit	New Item	545576
279	37.07	11 kV, Fault Passage Indicator for Overhead Line	302580	Unit	14810	14810
	38	Compact RMU (VCB/SF6 Type) with Copper Busbar, 350 MVA, 630 Amps as per IEC-62271/IS-3427				
280	38.01	3 Way RMU, 2 OD + 1 VL (One Incomer + One Breaker + One Outgoing)	302340	Unit	425000	425000
281	38.02	4 Way RMU, 2 OD + 2 VL (One Incomer + Two Breakers + One Outgoing)	302345	Unit	600000	600000
282	38.03	5 Way RMU, 2 OD + 3 VL (One Incomer + Three Breakers + One Outgoing)	302350	Unit	750000	750000
283	38.04	6 Way RMU, 2 OD + 4 VL (One Incomer + Four Breakers + One Outgoing)	302355	Unit	900000	900000
284	38.05	1 OD for RMU 630 Amps	302335	Unit	Will be Intimated	150000
285	38.06	1 VL for RMU, 630 Amps	302358	Unit	Will be Intimated	150000
	39	DAS Specification Compact RMU (VCB/SF6 Type) as per IEC-62271 The DAS RMUs shall have the following in addition to the Standards: <ul style="list-style-type: none"> • DC motors, Numerical Relays, Multi-functional meters, fault passage indicator (FPI), Metering CTs, Protection CTs, Auxiliary transformers, Potential transformer, Batteries, Battery chargers (12 V & 24 V), AC power socket and light for illumination of Control panel. • Control cable from each panel shall be wired and terminated to suitable 24 pin connector in the control panel. • Suitable space for fixing the Remote Terminal Unit (RTU) and Radio Modem in Control panel. • Suitable Clamps for fixing Antenna Pipe 				

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286	39.01	3 Way RMU, 2OD + 1VL (One Incomer + One Breaker + One Outgoing) 630 Amps with Copper Busbar	302490	Unit	609600	609600
287	39.02	4 Way RMU, 2OD + 2VL (One Incomer + Two Breakers + One Outgoing) 630 Amps with Copper Busbar	302491	Unit	834600	834600
288	39.03	5 Way RMU, 2OD + 3VL (One Incomer + Three Breakers + One Outgoing) 630 Amps with Copper Busbar	302492	Unit	948600	948600
289	39.04	1 VL for RMU, 630 Amps Copper Busbar	302493	Unit	New Item	225000
290	39.05	RTU (Remote Terminal Unit) Input Voltage: 16V DC to 32V DC Type: Isolated Un-Grounded type-Input ground and output ground are isolated from each other Output Voltage: 24V DC Fixed Output Current: 2.5 Amp's Fixed RTU Software/Firmware: RTU have configuration and maintenance software tool. Compatible for existing DAS System)	302494	Unit	New Item	333824
291	39.05	24-Pin Male RMU-RTU Connector: RMU-RTU Interface connectors used to interconnect each RTU with its associated RMU. Cabling between RMU status and control points will be brought out by the RMU supplier to a set of hooded 24-Pin Female connectors fixed within the RMU enclosure that will house the RTU. Corresponding set of hooded 24-Pin Male connectors wired back to the RTU via suitable cable.	302495	Unit	New Item	6629
292	39.06	Control Cable 24 Core (1.5 Mtr) suitable for RTU	302496	Set	New Item	1433
	40	Load Break Switch				
293	40.01	Load Break Switch with Panel	506492	Unit	Will be Intimated	56640
	41	Aerial Bunched Cable (ABC)				
	A	11 kV [6.35/11 kV(E)], HT Aerial Bunched Cable. High quality clean XLPE compound shall be used for Insulations (Free from microvoids, Moisture content, ambers and contaminations) with Metallic screen of EC Grade Copper Tape 0.5 mm as per IS-7098 (Part-2), 2011				
294	41.01	3x95 + 1x70 Sqmm (Insulated Messenger Wire)	284791	KM	680510	680510
295	41.02	3x120 + 1x95 Sqmm (Insulated Messenger Wire)	284792	KM	829338	829338

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
	B	1.1 kV, LT Aerial Bunched Cable, confirming to IS-14255: 1995 XLPE insulation Parameter shall be as below				
		1. Hot Set Test:				
		a) Elongation under Load: 50% (Max)				
		b) Permanent Elongation After Cooling: 3% (Max)				
		2. Thermal Aging in oven:				
		a) Tensile Strength: 16 N/mm ² (Min)				
		b) Elongation: 375% (Min)				
		3. Water Absorption Test				
		a) Water absorbed: 0.5 mg/cm ² (Max)				
		4. Carbon Black Content shall be ranging from 2% to 3%				
296	41.03	3x95 + 1x70 + 1x16 Sqmm Street light (Insulated Messenger cum Neutral)	284819	KM	442170	435622
297	41.04	3x95 + 1x70 + 1x25 Sqmm Street light (Insulated Messenger cum Neutral)	284811	KM	455542	446546
298	41.05	3x95 + 1x70 + 1x35 Sqmm Street light (Insulated Messenger cum Neutral)	284812	KM	467298	467298
299	41.06	3x70 + 1x50 + 1x16 Sqmm Street light (Insulated Messenger cum Neutral)	284813	KM	New Item	335500
300	41.07	3x25 + 1x25 + 1x16 Sqmm Street light (Insulated Messenger cum Neutral)	284814	KM	New Item	147000
301	41.08	3x16 + 1x25 + 1x16 Sqmm Street light (Insulated Messenger cum Neutral)	284816	KM	New Item	97000
302	41.09	2x16 + 1x25 Sqmm (Insulated Messenger cum Neutral)	284817	KM	New Item	76000
	42	Accessories for ABC Cables as per NF-33, as per IS-13573 for Joints & Terminations				
303	42.01	Suspension Clamp suitable for insulated Messsenger wire of size 25 to 95 Sqmm	284847	No	335	335
304	42.02	11 kV, AB Cable Straight thru' joint kit suitable for 95 Sqmm	284848	Set (3 Nos)	5823	6813
305	42.03	11 kV, AB Cable Straight thru' joint kit suitable for 120 Sqmm	284849	Set (3 Nos)	6183	7234
306	42.04	11 kV, ABC Termination kit 95 - 120 Sqmm	284873	Set (3 Nos)	2164	2532
307	42.05	Surge Arrester (for AB Cable)	303100	No	611	611

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
308	42.06	Ground Connection for Messenger Wire	284880	No	12	12
309	42.07	Single Phase Distribution Box for 20 Connection	284820	No	2128	2128
310	42.08	Single Phase Distribution Box for 10 Connection	284818	No	2010	2010
311	42.09	Three Phase Distribution Box for 5 Connection	284815	No	2128	2128
312	42.1	Three Phase Distribution Box for 6 Connection	284821	No	2128	2128
313	42.11	Piercing Connector Suitable for 16 Sqmm - 95 Sqmm AB Cable - Service Connection	284822	No	235	235
314	42.12	Piercing Connector Suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connection	284223	No	165	165
315	42.13	Piercing Connector Suitable for 25 Sqmm - 95 Sqmm AB Cable - Main to Main Connection	284855	No	275	275
316	42.14	Piercing Connector Suitable for 50 Sqmm - 150 Sqmm AB Cable - Main to Main Connection	284865	No	309	309
317	42.15	Universal Hook and Bolt & Nut	284284	No	314	314
318	42.16	Dead End Clamp/Anchor Clamp Assembly 25 to 95 Sqmm Insulated Messenger (Exclusive of Pole Clamp and Eye Hook)	284825	No	135	135
319	42.17	Dead End Clamp/Anchor Clamp Assembly 16 to 70 Sqmm Insulated Messenger (Exclusive of Pole Clamp and Eye Hook)	284843	No	206	206
320	42.18	Dead End Clamp/Anchor Clamp Assembly 70 to 210 Sqmm Insulated Messenger (Exclusive of Pole Clamp and Eye Hook)	284844	No	309	309
321	42.19	Suspension Clamp Assembly 16 to 70 Sqmm Insulated Messenger (Exclusive of Pole Clamp and Eye Hook)	284845	No	196	196
322	42.2	Suspension Clamp Assembly 70 to 210 Sqmm Insulated Messenger (Exclusive of Pole Clamp and Eye Hook)	284846	No	314	314
323	42.21	Pre - Insulated Lug - CPTAU for 120 Sqmm	284836	No	397	397
324	42.22	Pre - Insulated Lug - CPTAU for 95 Sqmm	284837	No	348	348
325	42.23	Pre - Insulated Lug - CPTAU for 70 Sqmm	284827	No	304	304
326	42.24	Pre - Insulated Lug - CPTAU for 50 Sqmm	284828	No	270	270
327	42.25	Pre - Insulated Lug - CPTAU for 25 Sqmm	284834	No	254	254
328	42.26	Pre - Insulated Lug - CPTAU for 16 Sqmm	284835	No	126	126

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
329	42.27	Tee - Connector - KZ3 95	284829	No	348	348
330	42.28	Straight Joint Suitable for 95 Sqmm, LT ABC - MJPT Type	284832	No (1 Core)	319	373
331	42.29	Straight Joint Suitable for 70 Sqmm, LT ABC - MJPT Type	284830	No (1 Core)	298	349
332	42.3	Straight Joint Suitable for 50 Sqmm, LT ABC - MJPT Type	284831	No (1 Core)	279	326
333	42.31	Straight Joints Suitable for 25 Sqmm, LT ABC - MJPT Type	284838	No (1 Core)	258	302
334	42.32	Straight Joint Suitable for 16 Sqmm, LT ABC - MJPT Type	284840	No (1 Core)	187	219
335	42.33	End Cap for 50/70 Sqmm	284833	No	20	20
336	42.34	Nylon Cable Tie (100 Nos)	284839	Set	412	412
337	42.35	Pole Clamp for HT/LT AB cable	284841	No	103	103
338	42.36	Eye Hook (Flat Type) for fixing Clamp	284842	No	90	90
	43	11 kV, Jointing & Cable Termination Kit as per IS-13573				
	A.	Heat Shrinkable Type Transition Jointing Kit for XLPE Cable				
339	43.01	3x95 Sqmm	288312	Set	9084	9084
340	43.02	3x240 Sqmm	288314	Set	11227	11227
341	43.03	3x400 Sqmm	288315	Set	11434	11434
	B.	Heat Shrinkable Indoor Type Cable Termination Kit for XLPE Cable				
342	43.04	3x95 Sqmm	288332	Set	2837	3319
343	43.05	3x240 Sqmm	288334	Set	3555	4159
344	43.06	3x400 Sqmm	288336	Set	3648	4268
	C.	Heat Shrinkable Outdoor Type Cable Termination Kit for XLPE Cable				
345	43.07	3x95 Sqmm	288302	Set	3081	3605
346	43.08	3x240 Sqmm	288304	Set	4030	4715
347	43.09	3x400 Sqmm	288305	Set	4060	4750

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
	D.	Heat Shrinkable Indoor Type Cable Termination Kit for PILC Cable				
348	43.10	3x95 Sqmm	288462	Set	2378	2782
349	43.11	3x240 Sqmm	288464	Set	2554	2988
350	43.12	3x400 Sqmm	288465	Set	2607	3050
	E.	Heat Shrinkable Outdoor Type Cable Termination Kit for PILC Cable				
351	43.13	3x95 Sqmm	288456	Set	3013	3525
352	43.14	3x240 Sqmm	288458	Set	3781	4424
353	43.15	3x400 Sqmm	288460	Set	3798	4444
	F.	Heat Shrinkable Straight Through Jointing Kit for XLPE Cable with Copper Lug & Al Ferrule				
354	43.16	3x95 Sqmm	288322	Set	5539	6481
355	43.17	3x240 Sqmm	288324	Set	6755	7903
356	43.18	3x400 Sqmm	288329	Set	8296	9706
	G.	Heat Shrinkable Straight Through Jointing Kit for PILC Cable with Copper Lug & Al Ferrule				
357	43.19	3x95 Sqmm	288450	Set	5909	6914
358	43.20	3x240 Sqmm	288452	Set	6677	7812
359	43.21	3x400 Sqmm	288453	Set	8067	9438
	44	Service Connection Accessories				
360	44.01	Pole Mounted Fibre Glass Reinforced Aerial Fuse Board 60 Amps - 3 Way (Dwg No. BESCOM/GM/QS&S/24 Dtd 24.11.2018)	612614	No	936	936
361	44.02	Pole Mounted Fibre Glass Reinforced Aerial Fuse Board 30 Amps - 3 Way	612615	No	669	669
362	44.03	FGRP Aerial Fuse Board 30 Amps - 4 Way	612617	No	872	872
363	44.04	FGRP Aerial Fuse Board 30 Amps - 5 Way	612618	No	987	987
364	44.05	FGRP Aerial Fuse Board 30 Amps - 6 Way	612616	No	1081	1081
	45	LT Service Connector				
365	45.01	For Weasel	288502	No	26	28
366	45.02	For Rabbit	288503	No	26	28

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
	46	PVC Pipe as per IS-2509				
	A.	Pipe				
367	46.01	PVC Pipe - 20 mm Dia	778020	Mtr	19	19
368	46.02	PVC Pipe - 25 mm Dia	778025	Mtr	25	25
369	46.03	PVC Pipe - 32 mm Dia	778032	Mtr	41	41
370	46.04	PVC Pipe - 40 mm Dia	778040	Mtr	46	46
371	46.05	PVC Pipe - 50 mm Dia	778050	Mtr	52	52
372	46.06	PVC Pipe - 63 mm Dia	778063	Mtr	68	68
373	46.07	PVC Pipe - 75 mm Dia	778075	Mtr	80	80
374	46.08	PVC Pipe - 80 mm Dia	778080	Mtr	112	112
375	46.09	PVC Pipe - 100 mm Dia	778100	Mtr	128	128
376	46.10	PVC Pipe - 150 mm Dia	778105	Mtr	267	267
377	46.11	PVC Pipe - 200 mm Dia	778110	Mtr	403	403
	B.	Bend				
378	46.12	PVC Bend - 20 mm Dia	778000	No	6	6
379	46.13	PVC Bend - 25 mm Dia	778001	No	9	9
380	46.14	PVC Bend - 32 mm Dia	778002	No	20	20
381	46.15	PVC Bend - 40 mm Dia	778003	No	32	32
382	46.16	PVC Bend - 50 mm Dia	778004	No	49	49
383	46.17	PVC Bend - 63 mm Dia	778005	No	60	60
384	46.18	PVC Bend - 75 mm Dia	778006	No	65	65
385	46.19	PVC Bend - 80 mm Dia	778007	No	92	92
386	46.20	PVC Bend - 100 mm Dia	778008	No	138	138
387	46.21	PVC Bend - 150 mm Dia	778009	No	183	183
388	46.22	PVC Bend - 200 mm Dia	778010	No	233	233
	47	GI Pipe B - Class as per IS-1239				
389	47.01	GI Pipe - 20 mm Dia	768040	Mtr	101	120
390	47.02	GI Pipe - 25 mm Dia	768042	Mtr	142	168
391	47.03	GI Pipe - 32 mm Dia	768043	Mtr	191	226
392	47.04	GI Pipe - 40 mm Dia	768044	Mtr	202	240

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
393	47.05	GI Pipe - 50 mm Dia	768046	Mtr	262	311
394	47.06	GI Pipe - 63 mm Dia	768047	Mtr	284	337
395	47.07	GI Pipe - 65 mm Dia	768048	Mtr	375	445
396	47.08	GI Pipe - 100 mm Dia	768052	Mtr	1047	1242
397	47.09	GI Pipe - 150 mm Dia	768058	Mtr	1048	1243
	48	1.1 kV Class HR (Heat Resistant) PVC Insulated & Sheathed Aluminium Single Core wires as per IS-694: 2010				
398	48.01	PVC Wire - 2.5 Sqmm Weight per 100 Mtr Coil: 1.8 Kg	289022	Coil	876	876
399	48.02	PVC Wire - 4 Sqmm Weight per 100 Mtr Coil: 2.4 Kg	289023	Coil	1060	1060
400	48.03	PVC Wire - 6 Sqmm Weight per 100 Mtr Coil: 3.5 Kg	289024	Coil	1282	1282
401	48.04	PVC Wire - 10 Sqmm Weight per 100 Mtr Coil: 5.3 Kg	289025	Coil	1739	1739
	49	1.1 KV Class HR (Heat Resistant) PVC Insulated & UnSheathed Aluminium Wires Multistrand Single Core Lead wires as per IS-694: 2010				
402	49.01	PVC Wire - 16 Sqmm Al Wt: 4.2 Kg, Total Wt: 7.5 Kg/100 Mtr Coil	289026	Coil	2341	2341
403	49.02	PVC Wire - 25 Sqmm Al Wt: 6.7 Kg, Total Wt: 11.5 Kg/100 Mtr Coil	289027	Coil	3231	3231
404	49.03	PVC Wire - 35 Sqmm Al Wt: 9.3 Kg, Total Wt: 14.5 Kg/100 Mtr Coil	289028	Coil	3607	3607
405	49.04	PVC Wire - 50 Sqmm Al Wt: 13.8 Kg, Total Wt: 22 Kg/100 Mtr Coil	289029	Coil	4431	4431
406	49.05	PVC Wire - 70 Sqmm Al Wt: 18.7 Kg, Total Wt: 28.5 Kg/100 Mtr Coil	289030	Coil	6650	6650
407	49.06	PVC Wire - 95 Sqmm Al Wt: 25 Kg, Total Wt: 36 Kg/100 Mtr Coil	289031	Coil	8163	8163
408	49.07	PVC Wire - 120 Sqmm Al Wt: 32 Kg, Total Wt: 45.5Kg/100 Mtr Coil	289032	Coil	10704	10704
409	49.08	PVC Wire - 150 Sqmm Al Wt: 41.4 Kg, Total Wt: 57 Kg/100 Mtr Coil	289033	Coil	13180	13180

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
410	49.09	PVC Wire - 185 Sqmm Al Wt: 49 Kg, Total Wt: 68 Kg/100 Mtr Coil	289034	Coil	15207	15207
411	49.1	PVC Wire - 240 Sqmm Al Wt: 63.5 Kg, Total Wt: 87 Kg/100 Mtr Coil	289036	Coil	19854	19854
	50	Fuse Wire				
412	50.01	Tinned Copper Fuse Wire, 5 Amps	625020	Kg	641	775
413	50.02	Tinned Copper Fuse Wire, 10 Amps	625230	Kg	641	775
414	50.03	Tinned Copper Fuse Wire, 20 Amps	625250	Kg	641	775
415	50.04	Tinned Copper Fuse Wire, 100 Amps	625075	Kg	641	775
	51	Porcelain Cutout (500 Volt)				
416	51.01	15/16 Amps	300003	No	34	34
417	51.02	30/32 Amps	300005	No	48	48
418	51.03	60/63 Amps	300007	No	144	144
419	51.04	100 Amps	300010	No	259	259
420	51.05	200 Amps	300020	No	412	412
421	51.06	300 Amps	300030	No	756	756
	52	Grounding Material				
		Pipe Grounding				
422	52.01	GI Grounding pipe, B - Class, 42 mm dia, 2.5 Mtr long, 3.2 mm thick with bolt, nut, GI Strips and washer complete Minimum Weight of GI Pipe: 7.3 Kg	281674	No	592	626
423	52.02	Good Quality well burnt Charcoal for grounding purposes packed in non returnable gunny bag of 30 Kg each	600095	No	412	600
424	52.03	Good Quality Salt for grounding purposes packed in 50 Kg gunny bag	607054	Bag	275	275
		Rod Earthing				
425	52.04	Rod type of earthing using 40 mm Dia, 3 Mtr long MS rod as ground rod, in earth pit of 300 mm width and 3300 mm depth and using 50x6 mm flat welded to ground rod as terminal & connected to equipment ground terminal using PVC Al wire as specified	281685	No	1832	1832

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
426	52.05	Bentonite clay slurry for earthing in 50 Kg Bag	607220	Bag	326	326
	53	Alkathine tube				
427	53.01	Transparent Alkathine tube 19 mm dia, 2 mm thick in coils of 30 Mtr	821900	Coil	458	458
	54	Measuring Equipment				
428	54.01	LT Electronic Tri - Vector Meter 5 Amps, 0.5 Accuracy Class	357510	No	2061	2061
429	54.02	HT Electronic Tri - Vector Meter 5 Amps, 3 Phase 3 wire DLMS Meter 0.5 Accuracy Class	357512	No	2382	2382
430	54.03	HT ETV Meter 0.2 Accuracy Class with ABT feature and DLMS protocol with ToD with RS 232 Port UNIDIRECTIONAL	357325	No	New Item	17000
431	54.04	HT ETV Meter 0.2 Accuracy Class with ABT feature and DLMS protocol with ToD with RS-232 Port BIDIRECTIONAL	357326	No	New Item	19470
432	54.05	LT Single Phase 5-30 Amps, DLMS Complaint Static Energy Meter, 1.0 Accuracy Class	357006	No	671	671
433	54.06	LT AC 3 Phase 4 Wire, 5-30 Amps DLMS Complaint Energy Meter, 1.0 Accuracy Class	357531	No	2244	1731
434	54.07	LT 3 Phase, 4 Wire, CT Operated DLMS Complaint ETV Meter - 5A, 0.5s Accuracy Class	357519	No	2244	2525
435	54.08	Pre - Paid Energy Meter Single Phase, 5-30 Amps, 1.0 Accuracy Class with Key Pad Technology consumer interface unit along with pillfer proof box	357580	No	9832	6993
436	54.09	Pre - Paid Energy Meter Single Phase, 5-30 Amps, 1.0 Accuracy Class with Card Technology	357581	No	New Item	12173
437	54.10	Pre - Paid Energy Meter 3 Phase, 5-30 Amps, 1.0 Accuracy Class with Key Pad Technology consumer interface unit along with pillfer proof box	357585	No	12396	10078
438	54.11	Pre - Paid Energy Meter 3 Phase, 5-30 Amps, 1.0 Accuracy Class with Card Technology	357586	No	New Item	13617
439	54.12	HT 3 Phase 4 Wire Static Meter (CT, PT Operated) 3 x 63.5 V, 1 Amps 0.2s Accuracy Class with RS-485 & ABT features	357514	No	13507	13507

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
440	54.13	LT 3 Phase 4 Wire 5-30 Amps Thread Through Type composite Meter Housing Box consisting of ETV Meter with AMR comply and LTCT with built in GSM/GPRS Modem (as per technical specification) upto 100 kVA Distribution Transformer.	357515	No	17529	17529
441	54.14	Numerical Over Current & Earth Fault Protecion Relay with Accessories for NJY Works	357517	No	10620	10620
442	54.15	GPRS Modem with Accessories	357521	Set	New Item	5074
	55	Meter Protection/Tamper Proof Box (MS) for LT Installations 25 HP and above				
443	55.01	Meter Protection/Tamper Proof box with busbar for LT 3 Ph with CT Ratio 50/5A, 1.0 Accuracy Class	358040	Unit	6156	6156
444	55.02	Meter Protection/Tamper Proof box with busbar for LT 3 Ph with CT Ratio 75/5A, 1.0 Accuracy Class	358023	Unit	5716	5716
445	55.03	Meter Protection/Tamper Proof box with busbar for LT 3 Ph with CT Ratio 100/5A, 1.0 Accuracy Class	358030	Unit	5452	5452
446	55.04	LT Metering Box for housing the ETV Meter without CT's busbar wiring etc	358050	Unit	3664	3664
447	55.05	Pillfer proof box for below 25 HP Installation	612655	Unit	295	295
448	55.06	SMC Single Phase Meter protection box	358005	Unit	Will be Intimated	480
449	55.07	Sheet Metal/Deep Drawn LT Metering box with wiring arrangement for Modem and DLMS meter without CTs	358076	Unit	3664	3664
450	55.08	Sheet Metal/Deep Drawn Street Lighting Metering Box with Automatic Control Swith, Contactors with Single Phase 5-30 Amps meter & 50/5A CT	358078	Unit	6500	5954
451	55.09	Numerical Poly Carbonate Seal	626234	No	8	10
452	55.10	Meter Sealing Wire	626500	Kg	153	181
453	55.11	High Security Label Seal	357590	No	5	5
454	55.12	Poly Carbonate sealing bits without number	626233	No	6	6

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
	56	LT Current Transformer, 3.75 VA, Ring type as per IS-2705 Part-1&2				
455	56.01	CT Ratio - 25/5A, 1.0 Accuracy Class	336005	No	511	548
456	56.02	CT Ratio - 30/5A, 1.0 Accuracy Class	336006	No	511	548
457	56.03	CT Ratio - 50/5A, 1.0 Accuracy Class	336010	No	507	544
458	56.04	CT Ratio - 75/5A, 1.0 Accuracy Class	336015	No	422	453
459	56.05	CT Ratio - 50/5A, 0.5 Accuracy Class	336016	No	504	541
460	56.06	CT Ratio - 75/5A, 0.5 Accuracy Class	336017	No	321	344
461	56.07	CT Ratio - 100/5A, 0.5 Accuracy Class	336020	No	374	401
462	56.08	CT Ratio - 150/5A, 0.5 Accuracy Class	336025	No	280	300
463	56.09	CT Ratio - 200/5A, 0.5 Accuracy Class	336030	No	330	354
464	56.10	CT Ratio - 300/5A, 0.5 Accuracy Class	336035	No	330	354
465	56.11	CT Ratio - 400/5A, 0.5 Accuracy Class	336040	No	330	354
466	56.12	CT Ratio - 600/5A, 0.5 Accuracy Class	336046	No	371	398
467	56.13	CT Ratio - 800/5A, 0.5 Accuracy Class	336050	No	371	398
	57	Instrument Transformer (PT & CT) as per IS-2705 Part-1&2				
	A.	11 KV PT				
468	57.01	PT 11 kV/110V, 50 VA, Single Phase Insulation level 15/35/95 kV as per IS 3156, 0.5 Accuracy Class	335230	No	7906	8535
469	57.02	PT 11 kV/ $\sqrt{3}$ /110V/ $\sqrt{3}$, 25 VA, Single phase Insulation level 15/35/95 kV as per IS 3156, 0.2 Accuracy Class	335232	No	8428	9099
470	57.03	PT 11 kV Station Type Three phase	335220	No	22086	30849
	B.	11 KV CT (Secondary - 1A) for 3 Phase 4 Wire Metering, Burden: 2.5 VA, 0.2 Accuracy Class				
471	57.04	Ratio: 1.25/1A to 2.5/1A	336336	No	7438	8031
472	57.05	Ratio: 5/1A to 100/1A	336337	No	6376	6883
473	57.06	Ratio: 125/1A to 200/1A	336338	No	6825	7368
474	57.07	Ratio: 225/1A to 400/1A	336339	No	7438	8031

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
	58	HT Metering Equipment				
475	58.01	11 kV HT Metering cubicle of different CT Ratio, Both side cable entry type with 3 CT & 3 PT, With Transparent Cover TTB, with 30x8 mm Copper Busbar, Modem & 2 No of Meters for 3 Phase 4 Wire Metering without Load Break Switch (HT Metering Box Fabricated out of 3 mm MS Sheet duly epoxy powder coated) as per revised Specification (Dwg No. BESCOM/GM/QS&S/....Dtd 24.11.2018)	358351	Unit	128784	188292
	59	UPS on Line				
476	59.01	1 kVA with required Tubular Batteries	344901	Set	22738	22738
477	59.02	5 kVA with required Tubular Batteries	344905	Set	83407	83407
	60	Heavy Duty Copper Terminal Long Barrel				
478	60.01	25 Sqmm Copper Terminal, Apprx Wt: 11 Gm	288527	No	18	19
479	60.02	35 Sqmm Copper Terminal, Apprx Wt: 17 Gm	288528	No	25	27
480	60.03	50 Sqmm Copper Terminal, Apprx Wt: 26 Gm	288529	No	37	40
481	60.04	70 Sqmm Copper Terminal, Apprx Wt: 38 Gm	288530	No	57	61
482	60.05	95 Sqmm Copper Terminal, Apprx Wt: 58 Gm	288531	No	82	88
483	60.06	120 Sqmm Copper Terminal, Apprx Wt: 64 Gm	288532	No	90	96
484	60.07	150 Sqmm Copper Terminal, Apprx Wt: 98 Gm	288533	No	118	126
485	60.08	185 Sqmm Copper Terminal, Apprx Wt: 158 Gm	288534	No	176	188
486	60.09	225 Sqmm Copper Terminal	288535	No	224	240
487	60.10	240 Sqmm Copper Terminal, Apprx Wt: 218 Gm	288536	No	228	244
488	60.11	300 Sqmm Copper Terminal	288537	No	331	354
489	60.12	400 Sqmm Copper Terminal, Apprx Wt: 395 Gm	288538	No	555	593
	61	Al End Terminal (Lug)				
490	61.01	10 Sqmm	288630	No	2	2
491	61.02	16 Sqmm	288631	No	2	2
492	61.03	25 Sqmm	288632	No	3	3
493	61.04	32 Sqmm	288633	No	4	4
494	61.05	50 Sqmm	288634	No	7	8
495	61.06	70 Sqmm	288635	No	11	12

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
496	61.07	95 Sqmm	288636	No	13	14
497	61.08	120 Sqmm	288637	No	17	18
498	61.09	150 Sqmm	288638	No	20	22
499	61.10	185 Sqmm	288639	No	32	35
500	61.11	225 Sqmm	288640	No	35	38
501	61.12	240 Sqmm	288641	No	51	55
502	61.13	300 Sqmm	288642	No	60	65
503	61.14	400 Sqmm	288643	No	79	85
	62	TOOLS AND PLANT				
504	62.01	Battery Hydrometer with syring suitable for vent holes	429810	No	112	250
505	62.02	Multimeter Electronic Type	359215	No	1007	1007
506	62.03	Multimeter Electromechanical Type	359210	No	1811	1811
507	62.04	Rubber Hand gloves 15 kV, SEAMLESS Confirming to ISS (Sample to be verified for seamless before approval) for electrical purpose	427252	Pair	1102	1102
508	62.05	Thermometer (Wall Mounted)	430395	No	258	258
509	62.06	Portable Drilling Machine	410020	No	2405	2405
510	62.07	Megger 500 V	359400	No	2517	2517
511	62.08	Megger 2.5 kV - 5 kV	359450	No	5033	5033
512	62.09	Silica Gel	607056	Kg	190	190
513	62.10	Telescopic Earthing Rod	427215	No	1403	1528
514	62.11	Panel Indication Lamp	611972	No	15	15
515	62.12	Ring Spanner	424000	Set	1764	1764
516	62.13	Tube Spanner	424150	Set	671	671
517	62.14	Pipe Wrench 24"	424410	No	881	881
518	62.15	Pipe Wrench 18"	424408	No	336	336
519	62.16	Double End Spanner	424300	Set	317	317
520	62.17	Hack Saw Frame + B185	418170	No	112	112
521	62.18	Hand Torch 5 Celled	427405	No	146	146
522	62.19	Hand Torch 3 Celled	427403	No	73	73

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
523	62.20	Rechargeable LED Hand Torch	427408	No	826	985
524	62.21	Insulated Cutting Plier 12"	425040	No	243	280
525	62.22	Insulated Cutting Plier 8"	425041	No	170	200
526	62.23	Live Line Tester (HT)	440000	No	78	78
527	62.24	LT Line Tester	440005	No	43	50
528	62.25	High Voltage Detector	440008	No	17743	17743
529	62.26	Screw Driver 18"	425522	No	89	110
530	62.27	Screw Driver 12"	425521	No	77	95
531	62.28	Screw Driver 8"	425518	No	81	90
532	62.29	Hammer 8 Lbs	418141	No	224	224
533	62.30	Hammer 2 Lbs	418100	No	168	168
534	62.31	Allen Key	424260	No	215	215
535	62.32	Adjustable Screw Spanner 8"	424364	No	159	180
536	62.33	Adjustable Screw Spanner 12"	424365	No	254	300
537	62.34	Box Spanner	424120	Set	2237	2500
538	62.35	Transil Oil Dielectric Breakdown Test Kit	440060	No	70464	70464
539	62.36	SF6 Gas Leak Detector	440830	No	35276	35276
540	62.37	DC Volt Meter Range - 3V to + 5V	359180	No	503	503
541	62.38	Specific Gravity Correction Chart	620172	No	159	159
542	62.39	Wall Mounting Type Holder for Hydrometer	430311	No	112	112
543	62.40	Earth Resistance Tester	359481	No	6040	6040
544	62.41	Rubber Apron	427341	No	207	207
545	62.42	Pipette	430140	No	391	391
546	62.43	Protective Goggle	427330	No	425	425
547	62.44	Acid Resisting Jar (4 Pint capacity)	429814	No	419	419
548	62.45	Rubber Shoes Knee Height	427360	No	535	535
549	62.46	Glass Funnel	430200	No	117	117
550	62.47	Hickory Rod	427120	No	1070	1070
551	62.48	Manilla Rope 1" Dia	406226	100 Mtr	2106	2106

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
552	62.49	Manilla Rope 3/4" Dia	406220	100 Mtr	1911	1911
553	62.50	Polypropylene Rope of 26 mm Dia	406351	Kg	224	224
554	62.51	Files of sizes	426000	Set	280	280
555	62.52	Safety Belt	427320	No	682	682
556	62.53	Safety Belt with Accessories	427321	Set	New Item	3640
557	62.54	Electrical Safety Helmet attached with Electronic Induction Tester	427311	Set	907	1660
558	62.55	Hand Operated Crimping Tool 25 Sqmm to 400 Sqmm	425320	No	8802	8802
559	62.56	Common Meter Reading Instrument	358361	No	28997	28997
560	62.57	Thermal Imaging Camera	440661	No	399299	399299
561	62.58	Hydraulic Crimping Tool with suitable Dies for crimping lugs of size upto 400 Sqmm	425360	Set	10626	10626
562	62.59	Hi Visibility Reflective Jacket	407301	No	669	690
563	62.60	Hi Visibility Reflective Rain Wear	407302	No	Will be Intimated	2773
564	62.61	Protective Eye Wear for Safety with integral hands free LED Lighting	407303	No	Will be Intimated	1036
565	62.62	Safety shoes with Two Pair of socks	427322	Pair	Will be Intimated	1729
566	62.63	Chain saw (Motorised), extremely robust and long lasting chain saw. Highly suitably for cutting firewood, thinning shrubs and bushes and shaping trees.	414371	Set	27731	27731
567	62.64	FRP wall Extension ladder	427075	Set	New Item	12980
568	62.65	LDPE Safety Cone with ESCOM's Logo	407370	No	Will be Intimated	1800
569	62.66	HM HDPE Flexible Poly Film Barricade Tape of 50 Microns with ESCOM's Logo, Caution, Danger & Men At Work	407375	Mtr	Will be Intimated	2.8
570	62.67	Men at work Sign Board	407380	No	Will be Intimated	2000
571	62.68	Insulated Crowbar	404065	No	Will be Intimated	750

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
572	62.69	Head Torch	427447	No	Will be Intimated	400
573	62.70	Insulated GOS Operating Handle/Rod for Redesigned & Modified GOS	503215	No	2125	2125
	63	Miscellaneous Materials				
574	63.01	Cable Covering Tile 125x250x40 mm	801035	Per1000	10000	10000
575	63.02	Cable Covering Tile 125x125x40 mm	801034	Per1000	5000	5000
576	63.03	RCC Hume Pipe 2000 mm long 150 mm Dia	820672	No	300	300
577	63.04	RCC Hume Pipe 2000 mm long 200 mm Dia	820673	No	380	380
578	63.05	Collars for RCC Hume Pipe 150 mm Dia	820703	No	80	80
579	63.06	Collars for RCC Hume Pipe 200 mm Dia	820704	No	100	100
580	63.07	MS Pipe 200 mm Dia with collar	765050	Mtr	937	937
581	63.08	Burnt Brick (Class 35 Modular)	802005	No	6	6
582	63.09	Wire Cut Brick (Class 75 Modular)	802006	No	13	14
583	63.10	Pre - Cast Hollow Block (40x20x20 cm) Grade 30	802007	No	38	43
584	63.11	River Sand	800650	Cmt	1700	1700
585	63.12	Artificial Sand/Manufacture Sand	800651	Cmt	1700	1700
586	63.13	Cement in 50 Kg Bag	800030	Bag	335	360
587	63.14	Ready Mix Concrete M20 (1:1.5:3)	800660	Cmt	4600	5879
588	63.15	Ready Mix Concrete M25 (1:1:2)	800661	Cmt	4800	6065
589	63.16	Spall (Jelly used for packing)	800662	Cmt	400	425
590	63.17	Stone Spall	800663	Cmt	300	335
591	63.18	Stone Boulder	800664	Cmt	600	675
592	63.19	Route & Joint indicating slab with MS Anchor rod	802460	No	120	130
593	63.20	Black Cambric tape 25 mm wide 10 mil thick and in rolls of 50 Mtr	622675	Roll	127	127
594	63.21	Yellow Cambric tape 25 mm wide 7 mil thick and in rolls of 50 Mtr	622620	Roll	117	117
595	63.22	PVC Insulation Tapes 19 mm wide and in rolls of 10 Mtr	622720	Roll	12	14
596	63.23	ACB Paint	632030	Ltr	160	160
597	63.24	Aluminium Paint	632013	Ltr	240	240

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
598	63.25	Grey Enamel Paint smoke/battle ship	632050	Ltr	303	303
599	63.26	Red Oxide Paint	632020	Ltr	120	120
600	63.27	Cotton Tapes 19 mm wide and in rolls of 50 Mtr	622124	Roll	37	37
601	63.28	Cotton Waste	627520	Kg	50	50
602	63.29	Hack Saw Blade 300x12.5 mm	418185	No	8	8
603	63.30	TW Plate 300x300x25 mm with 20 mm Dia holes at the corners and coated with two coats of varnish on one side/SMC board	612621	No	257	257
604	63.31	TW Meter Board, 300x300x75 mm, coated with varnish/SMC board	612623	No	123	123
605	63.32	Monoplast	506559	100 Gm	62	62
606	63.33	Bitumen Compound	604060	Kg	73	73
	64	1.1 kV, Class HR (Heat Resistant) PVC Insulated, Copper Control Cable as per IS - 554 (Part-1) followed as per KPTCL Specification, Armouring wire dia in average \pm 2.5% and resistivity 14.0 Ohms/KM (Max) as per IS-3975				
607	64.01	2 Core, 2.5 Sqmm, 18 No GI Wires (1.4 mm)	289352	KM	59622	62161
608	64.02	4 Core, 2.5 Sqmm, 21 No GI Wires (1.4 mm)	289354	KM	84804	89713
609	64.03	6 Core, 2.5 Sqmm, 24 No GI Wires (1.4 mm)	289355	KM	New Item	134570
610	64.04	8 Core, 2.5 Sqmm, 26 No GI Wires (1.4 mm)	289356	KM	New Item	179426
611	64.05	10 Core, 2.5 Sqmm, 28 No GI Wires (1.6 mm)	289360	KM	191783	203868
612	64.06	14 Core, 2.5 Sqmm, 32 No GI Wires (1.6 mm)	289364	KM	265958	282810
613	64.07	19 Core, 2.5 Sqmm, 36 No GI Wires (1.6 mm)	289369	KM	358382	381130
614	64.08	2 Core, 4 Sqmm, 21 No GI Wires (1.4 mm)	289370	KM	81483	85471
615	64.09	2 Core, 6 Sqmm, 24 No GI Wires (1.4 mm)	289452	KM	103343	109121
616	64.10	2 Core, 10 Sqmm, 26 No GI Wires (1.6 mm)	289472	KM	134202	143093
617	64.11	4 Core, 4 Sqmm, 24 No GI Wires (1.4 mm)	289404	KM	174469	182222
618	64.12	4 Core, 6 Sqmm, 25 No GI Wires (1.6 mm)	289454	KM	168927	180421
619	64.13	4 Core, 10 Sqmm, 28 No GI Wires (1.6 mm)	289474	KM	283950	303134
620	64.14	4 Core, 16 Sqmm, 30 No GI Wires (1.6 mm)	289484	KM	420280	450390

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
621	64.15	4 Core, 25 Sqmm, 36 No GI Wires (1.6 mm)	289485	KM	New Item	712000
622	64.16	LED Bulb	446068	No	New Item	70
623	64.17	LED Tube Light	446069	No	New Item	220
624	64.18	LED Tube Light Fitting with Tube	446070	No	New Item	1000
625	64.19	Automatic Switch for Street Light	612645	No	2245	2245
626	64.20	Caution/Danger Board	613050	No	146	146
627	64.21	Standard Torch Cell 1.5V	612660	No	13	13
628	64.22	Street light metering box made of MS sheet steel with Clamp	358012	No	2140	1500
629	64.23	Street light metering box made of SMC	358013	No	1901	1901
	65	Full Threaded Bolt & Nut as per IS-1367				
	A.	MS				
630	65.01	16x40 mm	733612	MT	70464	84092
631	65.02	16x50 mm	733613	MT	70464	84092
632	65.03	16x65 mm	733616	MT	70464	84092
633	65.04	16x75 mm	733618	MT	70464	84092
634	65.05	16x85 mm	733620	MT	70464	84092
635	65.06	16x100 mm	733623	MT	70464	84092
636	65.07	16x125 mm	733625	MT	70464	84092
637	65.08	16x150 mm	733628	MT	70464	84092
638	65.09	16x175 mm	733630	MT	70464	84092
639	65.10	16x200 mm	733633	MT	70464	84092
640	65.11	16x225 mm	733634	MT	70464	84092
	B.	GI				
641	65.12	16x40 mm	280612	MT	95071	112735
642	65.13	16x50 mm	280613	MT	95071	112735
643	65.14	16x65 mm	280616	MT	95071	112735
644	65.15	16x75 mm	280618	MT	95071	112735
645	65.16	16x85 mm	280620	MT	95071	112735
646	65.17	16x100 mm	280623	MT	95071	112735

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
647	65.18	16x125 mm	280625	MT	95071	112735
648	65.19	16x150 mm	280628	MT	95071	112735
649	65.20	16x175 mm	280630	MT	95071	112735
650	65.21	16x200 mm	280633	MT	95071	112735
651	65.22	16x225 mm	280634	MT	95071	112735
	66	LT Brass Terminal Connector for Transformer (630 Amps, Approx. Weight 0.790 Kg)				
652	66.01	250 kVA	542180	No	919	1010
653	66.02	500 kVA	542185	No	919	1010
	67	Brass Cable Gland				
654	67.01	25 mm	542190	No	70	77
655	67.02	32 mm	542192	No	84	93
656	67.03	40 mm	542194	No	131	144
657	67.04	45 mm	542196	No	174	192
	68	For Distribution Transformer Centre (DTC) MS/SMC Box for housing the ETV Meter 3 Phase 4 Wire 5 Amps, with associated LT CT 0.5 Accuracy Class, ring type, with wiring Clamps, B&N and all other accessories required. (EXCLUDING ETV METER)				
	A.	MS Metering Box				
658	68.01	With CT Ratio 50/5 for 15/25 kVA DTC	358055	Set	5187	5287
659	68.02	With CT Ratio 100/5 for 50/63 kVA DTC	358060	Set	4785	4867
660	68.03	With CT Ratio 150/5 for 100 kVA DTC	358065	Set	4505	4564
661	68.04	With CT Ratio 400/5 for 250 kVA DTC	358070	Set	4654	4726
662	68.05	With CT Ratio 800/5 for 500 kVA DTC	358075	Set	4777	4858
	B.	SMC Metering Box				
663	68.06	With CT Ratio 50/5 for 15/25 kVA DTC	358056	Set	5187	5287
664	68.07	With CT Ratio 100/5 for 50/63 kVA DTC	358061	Set	4785	4867
665	68.08	With CT Ratio 150/5 for 100 kVA DTC	358066	Set	4505	4564
666	68.09	With CT Ratio 400/5 for 250 kVA DTC	358071	Set	4654	4726
667	68.10	With CT Ratio 800/5 for 500 kVA DTC	358077	Set	4777	4858

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
	69	COMPACT PRE - FABRICATED PACKAGED SUB - STATION as per IEC-60694/IS-3427				
		Compact Pre - Fabricated Packaged Sub - Station 11kV/433V consisting of 3 way SF6/VCB insulated compact RMU, oil cooled CRGO/Amorphous Core Star - 2 Rated (5 Star) Transformer and LT section with one MCCB/ACB as incoming and following outgoing MCCB feeders and with enclosure made of electronically galvanized steel sheet (min 2 mm Thickness) with powder coated finish, Copper busbar with LT Metering facility				
668	69.01	100 kVA Al. Wound Transformer, 250 Amps MCCB 50 kA 4 pole fixed type micro processor based for LT incomer and 2 Nos. 100 Amps MCCB 4 pole 36 kA TM Based for out going	276530	Set	New Item	1293000
669	69.02	250 kVA Al. Wound Transformer, 400 Amps MCCB 50 kA 4 pole fixed type micro processor based for LT incomer and 3 Nos. 250 Amps MCCB 4 pole 36 kA TM Based for out going	276540	Set	New Item	1655000
670	69.03	500 kVA Al. Wound Transformer, 800 Amps ACB 50 kA 4 pole fixed type micro processor based for LT incomer and 4 Nos. 250 Amps MCCB 4 pole 36 kA TM Based for out going	276550	Set	New Item	2176000
671	69.04	800 kVA Copper Wound Transformer, 1250 Amps ACB 50 kA 4 pole fixed type micro processor based for LT incomer and 6 Nos. 250 Amps MCCB 4 pole 36 kA TM Based for LT out going	276576	Set	New Item	2700000
672	69.05	1000 kVA Copper Wound Transformer, 1600 Amps ACB 50 kA 4 pole fixed type micro processor based for LT incomer and 2 Nos. 400 Amps MCCB + 4 No. 250 Amps MCCB 4 pole 36 kA TM Based for LT out going.	276599	Set	New Item	3327000
673	69.06	800 kVA, Copper Wound Transformer	321475	No	New item	1000000
674	69.07	1000 kVA, Copper Wound Transformer	321490	No	New item	1500000
675	69.08	LT ACB 800 Amps	310521	No	New item	211000
676	69.09	LT ACB 1250 Amps	310522	No	New item	240000
677	69.10	LT ACB 1600 Amps	310523	No	New item	300000
678	69.11	MCCB 250 Amps	358093	No	New item	25900

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
679	69.12	MCCB 400 Amps	358095	No	New item	33900
	70	Optical Fibre Cable (OFC) and its Accessories				
680	70.01	288 Fibre OFC	286000	KM	New Item	270214
681	70.02	96 Fibre OFC	286001	KM	New Item	101080
682	70.03	48 Fibre OFC	286002	KM	New Item	74775
683	70.04	HDPE/PLB Pipe 50/42 mm	286003	KM	New Item	82906
684	70.05	HDPE/PLB Pipe 40/33 mm	286004	KM	New Item	60790
685	70.06	Chambers at every 150 Mtr including pit	286005	No	New Item	6000
686	70.07	Joint for 288 Fibre	286006	No	New Item	13735
687	70.08	Joint for 96 Fibre	286007	No	New Item	5895
688	70.09	Joint for 48 Fibre	286008	No	New Item	3935
689	70.1	Blowing of cable above 24 Fibre	286009	KM	New Item	19220
690	70.11	End Plug for HDPE/PLB	286010	No	New Item	20
	71	SCRAP MATERIAL				
		Note: The rates are indicative and the respective zones are authorized to fix the floor price suitably as approved in the CSR 2012-13 meeting held on 09.11.2012 and confirmed vide proceedings CEE/T&P/KPTCL/6998-7013 Dt: 15.11.2012				Excluding GST
691	71.01	Released Copper Conductor	791210	Kg	574	431
692	71.02	Copper winding released from failed distribution transformer	731211	Kg	213	213
693	71.03	Copper Cable with Lead	791207	Kg	275	275
694	71.04	Aluminium Busbar/Wire Pieces	791010	Kg	137	169
695	71.05	Aluminium winding released from failed distribution transformer	791175	Kg	144	140
696	71.06	Released ACSR Conductor	791101	Kg	111	111
697	71.07	Released Aluminium cable	791531	Kg	114	71
		Iron Items				
698	71.08	SM Rail Pole, I Beam	790100	Kg	35	25
699	71.09	Ladder Pole, Tower Parts, Tubular Pole	790101	Kg	20	20

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes, F&I	CSR 2018-19 Ford Rates in Rs inclusive of Taxes, F&I
						Excluding GST
700	71.10	Cross Arm, Clamp etc	790104	Kg	22	27
701	71.11	Released Steel from RCC Pole (Skeleton Rods)	790103	Kg	22	20
702	71.12	Barbed/Ground wire/Zinc sheet etc.,	790102	Kg	22	20
703	71.13	Transformer Empty Tank of different capacity	790300	Kg	19	20
704	71.14	Scrap GOS with Insulator	790401	Kg	28	25
705	71.15	Broken Steel Furniture	790402	Kg	29	29
706	71.16	Brass	791300	Kg	195	195
707	71.17	Baliga Pole	793510	Rmtr	80	80
708	71.18	Scrap Wooden Furniture	793501	Kg	18	18
709	71.19	Empty Barrel of 210 Ltr Capacity - Good	442120	No	504	504
710	71.20	Empty Barrel of 210 Ltr Capacity - Scrap	795030	No	315	320
711	71.21	Lead	791400	Kg	89	89
712	71.22	Released HT Metering Cubicle, Distribution Box, Feeder Piller Box etc.,	795240	Kg	20	21
713	71.23	Released Energy Meter	795910	Kg	83	76
714	71.24	Released CT & PT	795500	Kg	74	74
		Scrap Wooden Reel				
715	71.25	In good condition	793504	Kg	16	16
716	71.26	Empty Wooden Reel Deteriorated and with Iron Rod	793550	No	85	85
717	71.27	Scrap RMU with/without breaker (rusted & borken panel) MEI Make	795210	MT	47801	47801
718	71.28	Scrap Transformer Oil	795211	Ltr	New Item	29

Note : Different makes of transformers have different sizes of tanks, different weights of coil, Core etc., and hence floor prices for transformer auction may be fixed accordingly.

PART - 2

**Deleted Items in Schedule of Rate
for Standard Stock Materials Common SR 2018-19
(11KV System)**

**Deleted Items in Schedule of Rate for Standard
Stock Materials Common SR 2018-19 (11KV System)**

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
	1	Line Supports (POLES)				
1	1.01	PSCC Pole - 9 Mtr Long, 160 KG WL in Transverse Direction & 136 KG WL in Longitudinal Direction	200007	No	3535	Deleted
2	1.02	Guy less poles			Will be Intimated	Deleted
3	1.03	Strut pole made of released MS Rail pole or Tubular pole along with clamp fish plate, bolts & nuts	200514	No	2008	Deleted
4	1.04	11Mtrs Long pole made of I Beam (MS) section size 200x100mm 25.9 KG/mtr	200621	No	15657	Deleted
5	1.05	11Mtrs Long pole made of I Beam (MS) section size 175x85mm 19.5 KG/mtr	200610	No	10712	Deleted
	2	Cross Arms (MS & GI)				
6	2.01	2 Pin Cross Arm with pole clamp, bolt & nuts & washers for RCC Pole - MS	-	No	167	Deleted
7	2.02	2 Pin Cross Arm with pole clamp, bolt & nuts & washers for RCC Pole - GI			226	Deleted
8	2.03	2 Pin Cross Arm with pole clamp, bolt & nuts & washers for PSC Pole - MS	-	No	162	Deleted
9	2.04	2 Pin Cross Arm with pole clamp, bolt & nuts & washers for PSC Pole - GI			218	Deleted
10	2.05	4 Pin Cross Arm with pole clamp, bolt & nuts & washers for RCC Pole - MS	-	No	271	Deleted
11	2.06	4 Pin Cross Arm with pole clamp, bolt & nuts & washers for RCC Pole - GI			363	Deleted
12	2.07	4 Pin Cross Arm with pole clamp, bolt & nuts & washers for PSC Pole - MS	-	No	266	Deleted
13	2.08	4 Pin Cross Arm with pole clamp, bolt & nuts & washers for PSC Pole - GI			356	Deleted
14	2.09	11 kV Horizontal Cross Arm with single top support, clamp, Bolt & Nuts with washers for RCC Poles - MS	-	No	394	Deleted
15	2.10	11 kV Horizontal Cross Arm with single top support, clamp, Bolt & Nuts with washers for RCC Poles - GI			520	Deleted

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
16	2.11	11 kV Horizontal Cross Arm with single top support, clamp, Bolt & Nuts with washers for PSCC Poles - MS	-	No	389	Deleted
17	2.12	11 kV Horizontal Cross Arm with single top support, clamp, Bolt & Nuts with washers for PSCC Poles - GI			513	Deleted
18	2.13	Special 3 Pin Cross Arm, clamp and Bolt & Nuts for RCC Poles - MS	-	No	659	Deleted
19	2.14	Special 3 Pin Cross Arm, clamp and Bolt & Nuts for RCC Poles - GI			878	Deleted
20	2.15	Brace for LT 4pin X arm (600mm long) - MS	279082	No	193	Deleted
21	2.16	Brace for LT 4pin X arm (600mm long) - GI	280082	No	241	Deleted
22	2.17	Brace for 11 kV special 3pin X arm (900mm long) - MS	279083	No	268	Deleted
23	2.18	Brace for 11 kV special 3pin X arm (900mm long) - GI	280083	No	335	Deleted
	3	Clamps A Type (MS & GI)				
24	3.01	PCC Pole clamp type A for LT X arm - MS	279502	No	45	Deleted
25	3.02	PCC Pole clamp type A for LT X arm - GI	280502	No	60	Deleted
26	3.03	PCC Pole clamp type A for X arm upto 1M from pole top - MS	279522	No	45	Deleted
27	3.04	PCC Pole clamp type A for X arm upto 1M from pole top - GI	280522	No	60	Deleted
28	3.05	Clamps for fixing MV Lamp control box, fuse box/St light fixture on rail pole - MS	279550	No	55	Deleted
29	3.06	RCC pole type C clamp for GOS Operating Handle	279524	No	55	Deleted
	4	Insulators				
30	4.01	11kV, 5KN Composite/Polymeric Pin Insulator (20 m dia FRP Rod)	283007	No	164	Deleted
31	4.02	11kV Solid Core Insulator	283315	No	151	Deleted
32	4.03	11kV Post Insulator	283101	No	357	Deleted
	5	Accessories for composite insulator				
33	5.01	Cross Arm Strap (MS)	279030	No	71	Deleted
34	5.02	Strain Clamp up to Rabbit ACSR	285058	No	168	Deleted
35	5.03	Strain Clamp for Coyote ACSR	285066	No	364	Deleted

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
	6	Distribution Transformers - 3 Phase, 11kV/433V - Stacked Core with Oil				
		A. OPEN BUSHING TYPE				
36	6.01	15kVA, Copper Winding	321301	No	45842	Deleted
37	6.02	25kVA, Aluminum Wdg (Conventional)	321304	No	51804	Deleted
38	6.03	25kVA, Aluminum Wdg, BEE 3 Star Rated	321433	No	51684	Deleted
39	6.04	63kVA, Aluminum Wdg	321306	No	74697	Deleted
40	6.05	63kVA, Aluminum Wdg, BEE 3 Star Rated	321434	No	93810	Deleted
41	6.06	100kVA, Aluminum Wdg	321310	No	93160	Deleted
42	6.07	100kVA, Aluminium Wdg, BEE 3 Star Rated	321435	No	121776	Deleted
43	6.08	250kVA, Aluminum Wdg	321325	No	209434	Deleted
44	6.09	250kVA, BEE 3 Star Rated/Energy Efficient	321436	No	254285	Deleted
45	6.10	500kVA, Aluminum Wdg	321350	No	331758	Deleted
46	6.11	500kVA, BEE 3 star rated		No	Will be Intimated	Deleted
		B. CABLE ENTRY TYPE				
47	6.12	25kVA, Aluminum Wdg, BEE 3 Star Rated	321441	No	71959	Deleted
48	6.13	63kVA, Aluminum Wdg, BEE 3 Star Rated	321442	No	115233	Deleted
49	6.14	100kVA, Aluminium Wdg, BEE 3 Star Rated	321443	No	152630	Deleted
50	6.15	250kVA, Aluminum Wdg	321444	No	217102	Deleted
51	6.16	500kVA, Aluminum Wdg	321445	No	340419	Deleted
	7	Distribution Transformer - 3 Phase, 11kV/433V - Amorphous Core with Oil				
		A. OPEN BUSHING TYPE				
52	7.01	25kVA, BEE 3 Star Rated	321376	No	Will be Intimated	Deleted
53	7.02	63kVA, BEE 3 Star Rated	321377	No	Will be Intimated	Deleted
54	7.03	100kVA, BEE 3 Star Rated	321380	No	Will be Intimated	Deleted
55	7.04	250kVA, BEE 3 Star Rated	321381	No	Will be Intimated	Deleted
56	7.05	500kVA, BEE 3 Star Rated	321382	No	Will be Intimated	Deleted

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	B.	AMORPHOUS CORE - CABLE ENTRY TYPE				
57	7.06	25kVA, BEE 3 Star Rated	321390	No	Will be Intimated	Deleted
58	7.07	63kVA, BEE 3 Star Rated	321391	No	Will be Intimated	Deleted
59	7.08	100kVA, BEE 3 Star Rated	321392	No	Will be Intimated	Deleted
60	7.09	200kVA, BEE 3 Star Rated	321393	No	Will be Intimated	Deleted
61	7.10	500kVA, BEE 3 Star Rated	321394	No	Will be Intimated	Deleted
	8	Distribution Transformer Self Protected 11kV/433V, 3 Phase				
62	8.01	100 kVA	321365	No	121059	Deleted
63	8.02	250 kVA	321370	No	241188	Deleted
	9	DTs - Single Phase, 11kV/250V				
64	9.01	15kVA, Copper Wound with MCCB	321302	No	62890	Deleted
65	9.02	15kVA, Amorphous Core Copper Winding with MCCB	321303	No		Deleted
66	9.03	10kVA, Copper winding with MCCB	321300	No	44517	Deleted
	10	Lightning Arresters				
67	10.01	LA 9kV, 5kA, Metal Oxide	303200	No	686	Deleted
68	10.02	LA 9kV, 5kA, Polymeric Type	303205	No	1140	Deleted
	11	Double Pole TC Sets for erection of Transformers on RCC/PSCC 9 Mtrs Long Poles				
69	11.01	For 25/63kVA Transformer - MS	279110	Set	7615	Deleted
70	11.02	For 25/63kVA Transformer - GI	280110	Set	9673	Deleted
	12	SPMT Materials for erection of Transformers on RCC/PSCC 9 Mtrs Long Poles				
71	12.01	Single Pole Mounted Transformer kit for 100 kVA on 9 mtr RCC Poles - MS	279125	Set	6316	Deleted
72	12.02	Single Pole Mounted Transformer kit for 100 kVA on 9 mtr RCC Poles - GI	280125	Set	8033	Deleted

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	13	GOS				
73	13.01	11kV, 200Amps Single Break GOS (Modified for making footpath free)			Will be Intimated	Deleted
	14	LT Feeder Piller Box				
74	14.01	Low Voltage Link Box - 2 Way	300315	No	Will be Intimated	Deleted
75	14.02	Low Voltage Link Box - 4 Way	300316	No	Will be Intimated	Deleted
	15	Cast Iron Terminating Kit (Pothead) Suitable for 1.1kV Class LT UG Cables				
76	15.01	2.5 to 25 Sqmm	288168	Set	191	Deleted
77	15.02	35 to 95 Sqmm	288169	Set	298	Deleted
	16	11kV, 3 Core, XLPE HTUG Cable (FLAT Armoured), as per IS 7098 (Part -II) with Pressure Extruded PVC Inner Sheath				
78	16.01	95 Sqmm, (31 GI Strips - 4.0 x 0.8mm)	287340	KM	591925	Deleted
79	16.02	120 Sqmm, (33 GI Strips - 4.0 x 0.8mm)	287342	KM	751688	Deleted
80	16.03	240 Sqmm, (40 GI Strips - 4.0 x 0.8mm)	287345	KM	1120404	Deleted
81	16.04	400 Sqmm, (47 GI Strips - 4.0 x 0.8mm)	287350	KM	1687794	Deleted
	17	1.1kv, XLPE LTUG Cable				
82	17.01	25 sq mm 3.5 Core	287257	KM	138000	Deleted
83	17.02	95 sq mm 3.5 Core	287261	KM	371000	Deleted
84	17.03	150 sq mm 3.5 Core	287262	KM	548000	Deleted
85	17.04	185 sq mm 3.5 Core	287263	KM	680000	Deleted
86	17.05	240 sq mm 3.5 Core	287264	KM	849000	Deleted
	18	Conventional RMUs (VCB Type) with Copper Bus Bar, 350MVA, 630 Amps				
87	18.01	Single I/C Panel with DAS Specification	302484	Set	Will be Intimated	Deleted
88	18.02	6 Way RMU, 2OD + 4VL (One Incomer + Four Breakers + One Outgoing), 350MVA, 800Amps with Cu Busbar	302483	Set	2172221	Deleted
89	18.03	5 Way RMU, 2OD + 3VL (One Incomer + Three Breakers + One Outgoing), 350MVA, 800Amps with Cu Busbar	302310	Set	1811864	Deleted

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90	18.04	5 Way RMU, 2OD + 3VL (One Incomer + Three Breakers + One Outgoing), 350MVA, 800Amps with Al Busbar	302311	Set	Will be Intimated	Deleted
91	18.05	4 Way RMU, 2OD + 2VL (One Incomer + Two Breakers + One Outgoing)	302312	Set	1451508	Deleted
92	18.06	3 Way RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing)	302313	Set	1091151	Deleted
	19	Conventional RMUs OD				
93	19.01	One Breaker (VL) Panel with Al Busbar	302316	No	Will be Intimated	Deleted
94	19.02	3 Way RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing), 350MVA , 800Amps with Cu Busbar	302320	Set	Will be Intimated	Deleted
95	19.03	3 Way RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing), 350MVA , 800Amps with Al Busbar	302321	Set	Will be Intimated	Deleted
96	19.04	3 Way RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing), 250MVA , 400Amps, VCB Type with Cu Busbar	302325	Set	Will be Intimated	Deleted
97	19.05	3 Way RMU, 2OD + 1VL (One Incomer + One Breakers + One Outgoing), 250MVA , 400Amps, VCB Type with Al Busbar	302326	Set	Will be Intimated	Deleted
98	19.06	Retrofitting of MEI make oil switch type OD with VCB	302470	No	Will be Intimated	Deleted
	20	DAS Specification Compact RMU (VCB/SF6 Type) The DAS RMUs shall have the following in addition to the Standards: <ul style="list-style-type: none"> • DC motors, Numerical Relays, Multi-functional meters, fault passage indicator (FPI), Metering CTs, Protection CTs, Auxiliary transformers, Potential transformer, Batteries, Battery chargers (12V & 24V), AC power socket and light for illumination of Control panel. • Control cable from each panel shall be wired and terminated to suitable 24 pin connectors in the control panel. • Suitable space for fixing the Remote Terminal Unit (RTU) and Radio Modem in Control panel. • Suitable clamps for fixing Antenna Pipe 				

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99	20.01	6 Way RMU, 2 OD + 4 VL (One Incomer + Four Breakers + One Outgoing) 630A with Copper Bus Bar	1300000			Deleted
	21	Load Break Switches				
100	21.01	Load Break Switches Only Without Panel	506491	Unit	Will be Intimated	Deleted
101	21.02	3 Way Load Break Switch	506493	Unit	Will be Intimated	Deleted
	22	Covered Conductor				
102	22.01	11kV 70sq mm Covered Conductor		KM	Will be Intimated	Deleted
	23	Measuring Equipments				
103	23.01	HT Electronic Tri - Vector Meter 5A, Class -0.2 accuracy with ABT features	357500	No	10679	Deleted
	24	11KV CTs (Secondary - 1A) for 3 phase - 4 wire Metering, Burden: 2.5VA Accuracy Class 0.2				
104	24.01	CT - 11kV, 2.5/5A, Accuracy Class 0.5	336292	No	3664	Deleted
105	24.02	CT - 11kV, 5/5A, Accuracy Class 0.5	336294	No	3664	Deleted
106	24.03	CT - 11kV, 7.5/5A, Accuracy Class 0.5	336296	No	3664	Deleted
107	24.04	CT - 11kV, 10/5A, Accuracy Class 0.5	336302	No	3664	Deleted
108	24.05	CT - 11kV, 12.5/5A, Accuracy Class 0.5	336303	No	3664	Deleted
109	24.06	CT - 11kV, 15/5A, Accuracy Class 0.5	336304	No	3664	Deleted
110	24.07	CT - 11kV, 20/5A, Accuracy Class 0.5	336306	No	3893	Deleted
111	24.08	CT - 11kV, 25/5A, Accuracy Class 0.5	336308	No	3893	Deleted
112	24.09	CT - 11kV, 30/5A, Accuracy Class 0.5	336310	No	3893	Deleted
113	24.10	CT - 11kV, 40/5A, Accuracy Class 0.5	336341	No	3893	Deleted
114	24.11	CT - 11kV, 50/5A, Accuracy Class 0.5	336309	No	3893	Deleted
115	24.12	CT - 11kV, 60/5A, Accuracy Class 0.5	336342	No	3893	Deleted
116	24.13	CT - 11kV, 75/5A, Accuracy Class 0.5	336315	No	4122	Deleted
117	24.14	CT - 11kV, 100/5A, Accuracy Class 0.5	336321	No	4122	Deleted
118	24.15	CT - 11kV, 150/5A, Accuracy Class 0.5	336375	No	4122	Deleted
119	24.16	CT - 11kV, 200/5A, Accuracy Class 0.5	336325	No	4122	Deleted
120	24.17	CT - 11kV, 400/5A, Accuracy Class 0.5	336335	No	4351	Deleted

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	25	HT Metering Equipments				
121	25.01	HT Metering cubicle, 11kV Class, all single ratio CTs including ETV Meter (2CT 2PT) Without Load Break Switch	358350	No	58481	Deleted
122	25.02	With Load Break Switch	358320	No	114049	Deleted
123	25.03	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)	358355	No	124204	Deleted
124	25.04	0.2 S Class ETV Meter with ABT Feature & DLMS Protocol with ToD	357518	No	18321	Deleted
	26	Heavy Duty Copper Terminals				
125	26.01	25 Sqmm Copper Terminals	288507	No	18	Deleted
126	26.02	35 Sqmm Copper Terminals	288508	No	19	Deleted
127	26.03	50 Sqmm Copper Terminals	288509	No	27	Deleted
128	26.04	70 Sqmm Copper Terminals	288510	No	45	Deleted
129	26.05	95 Sqmm Copper Terminals	288511	No	65	Deleted
130	26.06	120 Sqmm Copper Terminals	288512	No	71	Deleted
131	26.07	150 Sqmm Copper Terminals	288513	No	93	Deleted
132	26.08	185 Sqmm Copper Terminals	288514	No	129	Deleted
133	26.09	225 Sqmm Copper Terminals	288515	No	167	Deleted
134	26.10	240 Sqmm Copper Terminals	288516	No	169	Deleted
135	26.11	300 Sqmm Copper Terminals	288517	No	244	Deleted
136	26.12	400 Sqmm Copper Terminals	288518	No	409	Deleted
	27	TOOLS AND PLANT				
137	27.01	Grounding Sticks/Rods (Earthing Rods)	427210	Set	1913	Deleted
138	27.02	Hydrometer syring suitable for vent holes	422811	No	168	Deleted
139	27.03	Rain Coats with Hoods	427300	No	437	Deleted
140	27.04	Safety Helmets	427310	No	125	Deleted
141	27.05	Leather Shoes	407304	Pair	Will be Intimated	Deleted
142	27.06	Socks	407305	Pair	Will be Intimated	Deleted

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143	27.07	Waist Leather Belt	407306	No	Will be Intimated	Deleted
144	27.08	Search Lights (Hand Held & Fixable to Vehicle)	427440	No	Will be Intimated	Deleted
145	27.09	Helmet with Miner Light	427312	No	Will be Intimated	Deleted
146	27.10	Foldable Insulated Fibre Ladder	427076	No	Will be Intimated	Deleted
147	27.11	Flurocent Light Fitting	446024	No	309	Deleted
148	27.12	Flurocent tube	611530	No	49	Deleted
149	27.13	T-5 Tubelight fitting Complete 28 watts with tube - 4 feet	446040	No	534	Deleted
150	27.14	Flurocent Lamp for above	446037	No	124	Deleted
151	27.15	T-5 Tubelight Fitting Complete 14 watts with tube - 2 feet	446038	No	516	Deleted
152	27.16	Floracent Lamp for above	611730	No	109	Deleted
153	27.17	Sodium Vapour Lamp (250W)	612645	No	789	Deleted
154	27.18	GI Bracket for Flurocent Tube	612240	No	364	Deleted
155	27.19	Sodium Vapour lamp Ignitors	278832/ 278811	No	273	Deleted
	28	Compact Fluorescent Lamps				
156	28.01	5 Watts	611545	No	121	Deleted
157	28.02	8 Watts	611548	No	126	Deleted
158	28.03	11 Watts	611551	No	146	Deleted
159	28.04	14 Watts	611554	No	141	Deleted
160	28.05	18 Watts	611558	No	180	Deleted
161	28.06	23 Watts	611563	No	204	Deleted
	29	LT Capacitor 3 Ph Housed in a encloser with necessary fuses, wiring, mounting arrangement as per tech Spec				
162	29.01	3 kVAr	333103	Set	811	Deleted
163	29.02	9 kVAr	333109	Set	1265	Deleted
164	29.03	18 kVAr	333118	Set	2162	Deleted
165	29.04	27 kVAr	333127	Set	3308	Deleted

Sl. No.	Item No.	Name of the Material	Material Code	UoM	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
166	29.05	54 kVAr	333154	Set	5685	Deleted
	30	Installing RLMU for the Existing Distribution Transformer Center				
167	30.01	Providing RLM Unit with necessary wiring for housing PLC, MCCB, MCB, Energy Meter, CTs, Cotactors etc., as per specification in Metallic Enclosure	358086	No	9849	Deleted
168	30.02	Programmable Logic Controllers with communication ports	358098	Set	17716	Deleted
169	30.02	GSM Modem	447662	No	7001	Deleted
		MCCB				
170	30.03	For 25 kVA, 40/60 Amps	358088	No	1360	Deleted
171	30.04	For 63 kVA, 100 Amps	358090	No	1374	Deleted
172	30.05	For 100 kVA, 160 Amps	358092	No	1557	Deleted
173	30.06	For 100 kVA, 250 Amps	358093	No	5026	Deleted
174	30.07	For 250 kVA, 400 Amps	358095	No	8933	Deleted
175	30.08	For 500 kVA, 630 Amps	358096	No	15069	Deleted
176	30.09	MCB 6 Amps	358094	No	192	Deleted
		Contactors				
177	30.10	For 25 kVA, 40 Amps	352440	No	1841	Deleted
178	30.11	For 63 kVA, 100 Amps	352460	No	3005	Deleted
179	30.12	For 100 kVA, 160 Amps	352480	No	5290	Deleted
180	30.13	For 100 kVA, 225 Amps	352485	No	10434	Deleted
	31	Compact Pre - fabricated Packaged Sub - station 11kV/433 V				
		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				
181	31.01	With 100 kVA Oil Cooled Transformer	276530	No	Will be Intimated	Deleted
182	31.02	With 250 kVA Oil Cooled Transformer	276540	No	Will be Intimated	Deleted

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183	31.03	With 500 kVA Oil Cooled Transformer	276550	No	Will be Intimated	Deleted
184	31.04	With 750 kVA Oil Cooled Transformer	276575	No	Will be Intimated	Deleted
185	31.05	With 990 kVA Oil Cooled Transformer	276590	No	Will be Intimated	Deleted
186	31.06	With 100 kVA Dry Type Transformer	276531	No	Will be Intimated	Deleted
187	31.07	With 250 kVA Dry Type Transformer	276541	No	Will be Intimated	Deleted
188	31.08	With 500 kVA Dry Type Transformer	276560	No	Will be Intimated	Deleted
189	31.09	With 750 kVA Dry Type Transformer	276585	No	Will be Intimated	Deleted
190	31.10	With 990 kVA Dry Type Transformer	276599	No	Will be Intimated	Deleted
		Breakup prices of Copper wound Oil Cooled Distribution Transformer				
191	31.11	500 kVA	321450	No	Will be Intimated	Deleted
192	31.12	750 kVA	321475	No	Will be Intimated	Deleted
193	31.13	990 kVA	321490	No	Will be Intimated	Deleted
194	31.14	LT ACB 2000A	310520	No	Will be Intimated	Deleted
195	31.15	MCCB 400A	358097	No	Will be Intimated	Deleted
	32	SCRAP MATERIALS				
		Note: The rates are indicative and the respective zones are authorized to fix the floor price suitably 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				Excluding GST
196	32.01	Copper Conductor	791200	KG	574	Deleted
197	32.02	Copper Ingots	791205	KG	396	Deleted
198	32.03	Aluminium wire in pieces	791100	KG	97	Deleted

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199	32.04	ACSR Conductor in Rings/Coils		KG	111	Deleted
200	32.05	Scrap HT/LT Aluminium Winding		KG	178	Deleted
201	32.06	Scrap Al Released From UG Cable	791530	KG	97	Deleted
		Iron Items			0	
202	32.07	Energy Meters (Electro Mech) 3 Phase	795920	KG	83	Deleted
203	32.08	Single/3 Phase Electronic Meters	795925	KG	83	Deleted
		Scrap Distribution Transformer of Aluminium Winding (without oil)				
204	32.09	15 kVA	795102	Each	5268	Deleted
205	32.10	25 kVA	795104	Each	6486	Deleted
206	32.11	63 kVA	795106	Each	9613	Deleted
207	32.12	100 kVA	795110	Each	17208	Deleted
208	32.13	200 kVA	795120	Each	30454	Deleted
209	32.14	250 kVA	795125	Each	41554	Deleted
210	32.15	300 kVA	795130	Each	33499	Deleted
211	32.16	500 kVA	795150	Each	40503	Deleted
		Scrap Distribution Transformer of Copper Winding (without oil)				
212	32.17	15 kVA	795101	Each	10786	Deleted
213	32.18	25 kVA	795164	Each	28866	Deleted
214	32.19	50 kVA	795165	Each	27825	Deleted
215	32.20	63 kVA	795166	Each	38759	Deleted
216	32.21	100 kVA	795170	Each	50279	Deleted
217	32.22	200 kVA	795180	Each	84168	Deleted
218	32.23	250 kVA	795182	Each	94130	Deleted
219	32.24	300 kVA	795190	Each	101624	Deleted
220	32.25	500 kVA	795195	Each	168761	Deleted
221	32.26	5 MVA	795198	Each	1013280	Deleted
		Scrap CSP 11kV Distribution Transformer				
222	32.27	15 kVA	795157	Each	10782	Deleted
223	32.28	25 kVA	795158	Each	6644	Deleted
224	32.29	63 kVA	795160	Each	11074	Deleted

BILL OF MATERIALS - 1 A

**For 11 kV DP Structure Kit for RCC Pole 9 Mtr Long, 145 kG WL
(Dwg. No. BESCOM/GM/QS&S/35 Dtd 24.11.2018)**

Sl No	Part No	Particulars MS Angle/Flat in mm	Dimension in mm	Length in mm	Qty	Wt/ Mtr in Kgs	Total Wt / Set in kgs	16 mm Hexagonal Bolt & Nut Full Thread	Qty	25 mm Class 'A' GI Pipe in Length	Clamps made out of 50x6 mm MS Flat
1	2	3	4	5	6	7	8	9	10	11	12
1		HT power x-arm	65x65x6	2340	2	5.8	27.14	175 mm Long	6	120 mm 2 Nos	
								50mm Long	6	60mm 3 Nos	
2		Brace X-arm (Horizontal member)	50x50x6	1700	2	4.5	15.30	65 mm Long	8		1. Type-A 2 Nos. 2.21 kg/set 2. Type-B 2 Nos. 2.69 kg/set
3		Brace X-arm (cross member)	50x50x6	2800	2	4.5	25.20	50 mm long	5		
4		Fish Plate	50x8	375	3	3.1	3.49				6 mm thick washer 1No.
Total Weight in Kgs							71.13	6			4.9
Total Weight of the DP Structure in Kgs							76.03				
Total Weight of the Bolt & Nuts Full Thread in Kgs							6.00				

- Note :**
1. Holes are of 18 mm Dia for 16 mm bolts & 22 mm Dia for 20mm Dia Pin Insulators.
 2. All Slotted holes are of 18x35 mm long.
 3. The weights given are for raw materials as per ISI structural steel hand book.

BILL OF MATERIALS - 1 B

For 11 kV DP structure Kit for PSCC Pole 9 Mtr Long, 300 Kg WL
(Dwg. No. BESCOM/GM/QS&S/63 Dtd 24.11.2018)

Sl No	Part No	Particulars MS Angle / Flat in mm	Dimension in mm	Length in mm	Qty	Wt/ Mtr in Kgs	Total Wt/ Set in kgs	16 mm Hexagonal Bolt & Nut Full Thread	Qty	25 mm Class 'A' GI Pipe in Length	Clamps made out of 50x6 mm MS Flat
1	2	3	4	5	6	7	8	9	10	11	12
1		HT power x-arm	65x65x6	2340	2	5.8	27.14	235 mm Long	6	120 mm 2 Nos	
								50mm Long	6	60mm 3 Nos	
2		Brace X-arm	50x50x6	1700	2	4.5	15.30	65 mm Long	8		1. 50x6mm, 710 mm Long 2 Nos 1.7 kg/set 2. 50x6mm 760mm Long 2 Nos 1.82 kg/set
3		Brace X-arm (cross member)	50x50x6	2800	2	4.5	25.20	50 mm long	5		
4		Fish Plate	50x8	375	3	3.1	3.49				6 mm thick washer 1No.
Total Weight in Kgs							71.13	6			7.04
Total Weight of the DP Structure in Kgs							78.17				
Total Weight of the Bolt & Nuts Full Thread in Kgs							6.00				

Note :

1. Holes are of 18 mm Dia for 16 mm bolts & 22 mm Dia for 20mm Dia Pin Insulators.
2. All Slotted 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 A

**DPTC Structure materials suitable for mounting 250 kVA 4/5 Star Rated Transformers
by using PSCC Pole 9 Mtr Long, 300 kG WL (Dwg No. BESCO/GM/QS&S/65/REV-002 Dtd 24.11.2018)**

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
	Transformer Seating Kit					
1	Transformer Seating Channel	2	100x50	2700	9.56	51.62
2	Transformer Seating Channel Supporting Clamping Channel	4	75x40	495	7.14	14.14
3	Transformer Belting Angle	2	45x45x5	2700	3.4	18.36
4	Transformer Belting Angle Supporting Side Angle	2	45x45x5	1000	3.4	6.80
5	Transformer Clamping Angle	2	50x50x6	495	4.5	4.46
6	Back Clamp for Transformer Belting Angle	2	50x6	557	2.4	2.67
7	Fish Plate	3	50x6	320	2.4	2.30
8	Dummy Angle Support for Transformer Mounting Channel	4	50x50x6	1088	4.5	19.58
9	Clamp for Transformer Seating Channel Supporting Angle	4	50x6	479	2.4	4.60
	LA, HG Fuse Unit and Supporting Materials					
10	HT Power Cross Arm	2	65x65x6	2700	5.8	31.32
11	HG Fuse Mounting Angle	1	45x45x5	2700	3.4	9.18
	Welded Angle	2	45x45x5	70	3.4	0.48
12	Back Clamp for HG Fuse Unit	2	50x6	656	2.4	3.15
13	Plastic Spacer supporting Fish Plate	2	50x6	700	2.4	3.36
14	Back Clamp for Top Plastic Spacer Fish Plate	2	50x6	628	2.4	3.01
15	Back Clamp for Bottom Plastic Spacer Fish Plate	2	50x6	736	2.4	3.53
16	Back Clamp for Top & Bottom Plastic Spacer Fish Plate	2	50x6	320	2.4	1.54
17	Stay Set Clamp Type-A	2	50x6	395	2.4	1.90
18	Stay Set Clamp Type-B	2	50x6	390	2.4	1.87
19	LA Mounting Angle	1	50x50x6	2360	4.5	10.62
	Welded Angle	2	50x6	70	4.5	0.63
20	Horizontal Angle for HG Fuse Fixing	2	45x45x5	925	3.4	6.29
21	Back Clamp for HG Fuse Mounting Angle Supporting Angle	2	50x6	520	2.4	2.50

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
22	Brace Angle for HG Fuse Mounting Angle	2	45x45x5	1176	3.4	8.00
23	Back Clamp for HG Fuse Brace Angle Supporting Angle	2	50x6	539	2.4	2.59
24	Pin Insulator Support	3	50x6	382	2.4	2.75
	Welded Angle	3	50x6	52	2.4	0.37
11kV H Frame Set details						
25	Angle Type A1& A2	2	45x45x5	2350	3.4	15.98
	Welded Angle	10	45x45x5	60	3.4	2.04
	Angle Type A3	2	45x45x5	345	3.4	2.35
26	Horizontal Angle for H-Frame	2	65x65x6	1200	5.8	13.92
27	Brace Angle for H-Frame Fixing	2	45x45x5	1330	3.4	9.04
28	GOS Operating Pipe Supporting Angle	1	45x45x5	1200	3.4	4.08
29	Back Clamp For H-Frame Brace Angle Supporting Angle	4	50x6	514	2.4	4.93
30	Back Clamp For Horizontal Angle For H-Frame Fixing	2	50x6	490	2.4	2.35
31	Back Clamp For GOS Operating Pipe Supporting Angle	1	50x6	580	2.4	1.39
32	H-Frame Brace Angle Supporting Angle	2	45x45x5	406	3.4	2.76
TOTAL a) Structure Steel						276.47
MS Bolts & Nuts Full Thread Including H Frame						
33	For Transformer & Kit	16	M16x40mm		0.166	2.66
		8	M16x140mm		0.313	2.50
		2	M16x100mm		0.249	0.50
		26	M16x65mm		0.195	5.07
		4	M16x230mm		0.456	1.82
		6	M16x80mm		0.217	1.30
34	For H-Frame	2	M16x40mm		0.166	0.33
		4	M16x90mm		0.233	0.93
		10	M16x65mm		0.195	1.95
TOTAL b) Bolt and Nut Full Thread						17.07

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

BILL OF MATERIALS - 2 B

**DPTC Structure materials suitable for mounting 250 kVA 4/5 Star Rated Transformers
by using RCC Pole 9 Mtr Long, 145 kG WL**

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
	Transformer Seating Kit					
1	Transformer Seating Channel	2	100x50	2700	9.56	51.62
2	Transformer Seating Channel Supporting Clamping Channel	4	75x40	495	7.14	14.14
3	Transformer Belting Angle	2	45x45x5	2700	3.4	18.36
4	Transformer Belting Angle Supporting Side Angle	2	45x45x5	1000	3.4	6.80
5	Transformer Clamping Angle	2	50x50x6	495	4.5	4.46
6	Back Clamp for Transformer Belting Angle	2	50x6	557	2.4	2.67
7	Fish Plate	3	50x6	320	2.4	2.30
8	Dummy Angle Support for Transformer Mounting Channel	4	50x50x6	1088	4.5	19.58
9	Clamp for Transformer Seating Channel Supporting Angle	4	50x6	560	2.4	5.38
	LA, HG Fuse Unit and Supporting Materials					
10	HT Power Cross Arm	2	65x65x6	2700	5.8	31.32
11	HG Fuse Mounting Angle	1	45x45x5	2700	3.4	9.18
	Welded Angle	2	45x45x5	70	3.4	0.48
12	Back Clamp for HG Fuse Unit	2	50x6	460	2.4	2.21
13	Plastic Spacer supporting Fish Plate	2	50x6	700	2.4	3.36
14	Back Clamp for Top Plastic Spacer Fish Plate	2	50x6	480	2.4	2.30
15	Back Clamp for Bottom Plastic Spacer Fish Plate	2	50x6	480	2.4	2.30
16	Back Clamp for Top & Bottom Plastic Spacer Fish Plate	2	50x6	480	2.4	2.30
17	Stay Set Clamp Type-A	2	50x6	460	2.4	2.21
18	Stay Set Clamp Type-B	2	50x6	460	2.4	2.21
19	LA Mounting Angle	1	50x50x6	2360	4.5	10.62
	Welded Angle	2	50x6	70	4.5	0.63
20	Horizontal Angle for HG Fuse Fixing	2	45x45x5	925	3.4	6.29
21	Back Clamp for HG Fuse Mounting Angle Supporting Angle	2	50x6	460	2.4	2.21

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
22	Brace Angle for HG Fuse Mounting Angle	2	45x45x5	1176	3.4	8.00
23	Back Clamp for HG Fuse Brace Angle Supporting Angle	2	50x6	460	2.4	2.21
24	Pin Insulator Support	3	50x6	382	2.4	2.75
	Welded Angle	3	50x6	52	2.4	0.37
	11kV H Frame Set details					
25	Angle Type A1& A2	2	45x45x5	2350	3.4	15.98
	Welded Angle	10	45x45x5	60	3.4	2.04
	Angle Type A3	2	45x45x5	345	3.4	2.35
26	Horizontal Angle for H-Frame	2	65x65x6	1200	5.8	13.92
27	Brace Angle for H-Frame Fixing	2	45x45x5	1330	3.4	9.04
28	GOS Operating Pipe Supporting Angle	1	45x45x5	1200	3.4	4.08
29	Back Clamp For H-Frame Brace Angle Supporting Angle	4	50x6	460	2.4	4.42
30	Back Clamp For Horizontal Angle For H-Frame Fixing	2	50x6	460	2.4	2.21
31	Back Clamp For GOS Operating Pipe Supporting Angle	1	50x6	560	2.4	1.34
32	H-Frame Brace Angle Supporting Angle	2	45x45x5	406	3.4	2.76
	TOTAL a) Structure Steel					274.40
	MS Bolts & Nuts Full Thread Including H Frame					
33	For Transformer & Kit	16	M16x40mm		0.166	2.66
		8	M16x140mm		0.313	2.50
		2	M16x100mm		0.249	0.50
		26	M16x65mm		0.195	5.07
		4	M16x230mm		0.456	1.82
		6	M16x80mm		0.217	1.30
34	For H-Frame	2	M16x40mm		0.166	0.33
		4	M16x90mm		0.233	0.93
		10	M16x65mm		0.195	1.95
TOTAL b) Bolt and Nut Full Thread						17.07

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

BILL OF MATERIALS - 3

3 Pole Structure for Transformer

Sl. No.	Particulars	Qty in Nos	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	3	50x50x6	4.5	1280	17.28
		2	50x6	2.4	463	2.22
2	GOS Support Cross arm & Clamp for fixing on to the pole	2	65x65x6	5.8	2000	23.20
		2	50x6	2.4	463	2.22
3	GOS Frame	4	45x45x5	3.4	2350	31.96
		4	45x45x5	3.4	310	4.22
		8	45x45x5	3.4	70	1.90
		12	45x45x5	3.4	60	2.45
4	GOS Supporting Cross arm and Clamp	4	45x45x5	3.4	1360	18.50
		2	50x6	2.4	498	2.39
		2	50x6	2.4	285	1.37
5	a) GOS Handle Supporting Cross arm Brace and Clamps	1	65x65x6	5.8	2000	11.60
		2	50x6	2.4	423	2.03
	b) GOS Handle Supporting Cross arm brace and Clamps	2	45x45x5	3.4	1000	6.80
		1	50x6	2.4	50	0.12
		1	50x6	2.4	320	0.77
6	Brace Cross Member and Clamps	2	50x50x6	4.5	2700	24.30
		2	50x6	2.4	493	2.37
TOTAL a) Structure Steel						155.692
MS Bolts & Nuts Full Thread						
TOTAL b) Bolt and Nut Full Thread						0.00

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

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 Traanformer)

Sl. No.	Particulars	Qty	MS Angle/ Flat	Wt/Mtr in Kgs	Length/ Piece in mtrxNo	Total Wt/Set in kgs	16mm dia Hexagonal 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 A

**H FRAME for providing new GOS for DP Set/DPTC using PSCC Pole 9 Mtr Long, 300 kG WL
(Dwg No. BESCO/GM/QS&S/61 Dtd 24.11.2018)**

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
	11kV H Frame Set details					
1	Angle Type A1&A2	2	45x45x5	2350	3.4	15.98
	Welded Angle	10	45x45x5	60	3.4	2.04
	Angle Type A3	2	45x45x5	345	3.4	2.35
2	Horizontal Angle for H-Frame	2	65x65x6	1200	5.8	13.92
3	Brace Angle for H-Frame Fixing	2	45x45x5	1330	3.4	9.04
4	GOS Operating Pipe Supporting Angle	1	45x45x5	1200	3.4	4.08
5	Back Clamp For H-Frame Brace Angle Supporting Angle	4	50x6	514	2.4	4.93
6	Back Clamp For Horizontal Angle For H-Frame Fixing	2	50x6	490	2.4	2.35
7	Back Clamp For GOS Operating Pipe Supporting Angle	1	50x6	580	2.4	1.39
8	H-Frame Brace Angle Supporting Angle	2	45x45x5	406	3.4	2.76
	TOTAL a) Structure Steel					58.85
	MS Bolts & Nuts Full Thread Including H Frame					
9	For H-Frame	2	M16x40mm		0.166	0.33
		4	M16x90mm		0.233	0.93
		10	M16x65mm		0.195	1.95
	TOTAL b) Bolt and Nut Full Thread					3.21

Note :

- 1 The hole have to be provided at locations as mentioned in the drawings.
- 2 All holes are in mm and slot holes 18x35, 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 - 5 B

H FRAME for providing new GOS for DP Set/DPTC using RCC Pole 9 Mtr Long, 145 kG WL

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
	11kV H Frame Set details					
1	Angle Type A1&A2	2	45x45x5	2350	3.4	15.98
	Welded Angle	10	45x45x5	60	3.4	2.04
	Angle Type A3	2	45x45x5	345	3.4	2.35
2	Horizontal Angle for H-Frame	2	65x65x6	1200	5.8	13.92
3	Brace Angle for H-Frame Fixing	2	45x45x5	1330	3.4	9.04
4	GOS Operating Pipe Supporting Angle	1	45x45x5	1200	3.4	4.08
5	Back Clamp For H-Frame Brace Angle Supporting Angle	4	50x6	460	2.4	4.42
6	Back Clamp For Horizontal Angle For H-Frame Fixing	2	50x6	460	2.4	2.21
7	Back Clamp For GOS Operating Pipe Supporting Angle	1	50x6	560	2.4	1.34
8	H-Frame Brace Angle Supporting Angle	2	45x45x5	406	3.4	2.76
	TOTAL a) Structure Steel					58.14
	MS Bolts & Nuts Full Thread Including H Frame					
9	For H-Frame	2	M16x40mm		0.166	0.33
		4	M16x90mm		0.233	0.93
		10	M16x65mm		0.195	1.95
TOTAL b) Bolt and Nut Full Thread						3.21

Note :

- 1 The hole have to be provided at locations as mentioned in the drawings.
- 2 All holes are in mm and slot holes 18x35, 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 A

**DPTC Structure materials suitable for mounting 25/63/100 kVA 4/5 Star Rated Transformers
by using PSCC Pole 9 Mtr Long, 300 kG WL (Dwg No. BESCOM/GM/QS&S/62 Dtd 24.11.2018)**

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
	Transformer Seating Kit					
1	Transformer Seating Channel	2	100x50	2700	9.56	51.62
2	Transformer Seating Channel Supporting Clamping Channel	4	75x40	495	7.14	14.14
3	Transformer Belting Angle	2	45x45x5	2700	3.4	18.36
4	Transformer Belting Angle Supporting Side Angle	2	45x45x5	446	3.4	3.03
5	Transformer Clamping Angle	2	50x50x6	495	4.5	4.46
6	Back Clamp for Transformer Belting Angle	2	50x6	550	2.4	2.64
7	Fish Plate	3	50x6	320	2.4	2.30
	LA, HG Fuse Unit and Supporting Materials					
8	HT Power Cross Arm	2	65x65x6	2700	5.8	31.32
9	HG Fuse Mounting Angle	1	45x45x5	2700	3.4	9.18
	Welded Angle	2	45x45x5	70	3.4	0.48
10	Back Clamp for HG Fuse Unit	2	50x6	656	2.4	3.15
11	Plastic Spacer supporting Fish Plate	2	50x6	700	2.4	3.36
12	Back Clamp for Top Plastic Spacer Fish Plate	2	50x6	628	2.4	3.01
13	Back Clamp for Bottom Plastic Spacer Fish Plate	2	50x6	736	2.4	3.53
14	Back Clamp for Top & Bottom Plastic Spacer Fish Plate	2	50x6	320	2.4	1.54
15	Stay Set Clamp Type-A	2	50x6	395	2.4	1.90
16	Stay Set Clamp Type-B	2	50x6	390	2.4	1.87
	11kV H Frame Set details					
17	Angle Type A1&A2	2	45x45x5	2350	3.4	15.98
	Welded Angle	10	45x45x5	60	3.4	2.04
	Angle Type A3	2	45x45x5	345	3.4	2.35
18	Horizontal Angle for H-Frame	2	65x65x6	1200	5.8	13.92

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
19	Brace Angle for H-Frame Fixing	2	45x45x5	1330	3.4	9.04
20	GOS Operating Pipe Supporting Angle	1	45x45x5	1200	3.4	4.08
21	Back Clamp For H-Frame Brace Angle Supporting Angle	4	50x6	514	2.4	4.93
22	Back Clamp For Horizontal Angle For H-Frame Fixing	2	50x6	490	2.4	2.35
23	Back Clamp For GOS Operating Pipe Supporting Angle	1	50x6	580	2.4	1.39
24	H-Frame Brace Angle Supporting Angle	2	45x45x5	406	3.4	2.76
	TOTAL a) Structure Steel					214.74
	MS Bolts & Nuts Full Thread Including H Frame					
25	For Transformer & Kit	7	M16x40mm		0.166	1.16
		8	M16x140mm		0.313	2.50
		24	M16x65mm		0.195	4.68
		4	M16x230mm		0.456	1.82
26	For H-Frame	2	M16x40mm		0.166	0.33
		4	M16x90mm		0.233	0.93
		10	M16x65mm		0.195	1.95
TOTAL b) Bolt and Nut Full Thread						13.38

Note :

- 1) The weight indicated is before punching of the holes.
- 2) Tolerance of $\pm 4\%$ is allowed on the weight.

BILL OF MATERIALS - 6 B

DPTC Structure materials suitable for mounting 25/63/100 kVA 4/5 Star Rated Transformers by using RCC Pole 9 Mtr Long, 145kG WL

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
	Transformer Seating Kit					
1	Transformer Seating Channel	2	100x50	2700	9.56	51.62
2	Transformer Seating Channel Supporting Clamping Channel	4	75x40	495	7.14	14.14
3	Transformer Belting Angle	2	45x45x5	2700	3.4	18.36
4	Transformer Belting Angle Supporting Side Angle	2	45x45x5	446	3.4	3.03
5	Transformer Clamping Angle	2	50x50x6	495	4.5	4.46
6	Back Clamp for Transformer Belting Angle	2	50x6	560	2.4	2.69
7	Fish Plate	3	50x6	320	2.4	2.30
	LA, HG Fuse Unit and Supporting Materials					
8	HT Power Cross Arm	2	65x65x6	2700	5.8	31.32
9	HG Fuse Mounting Angle	1	45x45x5	2700	3.4	9.18
	Welded Angle	2	45x45x5	70	3.4	0.48
10	Back Clamp for HG Fuse Unit	2	50x6	460	2.4	2.21
11	Plastic Spacer supporting Fish Plate	2	50x6	700	2.4	3.36
12	Back Clamp for Top Plastic Spacer Fish Plate	2	50x6	480	2.4	2.30
13	Back Clamp for Bottom Plastic Spacer Fish Plate	2	50x6	480	2.4	2.30
14	Back Clamp for Top & Bottom Plastic Spacer Fish Plate	2	50x6	480	2.4	2.30
15	Stay Set Clamp Type-A	2	50x6	460	2.4	2.21
16	Stay Set Clamp Type-B	2	50x6	460	2.4	2.21
	11kV H Frame Set details					
17	Angle Type A1&A2	2	45x45x5	2350	3.4	15.98
	Welded Angle	10	45x45x5	60	3.4	2.04
	Angle Type A3	2	45x45x5	345	3.4	2.35
18	Horizontal Angle for H-Frame	2	65x65x6	1200	5.8	13.92

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
19	Brace Angle for H-Frame Fixing	2	45x45x5	1330	3.4	9.04
20	GOS Operating Pipe Supporting Angle	1	45x45x5	1200	3.4	4.08
21	Back Clamp For H-Frame Brace Angle Supporting Angle	4	50x6	460	2.4	4.42
22	Back Clamp For Horizontal Angle For H-Frame Fixing	2	50x6	460	2.4	2.21
23	Back Clamp For GOS Operating Pipe Supporting Angle	1	50x6	560	2.4	1.34
24	H-Frame Brace Angle Supporting Angle	2	45x45x5	406	3.4	2.76
	TOTAL a) Structure Steel					212.61
	MS Bolts & Nuts Full Thread Including H Frame					
25	For Transformer & Kit	7	M16x40mm		0.166	1.16
		8	M16x140mm		0.313	2.50
		24	M16x65mm		0.195	4.68
		4	M16x230mm		0.456	1.82
26	For H-Frame	2	M16x40mm		0.166	0.33
		4	M16x90mm		0.233	0.93
		10	M16x65mm		0.195	1.95
	TOTAL b) Bolt and nut					13.38

Note :

- 1) The weight indicated is before punching of the holes.
- 2) Tolerance of $\pm 4\%$ is allowed on the weight.

BILL OF MATERIALS - 7 A

SPMT Structure materials suitable for mounting 25/63 kVA 4/5 Star Rated Transformers by using RCC Sq Section Pole 9 Mtr Long, 150 kG WL With H Frame (Dwg No. BESCO/GM/QS&S/37 Dtd 24.11.2018)

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
1	Transformer Seating Channel	2	65x65x6	485	5.8	5.63
2	Transformer Seating Channel	2	65x65x6	850	5.8	9.86
3	Tranformer Belting Angle with 65mm Cleat Welded	1	65x65x6	485	6.5	3.15
4	Tranformer Seating Supporting Verticle Side Angle	2	45x45x5	1000	3.4	6.80
5	Brace for Transformer Seating Angle	2	45x45x5	1230	3.4	8.36
6	Back Clamp for Transformer Seating Angle	1	50x8	560	3.1	1.74
7	Back Clamp for Transformer Belting Angle	1	50x8	560	3.1	1.74
	LA, HG Fuse Unit and Supporting Materials					
8	Horizontal Supporting Side Angle for H Frame set	1	50x50x6	850	4.5	3.83
9	Horizontal Supporting Side angle for HG Fuse Unit	2	50x50x6	1150	4.5	10.35
10	Brace for GOS & HG Fuse Unit	2	45x45x5	1321	3.4	8.98
11	Horizontal Supporting Side Angle for HG Fuse Unit	2	50x50x6	850	4.5	7.65
12	Horizontal Angle for HG Fuse Fixing	1	50x50x6	835	4.5	3.76
13	Vertical Supporting angle for fixing GOS & HG Fuse Unit	2	45x45x5	1550	3.4	10.54
14	Horizontal Supporting Side angle for fixing GOS	2	50x50x6	850	4.5	7.65
15	Vertical Supporting angle for fixing GOS	2	45x45x5	850	3.4	5.78
16	Horizontal Supporting angle for fixing GOS	2	50x50x6	1150	4.5	10.35
17	GOS Operating Pipe Supporting Angle	1	65x65x6	1150	5.8	6.67
18	GOS Operating Pipe Brace Angle	1	45x45x5	1000	3.4	3.40
19	Back Clamp For GOS Operating Pipe Supporting Angle (ON/OFF)	1	50x8	480	3.1	1.49
20	Back Clamp For GOS Operating Pipe Brace Angle (ON/OFF)	1	50x8	480	3.1	1.49

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
21	Back Clamp For GOS Mounting	1	50x8	480	3.1	1.49
22	Back Clamp For GOS Brace	1	50x8	480	3.1	1.49
23	Back Clamp For HG Fuse Unit	1	50x8	480	3.1	1.49
24	Back Clamp For LT Kit	1	50x8	480	3.1	1.49
		1	50x8	480	3.1	1.49
25	Fish Plate	1	50x6	270	2.4	0.65
	11kV H Frame Ladder Set details					
26	Angle Type A1& A2	2	45x45x5	1640	3.4	11.15
27	Welded Angle	6	45x45x5	60	3.4	1.22
28	Angle Type A3	2	45x45x5	345	3.4	2.35
	TOTAL a) Structure Steel					142.02
	MS Bolts & Nuts Full Thread Including H Frame					
	MS Bolt & Nuts For Transformer, Structure Kit & H Frame	47	16x40mm to 16x125mm	-	-	10.00
	TOTAL b) Bolt and Nut Full Thread					10.00

Note:

- 1) The weight indicated is before punching of the holes.
- 2) Tolerance of $\pm 4\%$ is allowed on the weight.

BILL OF MATERIALS - 7 B

**SPMT Structure materials suitable for mounting 25 kVA 4/5 Star Rated Transformers by using PSCC Pole
9 Mtr Long, 300 kG WL With H Frame (Dwg No. BESCO/GM/QS&S/64 Dtd 24.11.2018)**

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
	Transformer Seating Kit					
1	Transformer Seating Channel	2	65x65x6	485	5.8	5.63
2	Transformer Seating Channel	2	65x65x6	850	5.8	9.86
3	Transformer Belting Angle with 65mm Cleat Welded	1	65x65x6	485	6.5	3.15
4	Transformer Seating Supporting Vertical Side Angle	2	45x45x5	1000	3.4	6.80
5	Brace for Transformer Seating Angle	2	45x45x5	1230	3.4	8.36
6	Back Clamp for Transformer Seating Angle	1	50x8	724	3.1	2.24
7	Back Clamp for Transformer Belting Angle	1	50x8	704	3.1	2.18
	LA, HG Fuse Unit and Supporting Materials					
8	Horizontal Supporting Side Angle for H Frame set	1	50x50x6	850	4.5	3.83
9	Horizontal Supporting Side angle for HG Fuse Unit	2	50x50x6	1150	4.5	10.35
10	Brace for GOS & HG Fuse Unit	2	45x45x5	1321	3.4	8.98
11	Horizontal Supporting Side Angle for HG Fuse Unit	2	50x50x6	850	4.5	7.65
12	Horizontal Angle for HG Fuse Fixing	1	50x50x6	835	4.5	3.76
13	Vertical Supporting angle for fixing GOS & HG Fuse Unit	2	45x45x5	1550	3.4	10.54
14	Horizontal Supporting Side angle for fixing GOS	2	50x50x6	850	4.5	7.65
15	Vertical Supporting angle for fixing GOS	2	45x45x5	850	3.4	5.78
16	Horizontal Supporting angle for fixing GOS	2	50x50x6	1150	4.5	10.35
17	GOS Operating Pipe Supporting Angle	1	65x65x6	1150	5.8	6.67
18	GOS Operating Pipe Brace Angle	1	45x45x5	1000	3.4	3.40
19	Back Clamp For GOS Operating Pipe Supporting Angle (ON/OFF)	1	50x8	774	3.1	2.40

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
20	Back Clamp For GOS Operating Pipe Brace Angle (ON/OFF)	1	50x8	814	3.1	2.52
21	Back Clamp For GOS Mounting	1	50x8	574	3.1	1.78
22	Back Clamp For GOS Brace	1	50x8	624	3.1	1.93
23	Back Clamp For HG Fuse Unit	1	50x8	614	3.1	1.90
24	Back Clamp For LT Kit	1	50x8	714	3.1	2.21
		1	50x8	704	3.1	2.18
25	Fish Plate	1	50x6	270	2.4	0.65
	11kV H Frame Ladder Set details					
26	Angle Type A1&A2	2	45x45x5	1640	3.4	11.15
27	Welded Angle	6	45x45x5	60	3.4	1.22
28	Angle Type A3	2	45x45x5	345	3.4	2.35
	TOTAL a) Structure Steel					147.49
	MS Bolts & Nuts Full Thread Including H Frame					
	MS Bolt & Nuts Full Thread For Transformer, Structure Kit & H Frame	47	16x40mm to 16x125mm	-	-	10.00
	TOTAL b) Bolt and Nut Full Thread					10.00

Note:

- 1) The weight indicated is before punching of the holes.
- 2) Tolerance of $\pm 4\%$ is allowed on the weight.

BILL OF MATERIALS - 7 C

**SPMT Structure materials suitable for mounting 25/63 kVA 4/5 Star Rated Transformers
by using RCC Sq Section Pole 9 Mtr Long 150 kG WL Without H Frame**

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
	Transformer Seating Kit					
1	Transformer Seating Channel	2	65x65x6	485	5.8	5.63
2	Transformer Seating Channel	2	65x65x6	850	5.8	9.86
3	Transformer Belting Angle with 65mm Cleat Welded	1	65x65x6	485	6.5	3.15
4	Transformer Seating Supporting Vertical Side Angle	2	45x45x5	1000	3.4	6.80
5	Brace for Transformer Seating Angle	2	45x45x5	1230	3.4	8.36
6	Back Clamp for Transformer Seating Angle	1	50x8	560	3.1	1.74
7	Back Clamp for Transformer Belting Angle	1	50x8	560	3.1	1.74
	LA, HG Fuse Unit and Supporting Materials					
8	Horizontal Supporting Side Angle for H Frame set	1	50x50x6	850	4.5	3.83
9	Horizontal Supporting Side angle for HG Fuse Unit	2	50x50x6	1150	4.5	10.35
10	Brace for GOS & HG Fuse Unit	2	45x45x5	1321	3.4	8.98
11	Horizontal Supporting Side Angle for HG Fuse Unit	2	50x50x6	850	4.5	7.65
12	Horizontal Angle for HG Fuse Fixing	1	50x50x6	835	4.5	3.76
13	Vertical Supporting angle for fixing GOS & HG Fuse Unit	2	45x45x5	780	3.4	5.30
14	Back Clamp For HG Fuse Unit	1	50x8	480	3.1	1.49
15	Back Clamp For LT Kit	1	50x8	480	3.1	1.49
		1	50x8	480	3.1	1.49
16	Fish Plate	1	50x6	270	2.4	0.65
	TOTAL a) Structure Steel					82.26
	MS Bolts & Nuts Full Thread Including H Frame					
	MS Bolt & Nuts Full Thread For Transformer, Structure Kit	31	16x40mm to 16x125mm	-	-	7.00
	TOTAL b) Bolt and Nut Full Thread					7.00

Note:

- 1) The weight indicated is before punching of the holes.
- 2) Tolerance of $\pm 4\%$ is allowed on the weight.

BILL OF MATERIALS - 7 D

**SPMT Structure materials suitable for mounting 25 kVA 4/5 Star Rated Transformers
by using PSCC Pole 9 Mtr Long, 300 kG WL Without H Frame**

Sl. No.	Part No.	Qty in Nos	MS Angle Flat in mm	Length/Piece in mm x Nos	Wt/Mtr in Kgs	Approx wt in Kg
	Transformer Seating Kit					
1	Transformer Seating Channel	2	65x65x6	485	5.8	5.63
2	Transformer Seating Channel	2	65x65x6	850	5.8	9.86
3	Transformer Belting Angle with 65mm Cleat Welded	1	65x65x6	485	6.5	3.15
4	Transformer Seating Supporting Vertical Side Angle	2	45x45x5	1000	3.4	6.80
5	Brace for Transformer Seating Angle	2	45x45x5	1230	3.4	8.36
6	Back Clamp for Transformer Seating Angle	1	50x8	724	3.1	2.24
7	Back Clamp for Transformer Belting Angle	1	50x8	704	3.1	2.18
	LA, HG Fuse Unit and Supporting Materials					
8	Horizontal Supporting Side Angle for H Frame set	1	50x50x6	850	4.5	3.83
9	Horizontal Supporting Side angle for HG Fuse Unit	2	50x50x6	1150	4.5	10.35
10	Brace for GOS & HG Fuse Unit	2	45x45x5	1321	3.4	8.98
11	Horizontal Supporting Side Angle for HG Fuse Unit	2	50x50x6	850	4.5	7.65
12	Horizontal Angle for HG Fuse Fixing	1	50x50x6	835	4.5	3.76
13	Vertical Supporting angle for fixing GOS & HG Fuse Unit	2	45x45x5	780	3.4	5.30
14	Back Clamp For HG Fuse Unit	1	50x8	614	3.1	1.90
15	Back Clamp For LT Kit	1	50x8	714	3.1	2.21
		1	50x8	704	3.1	2.18
16	Fish Plate	1	50x6	270	2.4	0.65
	TOTAL a) Structure Steel					85.05
	MS Bolts & Nuts Full Thread Including H Frame					
	MS Bolt & Nuts Full Thread For Transformer, Structure Kit	31	16x40mm to 16x125mm	-	-	7.00
	TOTAL b) Bolt and Nut Full Thread					7.00

Note:

- 1) The weight indicated is before punching of the holes.
- 2) Tolerance of $\pm 4\%$ is allowed on the weight.

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

**SPMT For OH line (Having Single H Frame with Transformer seating and seating angle support x-arm)
for 11 Mtr Spun Pole for 25 kVA 4/5 Star Rated Transformer (Dwg No. BESCO/GM/QS&S/66 Dtd 24.11.2018)**

Part No.	Size of the steel section	Length in mm	Quantity (in nos.)	Kgs. / Mtr.	Total Wt.
	TOP Bracket				
1	100x100x8mm MS Angle	850	3	12.10	30.86
2	75x40x4.8mm MS Channel (MC75/MCP75)	2400	2	7.14	34.27
3	45x45x5mm MS Angle	850	3	3.40	8.67
4	75x40x4.8mm MS Channel (MC75/MCP75)	1475	2	7.14	21.06
5	50x50x6mm MS Angle	1000	2	4.50	9.00
6	65x65x6mm MS Angle	1440	2	5.80	16.70
	Transformer Center				
7	130x130x12mm Angle	1110	1	23.40	25.97
8	100x50x5mm MS Channel (MC100/MCP100)	1200	2	9.56	22.94
9	130x130x12mm MS Angle (with side plate)	1110	2	23.40	51.95
10	75x75x6mm MS Angle	1789	2	6.80	24.33
11	65x65x6mm MS Angle	1350	2	5.80	15.66
12	75x40x4.8mm MS Channel (MC75/MCP75)	1110	2	7.14	15.85
	GOS Mounting Structure (Ladder)				
13	45x45x5mm MS Angle	1640	2	3.40	11.15
14	45x45x5mm MS Angle (Cleat)	60	6	3.40	1.22
15	40x40x5mm MS Angle	335	2	3.00	2.01
16	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	3.53	21.19
17	MS Hexagonal bolts, nuts Full Thread and washers of different sizes to sufficient in quantity for fixing clamps	15kgs Approx.		15.00	
Total in Kgs					327.85

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

**SPMT For UG Cable network (Having 3 Nos H Frame with Transformer seating and seating angle support x-arm) for 11 Mtr Spun Pole for 25 kVA 4/5 Star Rated Transformer
(Dwg No. BESCO/GM/QS&S/67 Dtd 24.11.2018)**

Part No.	Size of the steel section	Length in mm	Quantity (in nos.)	Kgs. / Mtr.	Total Wt.
	TOP Bracket				
1	100x100x8mm MS Angle	850	5	12.10	51.43
2	75x40x4.8mm MS Channel (MC75/MCP75)	2400	4	7.14	68.54
3	45x45x5mm MS Angle	850	5	3.40	14.45
4	75x40x4.8mm MS Channel (MC75/MCP75)	1475	2	7.14	21.06
5	50x50x6mm MS Angle	1250	2	4.50	11.25
6	50x50x6mm MS Angle	1000	2	4.50	9.00
7	65x65x6mm MS Angle	1440	2	5.80	16.70
	Transformer Center				
8	130x130x12mm Angle	1110	1	23.40	25.97
9	100x50x5mm MS Channel (MC100/MCP100)	1200	2	9.56	22.94
10	130x130x12mm MS Angle (with side plate)	1110	2	23.40	51.95
11	75x75x6mm MS Angle	1789	2	6.80	24.33
12	65x65x6mm MS Angle	1350	2	5.80	15.66
13	75x40x4.8mm MS Channel (MC75/MCP75)	1110	2	7.14	15.85
	GOS Mounting Structure (Ladder)				
14	45x45x5mm MS Angle	1640	6	3.40	33.46
15	45x45x5mm MS Angle (Cleat)	60	18	3.40	3.67
16	40x40x5mm MS Angle	335	6	3.00	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	11.78
	b) 75x6 MS Flat	1000	8	3.53	28.24
18	MS Hexagonal bolts, nuts Full Thread and washers of different sizes to sufficient in quantity for fixing clamps		17 kgs Approx.		17.00
Total in Kgs					449.32

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

**SPMT 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 4/5 Star Rated Transformer
(Dwg No. BESCO/GM/QS&S/68 Dtd 24.11.2018)**

Part No.	Size of the steel section	Length (in mm)	Qty (in Nos)	Kgs/Mtr	Total Wt
	TOP Bracket				
1	100x100x8mm MS Angle	850	3	12.10	30.86
2	75x40x4.8mm MS Channel (MC75/MCP75)	2400	2	7.14	34.27
3	45x45x5mm MS Angle	850	3	3.40	8.67
4	75x40x4.8mm MS Channel (MC75/MCP75)	1475	2	7.14	21.06
5	50x50x6mm MS Angle	1000	2	4.50	9.00
6	65x65x6mm MS Angle	1440	2	5.80	16.70
	GOS Mounting Structure (Ladder)				0.00
7	45x45x5mm MS Angle	1640	2	3.40	11.15
8	45x45x5mm MS Angle (Cleat)	60	6	3.40	1.22
9	40x40x5mm MS Angle	335	2	3.00	2.01
10	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
11	MS Hexagonal bolts, nuts Full Thread and washers of different sizes to sufficient in quantity for fixing clamps		10kgs Approx.		10.00
Total in Kgs					166.14

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

**SPMT 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 4/5 Star Rated Transformer
(Dwg No. BESCO/GM/QS&S/69 Dtd 24.11.2018)**

Part 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)	1475	2	7.14	21.06
5	50x50x6mm MS Angle	1250	2	4.5	11.25
6	50x50x6mm MS Angle	1000	2	4.5	9.00
7	65x65x6mm MS Angle	1440	2	5.8	16.70
	GOS Mounting Structure (Ladder)				0.00
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	28.24
12	MS Hexagonal bolts, nuts Full Thread and washers of different sizes to sufficient in quantity for fixing clamps		10kgs Approx		10
Total in Kgs					273.83

Note :

1. The weights mentioned are subject to tolerance as per IS.
2. The weights mentioned are before drilling of holes.

PART - 3

Labour Rates for Common SR 2018-19 for 11 kV System

LABOUR RATES FOR COMMON SR 2018-19 for 11 kV SYSTEM

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs
	1	Digging of Pit			
	1.1	Digging of Pit 1.8 Mtr depth for erection of 9 to 10 Mtr Long Steel/RCC/PSCC supports as per approved Drawing.			
1	1.1.1	Ordinary Soil	Per Pit	378	416
2	1.1.2	Hard Soil	Per Pit	1294	1424
3	1.1.3	Hard latterite Soil	Per Pit	1435	1578
4	1.1.4	Hard Rock (By Chizling and/Or Wedging)	Per Pit	2454	2699
	1.2	Digging of Pit 1.6 Mtr depth for erection of 7.5/8 Mtr Long Steel/RCC/PSCC supports as per approved Drawing.			
5	1.2.1	Ordinary Soil	Per Pit	304	334
6	1.2.2	Hard Soil	Per Pit	1046	1151
7	1.2.3	Hard latterite Soil	Per Pit	1158	1274
8	1.2.4	Hard Rock	Per Pit	1979	2177
	1.3	Digging of Pit 2.0 Mtr depth for erection of 9.5 Mtr Long RCC supports (350 Kg WL for 33KV) as per approved Drawing.			
9	1.3.1	Ordinary Soil	Per Pit	413	454
10	1.3.2	Hard Soil	Per Pit	1310	1441
11	1.3.3	Hard latterite Soil	Per Pit	1558	1714
12	1.3.4	Hard Rock	Per Pit	2688	2957
	1.4	Digging of Pit 2.2 Mtr depth for erection of 11 Mtr Long RCC/PSCC supports as per approved Drawing.			
13	1.4.1	Ordinary Soil	Per Pit	464	510
14	1.4.2	Hard Soil	Per Pit	1756	1932
15	1.4.3	Hard latterite Soil	Per Pit	1756	1932
16	1.4.4	Hard Rock	Per Pit	3015	3317
	1.5	Digging of Pit 2.5 Mtr depth for erection of 11 Mtr long Tubular Spun Pole as per approved Drawing.			
17	1.5.1	Ordinary Soil	Per Pit	1137	1251
18	1.5.2	Hard Soil	Per Pit	2275	2503
19	1.5.3	Hard latterite Soil	Per Pit	2275	2503
20	1.5.4	Hard Rock	Per Pit	7393	8132

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
	1.6	Digging of Pit for providing GI Pipe type Earthing			
21	1.6.1	Ordinary Soil	Per Pit	457	503
22	1.6.2	Hard Soil	Per Pit	1792	1971
23	1.6.3	Hard latterite Soil	Per Pit	1986	2185
24	1.6.4	Hard Rock	Per Pit	2968	3265
	1.7	Digging of Pit for GUY SET			
25	1.7.1	Ordinary Soil	Per Pit	195	215
26	1.7.2	Hard Soil	Per Pit	499	549
27	1.7.3	Hard latterite Soil	Per Pit	550	605
28	1.7.4	Hard Rock	Per Pit	1270	1397
		Note: For Hard Latterite Soil and Hard Rock Soil works have to be classified and certified by Executive Engineer, where ever these types of soil is encountered.			
	1.8	Concrete works			
		Providing cement concrete to Poles and Guy sets with material and labour including necessary curing etc., complete (cost does not include excavation)			
	1.8.1	A) Base Concreting with CC 1:4: 8			
29		a) Pole base for 11/9.5/9/8 Mtr supports (500x650x150mm)	Each	229	237
30		b) Pole base for 9 Mtr Square Pole (650x650x150mm)	Each	298	308
31		c) Pole base for 11 Mtr Spun Pole (1000x1000x150mm)	Each	704	730
	1.8.2	B) Pole Concreting with CC 1:2:4 (without coping)			
32		a) 9 Mtr support (650x500x1700mm)	Each	2566	2746
33		b) 9.5 Mtr support (650x500x1850mm)	Each	2792	2988
34		c) 11 Mtr PSCC support (650x500x2000mm)	Each	2721	2912
35		d) 9 Mtr Square Pole (650x650x1700 mm)	Each	3214	3440
36		e) 11 Mtr Spun Pole (1000x1000x2500mm)	Each	11378	12177
37		f) 8 Mtr support (400x400x1500mm)	Each	982	1051
38		g) Guy concreting with Boulders, Mud & Sand As per Drawing No. BESCO/GM/CP/7/dt: 24.10.07. (with out cement)	Each	158	174

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs
	1.8.3	C) Providing Coping for Pole with CC 1:2:4 (As per actuals)			
39		a) 150 mm all around the Pole for an height of 300 mm for RCC, PSCC Pole	Each	444	471
40		b) 390 mm all around the Pole for an height of 300 mm for Spun Pole	Each	1040	1930
	1.8.4	D) Guy concreting in Marshy area			
41		a) Providing cement concrete 1:2:4 for Anchor Rod in Marshy/Black Cotton Soil 600x600x450 mm	Each	824	881
	2	Erection of Poles			
44	2.01	Erection of RCC/PSCC Pole of 7.5 to 8 Mtr long in a pit of 1.5 Mtr depth	No	544	598
45	2.02	Erection of RCC/PSCC Pole of 9 to 10 Mtr long in a pit of 1.8 Mtr depth	No	682	750
46	2.03	Erection of RCC Pole 9.5 Mtr long 350 Kg WL in a pit of 2.0 Mtr depth for 33 KV line	No	960	1056
47	2.04	Erection of PSCC Pole 11 Mtr Long 365 Kg WL in a pit of 2.2 Mtr depth	No	1088	1197
48	2.05	Erection of 11 Mtr long Concrete Spun Pole in a pit of 2.5 Mtr depth (Mechnised Labour)	No	1500	1650
49	2.06	Erection of 2 Pole Structure using RCC/PSCC Pole 9 to 10 Mtr long	Per Structure	2496	2746
50	2.07	Erection of 2 Pole Structure using RCC/PSCC Pole 7.5/8 Mtr long	Per Structure	2496	2746
51	2.08	Providing Spiral Earth Electrode type earthing (without charcoal, salt etc.,)	No	55	61
52	2.09	Erection of H-Frame.	No	191	210
	3	Erection of Double Pole Transformer Structure using 9 Mtr Long RCC (145 Kg WL)/PSCC (300 Kg WL) Pole including fixing of Structure Materials, Erection of Poles etc., complete for mounting of Transformer as per approved drawing			
53	3.01	For 25/63/100 kVA	Per Structure	3359	3695
54	3.02	For 100 to 250 kVA	Per Structure	3482	3830

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs
55	3.03	Above 250 kVA	Per Structure	3848	4233
	4	Erection of Single Pole Mounted Transformer Structure			
56	4.01	For 250 kVA Transformer on the existing 11 Mtr Spun Pole (excluding erection of Pole)	Per Structure	2033	2236
57	4.02	For 100 kVA on the existing 9 Mtr RCC Pole (Squire Section) (excluding erection of Pole)	Per Structure	1016	1118
58	4.03	For 25/63 kVA on the existing 9 Mtr RCC Pole (Square Section) (excluding erection of Pole)	Per Structure	1016	1118
59	4.04	For 25KVA Transformer on the existing 9 Mtr PSCC Pole of 300 KG WL (excluding erection of Pole)	Per Structure	1575	1733
60	4.05	3 Pole Structure: Erection of 3 Pole Structure formed with 3 Nos of 9 Mtr RCC/PSCC Pole with platform for mounting 100 to 500 kVA Transformer as per approved Drawing including fixing of Structure materials, erection of Poles etc., complete. (excluding excavation charges)	Per Structure	5137	5651
61	4.06	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) Mtr pit for foundation providing and laying cement concrete 1:4:8 for foundation laid in 10 cm thick layers, well compacted curing etc., complete providing and construction of stone masonry 0.9 Mtr below ground level and 1.2 Mtr above ground level neatly hammer dressed in cement mortar 1:6. Providing and Laying cement concrete slab 1.5x1.5x0.10 Mtr with cement concrete of 1:2:4 mix forming & cutting complete, providing pointing to stone masonry in cement mortar 1:3 after racking joint & nisely lining curing etc., plastering the concrete surfaces in cement mortar 1:4 including smooth randerling curing etc., curing at every stages completely.	Per Structure	25192	26401
	5	Fixing of Cross Arm, Single Top Support, EG Stirrup, Anticlimbing Device, Guy Set, Guarding etc.,			
62	5.01	Fixing of 2 Pin cross arm with Insulator and Braces fixing	Each	96	106
63	5.02	Fixing of 4 Pin cross arm with Insulator and Braces fixing	Each	96	106
64	5.03	Fixing of V-Shape/Horizontal cross arm including Single Top Support Brace and Insulator fixing	Each	96	106
65	5.04	Fixing of V-Shape/Horizontal cross arm for DC Line including Brace and Insulator fixing. (Without Single Top Support)	Each	81	89

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs
66	5.05	Fixing of 4 Pin double cross arm including Brace and Insulator	Set	168	185
67	5.06	Fixing of HT/LT Single Top Support	Each	64	70
68	5.07	Fixing of Earth Guard Stirrup	Set (2 Nos)	99	109
69	5.08	Spike Type	Per Set	23	25
70	5.09	GI Barbed Wire (12 Mtr)	No	25	28
71	5.10	Fixing of GUY Set with break insulator 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	159	175
72	5.11	Same as above but using 2 nos of No. 15 Strain Insulator	Per Set	179	197
73	5.12	Fixing guarding including fixing of necessary cross arms for existing HT and LT line at Road Crossing, Telephone Line Crossings upto span of 60 Mtr	Per Set	603	663
74	5.13	Fixing guarding including fixing of necessary cross arms between HT and LT line upto a span of 40 Mtr	Per Set	603	663
75	5.14	Above 40 Mtr Span	Per Set	1059	1165
76	5.15	Fixing Danger Board	Unit	48	53
		Stringing of Conductor			
77	5.16	Stringing of conductor Squirrel, Weasel , binding of conductor on each insulator and dead ending on strain or disc/strain insulator by means of clamps.	Per KM/ Wire	1913	2104
78	5.17	do - for Rabbit ACSR	Per KM/ Wire	2608	2869
79	5.18	do - for Coyote ACSR	Per KM/ Wire	4555	5011
	6	LT Reconductoring Work			
		Stringing of Conductor (including pin binding, providing jumps, dead ending, etc.,)			
80	6.01	Weasel	Per KM/ Wire	2296	2526
81	6.02	Rabbit	Per KM/ Wire	3130	3443
82	6.03	Coyote	Per KM/ Wire	5466	6013

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
		Releasing of Conductor			
83	6.04	Weasel	Per KM/ Wire	1722	1894
84	6.05	Rabbit	Per KM/ Wire	2347	2582
85	6.06	Coyote	Per KM/ Wire	4100	4509
86	6.07	Releasing & Refixing of Over Head Service Mains (Single Phase/3 Phase) Per connection/Installation (While executing reconductoring works only)	Per KM/ Wire	35	39
87	6.08	Releasing & Refixing of Over Head Service Mains (Single Phase/3 phase) Per connection/installation (While replacing existing Pole)	Per KM/ Wire	53	58
		NOTE:			
		1. Labour charges for releasing conductor is 90% of the corresponding stringing rates for New Lines			
		2. Special Locality Allowance as applicable shall be loaded to the labour charges			
		3. For new conductor required for LT Reconductoring 3% sag is allowed			
		4. Quantity of returnable release conductor shall be as per circular No: BESCO/GM(T)/BC-20/F-664/05-06/Cys-174 dtd:10.01.2006			
		5. HT Reconductoring Work: Reconductoring for HT is to be followed on the stringing rates for new conductor and releasing rates for old			
	7	Erection of Transformer			
88	7.01	Erection of 25 to 63 kVA Transformer on Transformer Structure	Each	682	750
89	7.02	Erection of 100 kVA Transformer	Each	910	1001
90	7.03	Erection of 200 - 250 kVA Transformer	Each	1365	1502
91	7.04	Erection of 300 - 500 kVA Transformer	Each	1819	2001
92	7.05	Providing GI Pipe Earthing for Lightning Arrester, Transformer Neutral and Transformer Metal parts (Excluding digging of pits)	Per Set (1 No. of Electrode)	116	128
93	7.06	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	2500	2750

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
94	7.07	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)	Per TFR	2500	2750
95	7.08	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) NOTE:- When the awards are issued for erection of New Transformers under labour awards, Hire charges are not payable for cranes hired. By the agencies.	Per TFR	2500	2750
	8	HT Metering			
96	8.01	Erection of HT metering Cubicle on Platform. Erection of LT Feeder piller box including necessary civil works like soil excavation & concreting etc. complete	No	1364	1501
97	8.02	upto 8 Ways	No	989	1088
98	8.03	above 8 Ways	No	1069	1176
	9	Distribution Box for DTC			
99	9.01	Fixing LT Distribution box for 100/250/500 kVA DTC (Excluding wiring)	Per Box	455	501
	10	Additional cost for making termination using H/Wedge Clamp			
100	10.01	Rabbit to Rabbit	No	72	79
101	10.02	Coyote to Coyote	No	96	106
102	10.03	Rabbit to Coyote	No	96	106
103	10.04	Additional cost for making termination using H - Clamps along with 2 hole Paddle/In-Line Connector/Micro wedge connector.	No	198	218
	11	Fixing Metering Box for housing the ETV Meter 3 Phase 4 Wire along with CT's, Meter & wiring for DTC			
104	11.01	25/63 kVA TC	Per Set	1145	1260
105	11.02	100 kVA TC	Per Set	1145	1260
106	11.03	250 kVA TC	Per Set	1145	1260
107	11.04	300/500 kVA TC	Per Set	1145	1260
	12	Erection & Commissioning of 11 kV Auto reclosures and Sectionalizers with remote communication capability			
108	12.01	Erection of fabricated steel Structure for Seating Auto reclosures and Sectionalizers	Per Set	396	436

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs
109	12.02	Erection of 11 kV Auto reclosures with control box GSM modem, connecting cable, control transformer, wiring testing and commissioning including parameterisation	Per Set	2769	3046
110	12.03	Erection of 11 kV sectionalizers with control box GSM modem, connecting cable, PTs wiring testing and commissioning including parameterisation	Per Set	2373	2610
	13	Fixing of DOLO, GOS, LA, Fuse Board, Service Mains, Spacer, Insulator Etc.,			
111	13.01	Fixing DOLO Cutout/Horn Gap Fuse including fixing of cross arm and wiring	Each	141	155
112	13.02	Fixing of GOS including wiring (11 kV Single Break 200 Amps)	Set	636	700
113	13.03	Fixing of GOS including wiring (11 kV Double Break 400 Amps)	Set	706	777
114	13.04	Fixing of 11 kV GOS Single Break or Double Break including wiring on old existing Structure (were only fixing of GOS work is involved)	Set	1413	1554
115	13.05	Modification of GOS Operating System for making Foot path free for pedestrian (Work involves cutting of existing vertical GOS Pipe and fixing the cuppling plate by welding, grinding etc., for operating the GOS)	Per GOS	1979	2177
116	13.06	Fixing of 3 Nos Lightning Arrestor including wiring	Set (3 Nos)	71	78
117	13.07	Fixing Pole Fuse Board	No	86	95
118	13.08	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	131	144
119	13.09	Fixing of LT Line spacer	No	41	45
120	13.10	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	40	44
121	13.11	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	59	65
122	13.12	Releasing and Refixing Insulator of 11 kV Pin Insulator	No	28	31
123	13.13	Releasing and Refixing Insulator of 11 kV Dead End Insulator Disc, Strain etc	No	34	37

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
	14	Supplying and fixing conduit			
124	14.01	Supplying heavy guage PVC pipe 25 mm Dia 2 mm 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 interval of 700mm using NF Screws (2/1)	Mtr	70	70
125	14.02	Wiring for lighting/power circuit using one of FRLS PVC insulated 1.1 kV grade multi strand copper with low conductor resistance 2.5 Sqmm single core wire in open are concealed system of wiring with specified IS-694-1990 and conforming to GTP of group A	Mtr	29.20	30
126	14.03	Wiring for lighting/power circuit using one of FRLS PVC insulated 1.1 kV grade multi strand copper with low conductor resistance 4 Sqmm single core wire in open are concealed system of wiring with specified IS-694-1990 and conforming to GTP of group A	Mtr	42.10	43
127	14.04	Supplying and fixing of porcelain fuse channel with cut out 16 Amps on existing wooden/panel using necessary nuts, bolts, and washers etc complete (32/3)	No	120	120
128	14.05	Fixing and Wiring of Single/3 Phase Meter on the existing meter board	Per connection	90	99
129	14.06	Releasing of Single/3 Phase Meter	Per connection	60	66
130	14.07	Fixing of Thread Through Meter along with wiring	No	New Item	3500
131	14.08	Fixing of GPRS Modems with Accessories	Set	New Item	885
132	14.09	Fixing and Wiring of LED Light fitting with suitable clamps Brackets, lamps, Bolts and nuts	No	New Item	194
	15	Street Light and Other Works			
133	15.01	Fixing of LT Protection Kit	Per Kit	205	226
134	15.02	Wiring of 1 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 cross arm, Spacer etc)	Set	568	625
135	15.03	Wiring of 2 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 cross arm, Spacer etc)	Set	910	1001

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
136	15.04	Fixing 1 Circuit of LT Wiring for 250/500 kVA Transformers via metering box. (includes fixing of necessary supports like 2 Pin cross arm, Spacer etc)	Per Circuit	728	801
137	15.05	Surveying for construction of HT and LT Lines duly furnishing single line diagram indicating Pole locations	KM	565	622
138	15.06	Numbering and Scheduling of Pole	KM	428	471
139	15.07	Magpying (Excluding Cost of paint etc.,)	KM	170	187
140	15.08	Dismanting of Steel/I- Beam	No	90% of the Pole erection charges.	90% of the Pole erection charges.
141	15.09	Releasing of Baliga Pole	No	85% of the 8 Mtr. RCC Pole erection charges.	85% of the 8 Mtr. RCC Pole erection charges.
	16	Releasing & Restrining of loose spans, binding, straightening of inclined Pole etc.			
142	16.01	Tightening of loose span a) Weasel/Squirrel b) Rabbit c) Coyote	KM	90% of the corresponding stringing charges.	90% of the corresponding stringing charges.
143	16.02	Straightening of Slant/Bent Pole	No	75% of the corresponding erection charges.	75% of the corresponding erection charges.
		Note: Above works has to be recorded in register maintained at SO/SD/Division office. Record has to be verified by the Executive Engineer (Ele) before issuing approval for work orders/awards.			
144	16.03	Dismantling of 2 B&S to I/O copper or equivalent	KM	750	825
145	16.04	Dismantling of copper conductor above 2 B&S	KM	1209	1330
146	16.05	Any Dismantling work	No	90% of the corresponding erection charges.	90% of the corresponding erection charges.
	17	Jungle Clearing: 3 Mtr Corridor (1.5 Mtr on either side of line) Trimming of trees and branches and clearing as per IE Rules.			
147	17.01	In Malnad/hilly areas if Jungle/trees/Plants/Shrubs exists only (once in two years)	KM	3068	3375
148	17.02	In Maidan (In accordance with necessity)	KM	1082	1190

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
	18	As above for construction of new line including Trimming of Trees, if Jungle/Tree/Plant/Shrubs Exists			
149	18.01	Malnad/Hill Area	KM	5486	6035
150	18.02	Maidan Area	KM	3278	3606
	19	Cutting, Clearing of Vegetation Grass/shrubs such other small plants, including removal of Roots etc., in station yard/store yard			
151	19.01	Maidan Area (Twice in year)	KM	5	6
152	19.02	Malnad Area (Once in Three Months)	KM	5	6
	20	Transportation Rates:			
		Transportation by Head Load where ever there is no accessibility for transportation by vehicle			
153	20.01	Poles: for Transporting one Pole (Not payable for distance less than 25 Mtr)	No	See New item furnished below	
154	20.02	Conductor: For Transporting 1 KM Length Conductor (Not payable for distance less than 25 Mtr)	Per KM		
155	20.03	Transformer: For Transportation 25 kVA Transformer (Not payable for distance less than 25 Mtr)	No		
156	20.04	Transformer: For Transportation 63 kVA transformer (Not payable for distance less than 25 Mtr)	No		
157	20.05	Transformer: For Transportation 100 kVA Transformer (Not payable for distance less than 25 Mtr)	No		
	21	Pole			
158	21.01	Upto 25 Mtr included in the Rates	Nil	Nil	Nil
159	21.02	25 to 105 Mtr	Per Pole	170	187
160	21.03	105 to 185 Mtr	Per Pole	185	204
161	21.04	Additional charges for every additional span above 185 Mtr	Per Pole	New Item	90
	22	ACSR Conductor			
162	22.01	Upto 25 Mtr included in the Rates	Nil	Nil	Nil
163	22.02	25 to 105 Mtr	Per KM	74	81
164	22.03	105 to 185 Mtr	Per KM	81	89
165	22.04	Additional charges for every additional 100 Mtr above 185 Mtr	Per KM	New Item	60

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
	23	Distribution Transformer 25 kVA			
166	23.01	Upto 25 Mtr included in the Rates	Per TFR	Nil	Nil
167	23.02	25 to 105 Mtr	Per TFR	335	369
168	23.03	105 to 185 Mtr	Per TFR	415	457
169	23.04	Above 185 Mtr	Per TFR	450	495
170	23.05	Additional charges for every additional 100 Mtr above 185 Mtr	Per TFR	New Item	300
	24	Distribution Transformer 63 kVA & 100 kVA			
171	24.01	Upto 25 Mtr included in the Rates	Per TFR	Nil	Nil
172	24.02	25 to 105 Mtr	Per TFR	550	605
173	24.03	105 to 185 Mtr	Per TFR	650	715
174	24.04	Above 185 Mtr	Per TFR	750	825
175	24.05	Additional charges for every additional 100 Mtr above 185 Mtr	Per TFR	New Item	500
	25	Hire Charges (These charges have to be specifically approved by the Corporate Office in respect of repair to transformers when applicable)			
176	25.01	Transportation using 7.5/10 Tons Lorry	KM	Rs.23 per KM subjected to a minimum of Rs.1200/- per day	Rs.25 per KM subjected to a minimum of Rs.1500/- per day
177	25.02	Transportation using mini Lorry/Tempo	KM	Rs.17 per KM subjected to a minimum of Rs.1000/- per day	Rs.18 per KM subjected to a minimum of Rs.1100/- per day
178	25.03	Loading of any type of material not covered specifically (cost includes crane charges if any).	MT	1178	1296
179	25.04	UnLoading of any type of material not covered specifically (cost includes crane charges if any).	MT	1178	1296
180	25.05	Loading of Power Transformer and other similar materials like Switchgear cable drums, Drake/Lynx Conductor etc., (cost includes crane charges if any).	MT	1308	1439
181	25.06	Unloading of Power Transformer and other similar materials like Switchgear cable drums, Drake/Lynx Conductor etc., (cost includes crane charges if any).	MT	1308	1439

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs
	26	Loading and unloading of Pole (loading of Pole to vehicles at stores and unloading at workspot) NOTE:- Consolidated amount for both loading and unloading.			
182	26.01	8 Mtr RCC/PSCC Pole	No	63	69
183	26.02	9 Mtr RCC/PSCC Pole	No	84	92
184	26.03	8 Mtr PSCC Pole (140 Kg WL)	No	53	58
	27	Loading & Unloading of Transformer (when maintenance men for loading and unloading are not available in store)			
		Loading			
185	27.01	25 kVA	No	162	178
186	27.02	63 kVA	No	162	178
187	27.03	100 kVA	No	244	168
188	27.04	250/300 kVA	No	407	448
189	27.05	500 kVA	No	812	893
		Un loading			
190	27.06	25 kVA	No	162	178
191	27.07	63 kVA	No	162	178
192	27.08	100 kVA	No	244	268
193	27.09	250/300 kVA	No	407	448
194	27.10	500 kVA	No	812	893
	28	Fixing of Energy Meter to non-metered IP sets 10 HP and below: (Including cost of all the materials like Meter Board, Channel cutouts and necessary wires required for the work)			
195	28.01	Fixing Single Phase Energy Meter to IP Sets fixed inside Pump House	Per IP Set	783	861
196	28.02	Fixing 3 Phase Energy Meter to IP Sets fixed in Pump House	Per IP Set	1082	1190
197	28.03	Fixing of Energy Meter to IP Set, (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	3617	3979

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
	29	UG Cable Work			
198	29.01	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 Mtr, Supplying and Displaying necessary Danger Boards and Lighting, Using sight Rails and Sign Boards at every 100 Mtr wherever necessary as directed.			
199	29.02	In Ordinary Soil	CMT	205	226
200	29.03	In Hard Soil	CMT	307	338
201	29.04	In Ordinary Rock without Blasting	CMT	273	300
202	29.05	In Ordinary Rock with Blasting	CMT	448	493
203	29.06	Hard Rock/Latterite Rock latterite Soil	CMT	1103	1213
		Note : 1) Soil classification has to be certified by the concerned Executive Engineer Ele. 2) 20% over & above may be given if depth is more than 1 Mtr			
204	29.07	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 Mtr	CMT	45	50
205	29.08	Cutting of Road surface for cable trenches and disposing of the excavated earth, as directed including Barricading, Danger Lighting then Refilling the Cable Trenches.			
206	29.09	Macadam Road	CMT	257	283
207	29.10	Tar Road	CMT	424	466
208	29.11	Cement Concrete Road	CMT	852	937
209	29.12	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	114	125
		Laying and Jointing the pipes (100-150 mm Dia) including lowering in Position: Fixing Collars etc., Joining with mud mortor complete			
210	29.13	RCC Pipe	Mtr	40	44
211	29.14	Stone Ware Pipe	Mtr	31	34
212	29.15	Laying the GI Pipe 80 mm 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	45	50

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
213	29.16	Removing and Refixing stone Masonary with necessary patch up and cementing drain works for Cluvert, Water Valve Crossing etc., including cost of materials.	CMT	593	652
214	29.17	Covering cable with Tiles	KM	2603	2863
215	29.18	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	9146	10061
216	29.19	Removing the kerb Stones and Refixing at the original place with necessary earthwork	Rmtr	8	9
217	29.20	Fixing of Route Joint Indicating Slab	No	68	75
	30	Transporting Cable from Store to work spot including loading and unloading (including Crane and other equipment charges if any)			
	A.	HT Cable			
218	30.01	3x95 to 3x150 Sqmm	Per KM of Cable	11436	12580
219	30.02	3x185 to 3x240 Sqmm	Per KM of Cable	13724	15096
220	30.03	1x300 to 1x1000 Sqmm (Single Core)	Per KM of Cable	13724	15096
221	30.04	3x300 to 3x500 Sqmm	Per KM of Cable	16009	17610
	B.	LT Cable			
222	30.05	2.5 to 25 Sqmm (Single/3.5/4 Core)	Per KM of Cable	706	777
223	30.06	35 to 95 Sqmm (3.5/4 Core)	Per KM of Cable	1413	1554
224	30.07	120 to 240 Sqmm (3.5/4 Core)	Per KM of Cable	1554	1709
	31	Laying of cable in Existing Trench/GI pipe/ Stone Ware/RCC Hume pipe using Wooden/ Aluminum Rollers as directed by the departmental staff			
	A.	HT Cable			
225	31.01	3x95 to 3x150 Sqmm	KM	35797	39377
226	31.02	3x185 to 3x240 Sqmm	KM	37786	41565

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
227	31.03	1x1000 Sqmm	KM	37786	41565
228	31.04	3x300 to 3x500 Sqmm	KM	39774	43751
	B.	LT Cable			
229	31.05	2.5 to 25 Sqmm	KM	12774	14051
230	31.06	35 to 95 Sqmm	KM	18694	20563
231	31.07	120 to 240 Sqmm	KM	19089	20998
	32	Cable Joint and wiring (for HT Cable only)			
	A.	Heat shrinkable Straight Through Joint			
232	32.01	3x95 to 3x150 Sqmm	No	1695	1865
233	32.02	3x185 to 3x240 Sqmm	No	1695	1865
234	32.03	3x300 to 3x400 Sqmm	No	1695	1865
	B.	Making and Fixing pot head for HT Cable only			
		Heat shrinkable type			
235	32.04	3x95 to 3x150 Sqmm	No	1554	1709
236	32.05	3x185 to 3x240 Sqmm	No	1554	1709
237	32.06	3x300 to 3x400 Sqmm	No	1554	1709
238	32.07	Releasing of HT cable after excavation refilling, consolidation Rewinding to the drum etc.,	KM	35796	39376
239	32.08	-do- for LT cable	KM	12299	13529
	33	Earth Excavation for RMU Foundation Work			
		Earth Excavation for RMU Foundation Depositing of earth on Bank up to a lead of 50 Mtr and with a lift up to 1.5 Mtr			
240	33.01	Ordinary Soil	CMT	178	189
241	33.02	In Hard Soil	CMT	267	283
242	33.03	In ordinary/soft Rock without Blasting	CMT	831	883
243	33.04	In ordinary/soft Rock with Blasting	CMT	475	513
244	33.05	Hard Rock/Lattirite Rock/Lattirite Soft (Chistling & Wedging)	CMT	1192	1352
		Note: Soil classifications has to be certified by respective Executive Engineer Ele.			

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs
245	33.06	KSRB 2-4 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	72	76
246	33.07	Lifting of Excess Earth up to distance of 10 KM	CMT	233	256
247	33.08	KSRB 4-1.3: Providing and Laying in position plain cement concrete of mix 1:4:8 with OPC Cement @ 180 Kgs, with 40 mm and down size graded granite metal coarse aggregates @ 0.85 CMT and fine aggregates @ 0.57 CMT machine mixed, machine mixed, concrete laid in layers not exceeding 15 cm. 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	4695	4867
248	33.09	KSRB 4-1.6: Providing and Laying in position plain cement concrete of mix 1:2:4 with Cement @ 240 Kgs, with 20 mm and down size graded granite metal coarse aggregates @ 0.878 CMT and fine aggregates @ 0.459 CMT machine mixed concrete laid in layers not exceeding 15 cm. 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	5084	5441
249	33.10	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	6008	6048
250	33.11	KSRB 5.2-3: Providing and constructing granite/trap/basalt size stone masonry in foundation with cement mortar 1:6 edges of stones chiselled dressed in courses not less than 15 cm high, bond stones at 2 Mtr apart in each course including cost of materials, labour curing complete as per specifications. KBS 5.1.13	CMT	3829	5005
251	33.12	KSRB 5.2-3: Providing and constructing granite/trap/basalt size stone masonry in foundation cement mortar 1:8 stones hammered dressed in courses not less than 20 cm high, bond stones at 2 Mtr apart in each course including cost of materials, labour curing complete as per specifications. KSB 5.1.13	CMT	3689	4037
252	33.13	KSRB 5-8.5: Providing quoin dressing to stone masonry and stone slabs, two line 5 cm wide on each face as per specifications. (measurement including mortar joints) KSB 5.1.13	Mtr	86	91

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs
253	33.14	KSRB 15-3.11 Plastering concrete surface in cement mortar 1:4, 20 mm thick inclusive of smooth rendering curing etc., complete.	Sqmt	222	234
254	33.15	KSRB 6-2.2 Providing and constructing Burnt Brick Masonary with approved quality of Non-modular bricks of standard size of class designation 5.0 Newton/Sqmm (table moulded) with cement mortar 1:8 for basement and super structure including cost of materials, labour charges, scaffolding, curing complete as per specifications. Specification No. KBS 6.2 Transporting RMU (Coventional) unit from store to work spot including loading, unloading. (No separate crane charges)	CMT	6141	6532
255	33.16	5 Panel	No	12811	14092
256	33.17	1 Panel Transporting RMU (Compact) unit from store to work spot including loading, unloading. (No separate crane charges)	No	2562	2818
257	33.18	5 Panel	No	6780	7458
258	33.19	1 Panel 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.	No	4520	4972
259	33.20	5 Panel	No	14184	15602
260	33.21	1 Panel	No	2836	3120
261	33.22	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	596	656
262	33.23	Cleaning of Bitumen type pothead bus joint (All sizes)	No	944	1038
263	33.24	Breaking and cleaning of straight through joint (All sizes)	No	944	1038
264		Sealing of cable ends including supply of plumbing lead, plumbing materials.			
265	33.25	PILC	No	912	1004
266	33.26	XLPE	No	170	187

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs
	34	LABOUR for Aerial Bunched Conductor & Accessories			
267	34.01	Stringing of 11 kV grade Aerial Bunched 3 Core cable of XLPE insulation of size 3x95 Sqmm + 1x70 Sqmm with Insulated Messenger Wire	KM	20426	22469
268	34.02	Stringing of 11 kV grade Aerial Bunched 3 Core cable of XLPE etc insulation of size 3x120 Sqmm + 1x95 Sqmm with Insulated Messenger Wire	KM	20426	22469
269	34.03	Stringing of 1.1 kV grade Aerial Bunched 3 Core cable of XLPE insulation of size (3x95) (Phase Conductor) + (1x70) (Insulated Messenger Neutral) + (1x16) (Street Light Control)	KM	20426	22469
270	34.04	Stringing of 1.1 kV grade Aerial Bunched 3 Core cable of XLPE insulation of size (3x95) (Phase Conductor) + (1x70) (Insulated Messenger Neutral) + (1x25) (Street Light Control)	KM	20426	22469
271	34.05	Stringing of 1.1 kV grade Aerial Bunched 3 Core cable of XLPE insulation of size (3x95) (Phase Conductor) + (1x70) (Insulated Messenger Neutral) + (1x35) (Street Light Control)	KM	20426	22469
272	34.06	Erection of Suspension Clamp - 25 to 95 Sqmm Insulated messenger	No	115	127
273	34.07	Erection of Anchor Clamp - 25 to 95 Sqmm Insulated messenger	No	115	127
274	34.08	Erection of Suspension Clamp - 25 to 95 Sqmm insulated messenger with bracket	No	154	169
275	34.09	Erection of Anchor Clamp - 25 to 95 Sqmm insulated messenger with bracket	No	154	169
276	34.10	Fixing of Universal Hook	No	115	127
277	34.11	Pole Clamp : 145 mm x 95	No	192	211
278	34.12	Installation of insulated piercing connector for Main to Street Light Main : 16-95 Sqmm, Tap: 1.5-10 Sqmm (EP95)	No	54	59
279	34.13	Installation of insulated piercing connector for Main to Service Line Main : 16-95 Sqmm, Tap: 4-35 Sqmm (P2X95)	No	77	85
280	34.14	Installation of insulated piercing connector for Main to Service Line Main: 25-95 Sqmm, Tap: 25-95 Sqmm (P3X95)	No	77	85
281	34.15	Installation of insulated piercing connector for Main to Service Line Main: 50-150 Sqmm, Tap: 4-35 Sqmm (P4X150D)	No	77	85
282	34.16	Installation of Pre-insulated straight thru' joints - MJPT for 16 Sqmm cable	No	154	169

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs
283	34.17	Installation of Pre-insulated straight thru' joints - MJPT for 25 Sqmm cable	No	154	169
284	34.18	Installation of Pre-insulated straight thru' joints - MJPT for 50 Sqmm cable	No	154	169
285	34.19	Installation of Pre-insulated straight thru' joints - MJPT for 70 Sqmm cable	No	154	169
286	34.20	Installation of Pre-insulated straight thru' joints - MJPT for 120 Sqmm cable	No	192	211
287	34.21	Installation of Pre-Insulated Lug - CPTAU for 16 Sqmm	No	154	169
288	34.22	Installation of Pre-Insulated Lug - CPTAU for 25 Sqmm	No	154	169
289	34.23	Installation of Pre-Insulated Lug - CPTAU for 50 Sqmm	No	154	169
290	34.24	Installation of Pre-Insulated Lug - CPTAU for 70 Sqmm	No	154	169
291	34.25	Installation of Pre-Insulated Lug - CPTAU for 95 Sqmm	No	160	176
292	34.26	Installation of Pre-Insulated Lug - CPTAU for 120 Sqmm	No	199	219
293	34.27	Distribution Box suitable for 20, Single Phase Connection	No	384	422
294	34.28	Distribution box suitable for 6, 3 Phase Connection	No	538	592
295	34.29	T-Connector KZ3 95	No	130	143
296	34.30	End Cap for 50/70 Sqmm	No	5	6
297	34.31	11 kV AB Cable T-Joint installation for 3 Core	No	1035	1139
298	34.32	11 kV AB Cable Straight thru' joint installation for 3 Core	No	828	911
299	34.33	11 kV AB Cable Termination installation for 3 Core	No	700	770
300	34.34	Surge Arrester for ABC	No	107	118
301	34.35	Ground connection for Messenger Wire	No	26	29
302	34.36	Anchor Sleeve for Messenger Wire	No	5	6
	35	Laying of UG Cables by Trenchless Technology by adopting Horizontal Boring & Drawing of cable including preparation at site			
303	35.01	Normal soil 5/6" Bore Without HDPE Pipe	Rmtr	706	706
304	35.02	Normal soil 5/6" Bore With HDPE Pipe	Rmtr	848	848
305	35.03	Drilling of 8" Bore by HDD and laying of UG cable along with upto 5 Nos of 50/42 mm or 40/33 mm HDPE/PLB Pipe including preparation at site for normal soil	Rmtr	New Item	1300

Sl. No.	Item No.	Particulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
306	36	Providing chain link fencing 50 mm 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	780	858
	37	Painting of LTFP Box, Spun Pole, Repair of LTFP & LTDB etc.			
307	37.01	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	1462	1608
308	37.02	Spun Pole Painting (supplying and applying two coats of enamel paints to 11 Mtr Spun Pole) and painting all the metal parts of the Structure with two coats of aluminium paint over primer	Pole	6277	6905
309	37.03	Spun Pole Painting (supplying & applying two coats of enamel paints to 11 Mtr Spun Pole) and painting	Pole	2690	2959
310	37.04	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	646	711
311	37.05	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	431	474
312	37.06	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	323	355
	38	Erection of Compact Pre-fabricated Packaged Sub-station 11kV/433 V			
313	38.01	Installing & fixing the Compact Pre-Fabricated Packaged Sub-Station 100/250/500/800/1000 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	9568	10525
		Labour Charges towards Station Works (As per Prevailing KPTCL SR with effect from 01.09.06)			
	39	11 kV Switchgear			
314	39.01	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.			

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
315	39.02	11 kV Indoor/Outdoor Switchgear	Per Panel	2078	2078
316	39.03	11 kV Kiosk	Per Panel	1729	1729
	40	Wiring & assisting in testing & Commissioning			
317	40.01	11 kV Indoor/Outdoor Switchgear	Per Panel	689	689
318	40.02	11 kV Kiosk	Per Panel	689	689
	41	a) Wiring b) Testing & Commissioning			
319	41.01	Identification of wires, Ferruling Crimping & Termination of wires fir annunciation, etc., Testing of Relays, CTs, PTs, & Breaker for operation.			
320	41.02	For Indoor/Outdoor panel comprising of 2I+8F+1BC+1AP3	Per Set	65503	65503
321	41.03	For Single 11 kV Panel Indoor/Outdoor type/Kiosk	Each	13098	13098
322	41.04	For Additional 11 kV Panel Indoor type	Each	6544	6544
323	41.05	For Single 11 kV Panel Outdoor type/Kiosk	Each	10009	10009
324	42	The Consolidated labour charges for 1 to 2 Pole works for Ganga kalyana & Water works. This amount includes all charges including Transportation charges, loading and un-loading charges, etc., (CDS - 44/CSR 2018-19)	Set	8829	9712
325	43	The Consolidated labour chrges for 3 to 5 Pole works for all types of works. This amounts includes all charges including Transportation charges, loading and un-loading charges, etc., (CDS - 45/ CSR 2018-19)	Set	13949	15344
	44	The Consolidated labour charges for 1 to 4 Pole works for Service connection and E&I works. This amount includes all charges including Transportation charges, loading and un-loading charges, etc., (CDS - 46/ CSR 2018-19)			
326	44.01	For work involing 1 Pole	Set	4238	4662
327	44.02	For work involing 2 Pole	Set	5650	6215
328	44.03	For work involing 3 Pole	Set	7063	7769
329	44.04	For work involing 4 Pole	Set	8475	9323
330	44.05	For work involing 5 & above Pole work	Set	Estimates are to be prepared as per SR	Estimates are to be prepared as per SR

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR SR 2018-19 in Rs
331	45	Consolidated Labour charges for shifting of the conductor terminations(existing cut points) in deteriorated existitng Poles to new Poles erected. Work includes all works associated with shifting of the terminations, like shifting of aerial fuse boards, cut outs, service main (UG cable and over head) and any other existing fitting. (CDS - 47/CSR - 2018-19)	Per Pole	3000	3300
332	46	Consolidated Labour charges for shifting of the existing conductor, including all works associated with shifting of the conductor such as any fittings, aerial fuse boards, cut outs, service main (UG cable and over head) etc., on the existing deteriorated intermediate Pole to new Pole erected. (CDS- 48/CSR - 2018-19)	Per Pole	2200	2420

NOTE :

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.

For Poles - As per the rates provided for Loading and unloading of Poles in the SR

For all other materials excluding transformers and conductors - 10% of the rates provisioned for Loading and unloading of Poles in the estimate.

For Transformers and Conductor - As per the rates provided in the S.R.

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.

Special labour charges for Ganga Kalyna and Water Works, Drinking Water Works and SC & E&I Works: (These rates are Applicable for works carried out under labour awards only. THESE RATES SHALL NOT BE OPERATED FOR RATE CONTRACT AWRADS AND OTHER TENDERED AWARDS).

Note:-

These labour charges are applicable for 1 to 2 Pole & 3 to 5 Poles in respect of Ganga Kalyana and Water Works

These rates are applicable only when 1 to 2 Pole & 3 to 5 Poles are involved and no other associated works.

These rates are applicable only when 1 to 4 Pole works for Service Main and E&I Works

The Labour Charges are all inclusive i.e., digging of pits, erection 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.

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 1 to 2 Pole and 3 to 5 Pole works in respect of all types of works wherein other works such as DTC erection etc., and other works are not involved.

DELETED LABOUR RATES FOR COMMON SR 2018-19 for 11 kV SYSTEM

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs.
	1	Erection of Poles			
1	1.01	Erection of 11mtr long Concrete spun pole in a pit of 2.5 mtr depth.(Manual Labour)	No	1216	Deleted
2	2	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 Beams or MS Rail 8 mtrs long	Per structure	2504	Deleted
42	2.01	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	304	334
43	2.02	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	271	298
	2.11	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	1906	2097
3	3	Erection of Double pole transformers structure including fixing of structural materials, erection of poles etc., complete for mounting of transformers as per approved drawing			
		25/63/100 kVA			
4	3.01	with 8 mtrs. RCC pole	Per structure	2952	Deleted
		100 to 250 kVA			
5	3.02	with 8 mtrs. RCC pole	Per structure	3208	Deleted
		Above 250 kVA			
6	3.03	with 8 mtrs. RCC pole	Per structure	3447	Deleted
	4	Erection of single pole mounted Transformer structures			
7	4.01	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 in pits for line deviation with necessary foundation, including fixing of cross arm, braces, strain/disc insulators.	Per structure	4241	Deleted

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs.
8	4.02	Erection of 4 Pole structure as in item above with platform for mounting of Transformer. (excluding excavation charges)	Per structure	4857	Deleted
	5	Fixing 3-phase LT Capacitor housed in a enclosure with necessary Fuses, wiring, mounting arrangement for			
9	5.01	15/25 kVA DTC, 3 kVAr	per Set	382	Deleted
10	5.02	63 kVA DTC, 9 kVAr	per Set	382	Deleted
11	5.03	100 kVA DTC, 18 kVAr	per Set	450	Deleted
12	5.04	250 kVA DTC, 27 kVAr	per Set	525	Deleted
13	5.06	500 kVA DTC, 54 kVAr	per Set	549	Deleted
	6	Installing RLM Unit for the existing Distribution TC including wiring			
14	6.01	for 25 kVA	per Set	3483	Deleted
15	6.02	for 63 kVA	per Set	3483	Deleted
16	6.03	for 100 kVA	per Set	3483	Deleted
17	7	Street Light and Other Works Fixing and Wiring Incandescent street Light Fitting with two Clamps.	set	176	Deleted
18	7.01	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	176	Deleted
19	7.02	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	176	Deleted
20	7.03	Fixing of Mercury Vapour Lamp fitting/Ornamental Light Fitting with Control Boxes etc.,	Set	393	Deleted
	8	Cable Joint and wiring(for HT Cable only)			
		Epoxy straight through joint			
21	8.01	3x95 to 3x150 Sqmm	No	989	Deleted
22	8.02	3x185 to 3x240 Sqmm	No	989	Deleted
23	8.03	3x300 to 3x400 Sqmm	No	989	Deleted

Sl. No.	Item No.	Partiulars	Unit	Common SR 2016-17 in Rs.	Common SR 2018-19 in Rs.
		Making and Fixing pot head for HT Cable only			
		Epoxy type			
24	8.04	3x95 to 3x150 Sqmm	No	989	Deleted
25	8.05	3x185 to 3x240 Sqmm	No	989	Deleted
26	8.06	3x300 to 3x400 Sqmm	No	989	Deleted
	9	Laying of UG Cables by trenchless technology by adopting horizontal boring & Drawing of cable including preparation at site			
		Without HDPE Pipe			
27	9.01	ii) Rock soil 5" bore size	Rmtr	1229	Deleted
28	9.02	iii) Normal soil 6" bore size	Rmtr	706	Deleted
29	9.03	iv) Rock soil 6" bore size	Rmtr	1229	Deleted
		With HDPE Pipe			
30	9.04	ii) Rock soil 5" bore size	Rmtr	1370	Deleted
31	9.05	iii) Normal soil 6" bore size	Rmtr	1031	Deleted
32	9.06	iv) Rock soil 6" bore size	Rmtr	1610	Deleted

PART - 4

Schedule of Rate for Standard Stock Materials Common SR 2018-19 (33 kV System)

Schedule of Rate for Standard Stock Materials Common SR 2018-19 (33kV System)

Sl. No.	Item No.	Name of the Material	UoM	Material Code	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
	1	33/11 kV Transformer with all fittings and accessories, OLTC, RTCC, First filling of oil and 10 % Spare oil				
1	1.01	5 MVA	No	322205	3865685	3942850
2	1.02	10 MVA	No	322210	Will be intimated	5233333
3	1.03	12.5MVA			6659932	6792874
	2	Circuit Breakers				
4	2.01	33 kV Circuit Breaker SF6 type 800 Amps, 25 kA	No	311601	306000	373000
	3	11kV Switch Gear				
5	3.01	11 KV 500 MVA (1600 Amps, for two incomer & two capacitor bank and 1250 Amps for eight feeders) MCVCB switchgear comprising 2I+10F+1BC+2AP VCB's all of 25 KA repturing capacity as per technical specification	Set		7367300	8692023
6	3.02	11 KV 500 MVA (1600 Amps, for one incomer & one capacitor bank and 1250 Amps for four feeders) MCVCB switchgear comprising 1I+5F+1BC+1AP VCB's all of 25 KA repturing capacity as per technical specification	Set		3889300	4049179
7	3.03	11 kV, 500 MVA, (1600 Amps, for incomer & 1250 Amps for feeder) outdoor Switch gear, comprising of 2I+2F+1BC+1AP MCVCBs	Set	309204	8189700	9662300
8	3.04	11 kV, 500 MVA, (1600 Amps, for incomer & 1250 Amps for feeder) outdoor Switch gear, comprising of 2I+10F+1BC+1AP VCBs	Set	309202	7130800	8349703
9	3.05	11 KV, 500 MVA, 1250 Amps, (I/C) and 800 Amps (feeder), outdoor Switch Gear, comprising of 2I+1BC+8F+1AP VCBs	Set	309200	6001700	7080872
10	3.06	11 kV Switch gear, 350 MVA, 800 Amps Outdoor MCVCB comprising of 1I+5F+1AP	Set	309206	3282700	3872966
11	3.07	11 KV 500 MVA 1250 Amps 25 KA feeder panel	No	309208	551000	650076
12	3.08	11 KV 500 MVA 1250 Amps SWG 1I+5F+1AP MCVCB	Set	309210	338400	3938681

Sl. No.	Item No.	Name of the Material	UoM	Material Code	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
13	3.09	11 kV 500 MVA Indoor type Switchgear with 1I+5F+1AP provided with VCBs, 1600 Amps for Incomer 1600 Amps for capacitor Bank, 1250 Amps for outgoing feeders all of 25 KA rupturing capacity and SCADA Compatible	Set		New Item	4049179
14	3.10	11 kV, 350 MVA, Indoor type Switchgear with 1I+1BC+4F+1CB+1AP provided with VCBs, 1250 Amps for incomer, Bus Coupler & capacitor Bank, 800 Amps for outgoing feeders all of 20 KA rupturing capacity	Set		New Item	4266673
15	3.11	11 kV 500 MVA Indoor type Switchgear with 2I+8 F+2CB+1BC+1AP provided with VCBs 1600 Amps for Bus coupler, Incomer & capacitor Bank, 1250 Amps for outgoing feeders all of 25 KA rupturing capacity and SCADA Compatible	Set		New Item	8692248
16	3.12	11 kV, 500 MVA, Outdoor type Switchgear with 2I+8F+2CB+1BC+1AP provided with VCB's, 1600 Amps for incomer & capacitor Bank, 1250 Amps for outgoing feeders, all of 25 KA rupturing capacity as per technical specification and SCADA compatible	Set		8431730	8258810
17	3.13	11 kV 500 MVA Indoor type Switchgear with 2C+10F+1BC+1AP provided with VCBs 1600 Amps for 2 Incomer & 2 capacitor Bank, 1250 Amps for 8 feeders all of 25 KA rupturing capacity and SCADA Compatible	Set		New Item	8692023
		Annunciator Panels				
18	3.14	1IC+4F	Set		New Item	102000
19	3.15	1IC+5F	Set		New Item	131000
20	3.16	1IC+6F	Set		New Item	142000
21	3.17	2IC+8F+1BC	Set		New Item	220000
		4 11 kV Kiosk				
22	4.01	11 kV, 350 MVA, 800 Amps Outdoor type, kiosk PCVCB comprising				
23	4.02	1IC+4F+1AP, PCVCB	Set		2307515	2260192
24	4.03	1IC+3F+1AP, PCVCB	Set		1921908	1882493
25	4.04	2IC+6F+1AP, PCVCB	Set		3789748	3712028
26	4.05	2IC+8F+1AP PCVCB	Set		4566276	4472630

Sl. No.	Item No.	Name of the Material	UoM	Material Code	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
27	4.06	11 kV, 350 MVA, 800 Amps Outdoor type, kiosk PCVCB	No		308500	302174
	5	Instrument Transformers				
	A.	Current Transformers				
	a.	220 kV CT's				
28	5.01	220 kV class 1200-800-600-400-300/1-1-1-1A	No		256000	251717
	b.	110 kV 0.2 accuracy class CTs for metering purpose				
29	5.02	CT Ratio 100-75/1A	No		115430	113499
30	5.03	CT Ratio 100-75-50/5A	No		116180	114236
31	5.03	CT Ratio 100/5A	No		115430	113499
	c.	33 kV class CT with 0.2 Accuracy Class				
32	5.04	400 - 200/1-1A for lines	No	336470	29120	36426
33	5.05	200 - 100/1-1-1A for Transformer	No	336473	29120	36426
34	5.05	30/5A	No	336400	18200	18000
35	5.06	33 KV Outdoor CT's 200-100/1-1A	No		35620	35227
	d.	11 kV class CT with 0.2 Accuracy Class				
36	5.07	11 KV Outdoor CT's 800-400/1-1-1A	No		30110	29778
37	5.08	11 KV Outdoor CT's 600-300/1-1-1 A	No		27100	26801
38	5.09	11 KV Outdoor CT's 400-200/1-1-1 A	No		28230	27918
39	5.1	11 KV Outdoor CT's 200-100/1-1 A	No		23710	23449
40	5.11	11 kV NCTs 800-400/1-1-1A	No	330210	30000	29669
41	5.12	11 kV NCTs 600-300/1-1-1A	No	330220	43000	42526
42	5.13	11 kV Class Out door CT 200-100/1-1-1A			New Item	23836.35
	B.	Potential Transformers				
	a.	220 kV PT's				
43	5.14	220kV/ $\sqrt{3}$ /110V/ $\sqrt{3}$ -110V/ $\sqrt{3}$	No		224000	224000
44	5.15	PTs 110 KV/ $\sqrt{3}$ /110V/ $\sqrt{3}$ -110V/ $\sqrt{3}$ 0.2 Accuracy Class	No		98000	98000
	b.	33 KV Outdoor PT's				
45	5.16	33kV Voltage Transformer 33kV $\sqrt{3}$ 110 $\sqrt{3}$ - 110 $\sqrt{3}$	No	335512	34000	34000

Sl. No.	Item No.	Name of the Material	UoM	Material Code	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
46	5.17	33 kV $\sqrt{3}/110V$ $\sqrt{3}-110V$ $\sqrt{3}-110V$ $\sqrt{3}$				38493
		C. Single phase PT 11kV / 110V				
47	5.18	Single phase PT 11kV $\sqrt{3}/110V$ $\sqrt{3}$	No	335220	8730	8633
48	5.19	3 Ph PT 11 kV $\sqrt{3}/110V$ $\sqrt{3}-110V$ $\sqrt{3}-110V$ $\sqrt{3}$	No		27848	29000
		6. Lightning Arrester				
49	6.01	30 kV Lightning Arrester Normal Duty Metal oxide (Discharge Class-2)	No	303510	9000	10052
50	6.02	30 kV Lightning Arrester Normal Duty Metal oxide (Discharge Class-3)	No	303512	7970	8902
51	6.03	30 kV 10kA Lightning Arrester Normal Duty polymeric Discharge Class -2	No	303520	10950	12947
		7. Isolators				
52	7.01	Isolators 33 kV 800 Amps, 25 kA Upright with Earth Switch complete metallic portion with insulator	Set	304536	78000	81000
53	7.02	Isolators 33 kV 800 Amps, 25 kA Upright without Earth Switch complete metallic portion with insulator (live point height 3750mm)	Set	304524	59000	68000
54	7.03	Isolators 33 kV 800 Amps, 25 kA Upright without Earth Switch complete metallic portion with insulator (live point height 4750 mm)	Set	304525	80000	79000
		8. Battery Set/Battery Charger				
55	8.01	Battery Set (Tubular) 48 V, 100 Ah	Set	344007	136956	136092
56	8.02	Battery Set (Tubular) 110 V, 100 Ah	Set	344011	300000	298108
57	8.03	Battery Set (Maintenance free VRLA) 48 V, 100 Ah	Set	344107	69565	69126
58	8.04	Battery Set (Maintenance free VRLA) 110 V, 100 Ah	Set	344111	15000	14905
59	8.05	Battery Charger 48 V, 100 Ah	Set	344416	58854	66345
60	8.06	Battery Charger 110 V, 100 Ah (with float cum boost charger working on 230V 1ph AC supply along with integral DCDB consisting 4 nos. O/G feeders as per specifications)	Set	344426	110000	124000
61	8.07	Capacitor Bank with 0.2% Series reactor & NCT 12.1 kV 2.9 MVAR star connected Capacitor Bank	Set	333424	403200	397000

Sl. No.	Item No.	Name of the Material	UoM	Material Code	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
	9.	Panel				
62	9.01	33 kV Line Panel (Simplex)	No	339500	326000	366000
63	9.02	33/11kV Transformer Panel (Simplex)	No	339530	472631	530622
64	9.03	33 kV Capacitor Bank Panel	No	339540	260513	292478
	10.	Towers				
65	10.01	Design, fabrication, galvanising and supply of High Tension transmission line tower materials including stubs	MT	201050	94000	97000
66	10.02	Fabrication, galvanization and supply of mild steel tower materials	MT	201055	85000	88000
67	10.03	Supply of galvanised Bolts & Nuts	MT	736002	119000	123000
68	10.04	Supply of stub templates	MT	210080	89336	91866
69	10.05	Lattice Type Tower (Normal) for Road Crossing as per GESCOM Drawing	No	-	New Item	114500
70	10.06	Lattice Type Tower (Normal) with 3 mtrs Extension for Road Crossing as per GESCOM Drawing	No	-	New Item	146400
	11.	CROSS ARM				
71	11.01	33 kV Horizontal Cross arm as per MESCOM Drawing No.	No	-	New Item	820
	12.	Outdoor type meter box to house ETV meters, made of CRCA steel mounted on angle iron frame work				
72	12.01	Meter box suitable for fixing 6 ETV meters	No	358046	14371	14778
73	12.02	Meter box suitable for fixing 4 ETV meters	No	358044	8784	9033
74	12.03	Meter box suitable for fixing 3 ETV meters	No	358043	6149	6323
	13.	Insulators				
75	13.01	Solid Core Insulator 33 kV	No	283125	3149	2294
76	13.02	33 kV Pin Insulator (Shell only)	No	283006	520	379
77	13.03	33 kV Pin Insulator (Pin only)	No	283056	208	249
78	13.04	33 kV Composit Disc Insulator	No	283433	704	344
79	13.05	33 kV Polymer Pin Insulator			962	555
80	13.06	33 kV 70 KN Polymer Insulator (Ball & socket type)			585	286

Sl. No.	Item No.	Name of the Material	UoM	Material Code	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
	14.	HARDWARE CLAMPS FOR STATION MATERIALS				
	A.	Bolted Type Tension Clamp				
81	14.01	Single Lynx ACSR conductor 70/90 kN 16mm	No	285080	963	998
82	14.02	Single Coyote ACSR conductor 70/90 kN 16mm	No	285079	905	937
83	14.03	Single Rabbit ACSR conductor 70/90 kN 16mm	No	285078	681	705
	B.	Bolted Type Suspension Clamp				
84	14.04	Single Lynx ACSR conductor 70/90 kN 16mm	No	285050	860	891
85	14.05	Single Coyote ACSR conductor 70/90 kN 16mm	No	258046	780	808
86	14.06	Single Rabbit ACSR conductor 70/90 kN 16mm	No	285038	624	647
87	14.07	Ground Wire Clamp 7/3.15mm 2 bolt	No	281410	882	913
	C.	Post Insulator Clamp				
88	14.08	Single Lynx ACSR conductor 127/76mm	No	285699	643	666
89	14.09	Single Coyote ACSR conductor 127/76mm	No	285697	595	616
90	14.10	Single Rabbit ACSR conductor 76mm	No	285696	445	565
91	14.11	DRAKE ACSR	Km		New Item	251000
92	14.12	Strain clamps for Drake ACSR	No		New Item	1714
93	14.13	Suspension Clamps for Drake ACSR	No		New Item	1189
	D.	Wedge Clamps for Drake ACSR				
94	14.14	Rabbit to Drake	No		New Item	2734
95	14.15	Coyote to Drake	No		New Item	2734
96	14.16	Lynx to Drake	No		New Item	2691
97	14.17	Drake to Drake	No		New Item	2691
98	14.18	PG clamps for DRAKE	No		New Item	913
99	14.19	Post insulators clamps suitable for Single Drake ACSR	No		New Item	713
100	14.20	Post insulators clamps suitable for Double Drake ACSR	No		New Item	1081
101	14.21	Terminal connectors for Drake ACSR for connection to the Cable ends and isolator ends (Pad clamps)	No		New Item	794

Sl. No.	Item No.	Name of the Material	UoM	Material Code	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
102	14.22	Vibration dampers for Drake	No		New Item	1089
103	14.23	Repair Sleeves for Drake	No		New Item	624
104	14.24	Mid span compression joints for coyote	No		New Item	438
105	14.25	7/3.15mm GI ground conductor	Km		New Item	64000
106	14.26	Number plates with pole clamps Bolt & nuts	No		New Item	161
		E. "T" Clamp for ACSR Conductor				
107	14.27	Single Lynx to Single Lynx	No	285610	366	379
108	14.28	Single Coyote to Single Coyote	No	285605	436	360
		F. Terminal connector clamp for ACSR Conductor				
109	14.29	Single Lynx	No	282620	586	607
110	14.30	Single Coyote	No	282616	504	522
		15. STATION STRUCTURES				
111	15.01	Fabrication, galvanization and supply of Station Structures	MT	276110	125010	128511
112	15.02	Supply of galvanized Bolts & Nuts	MT		113742	123000
113	15.03	Double pole structure for 33kV	Set	279103	4931	6052
114	15.04	V-Shape X arm for 33 kV	No	279016	736	903
115	15.05	HT ST Support for 33 kV	No	279093	307	377
116	15.06	Clamp 9.5M RCC Pole for 33 kV	No	279526	81	99
117	15.07	11 kV XLPE UG cable as per Technical specification 1x1000 Sqmm aluminum Conductor, armoured cable	KM		New Item	1280986
		16. Cable termination Kits (Pot heads suitable for following size cables as per Technical specification)				
118	16.01	1x1000 Sqmm UG cable				
119	16.02	Indoor	No		New Item	5323
120	16.03	Outdoor	No		New Item	6010
		17. 33 kV, 3 Core XLPE UG Insulated Aluminium Cable (FLAT STRIP ARMOUR)				
121	17.01	33 kV, 3 Core XLPE UG Cable - 95 Sqmm	KM	287451	2459110	1182718

Sl. No.	Item No.	Name of the Material	UoM	Material Code	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
122	17.02	33 kV, 3 Core XLPE UG Cable - 150 Sqmm	KM	287453	2888020	1445695
123	17.03	33 kV, 3 Core XLPE UG Cable - 240 Sqmm	KM	287456	3184300	1824306
124	17.04	33 kV, 3 Core XLPE UG Cable - 300 Sqmm	KM	287457	4217900	2047746
125	17.05	33 kV, 3 Core XLPE UG Cable - 400 Sqmm	KM	287458	4871370	2371292
		18. 33 kV 3 Core XLPE UG Insulated Aluminium Cable (ROUND WIRE ARMOUR)				
126	18.01	33 kV, 3 Core XLPE UG Cable - 95 Sqmm	KM		New Item	1500446
127	18.02	33 kV, 3 Core XLPE UG Cable - 150 Sqmm	KM		New Item	1834923
128	18.03	33 kV, 3 Core XLPE UG Cable - 240 Sqmm	KM		New Item	2315324
129	18.04	33 kV, 3 Core XLPE UG Cable - 300 Sqmm	KM		New Item	2599285
130	18.05	33 kV, 3 Core XLPE UG Cable - 400 Sqmm	KM		New Item	3009111
		19. 33 kV Jointing and Cable termination kits for XLPE cable				
		A. Heat Shrinkable type transition jointing kit				
131	19.01	33 kV, 3 Core XLPE UG Cable - 95 Sqmm	No	288050	23100	23754
132	19.02	33 kV, 3 Core XLPE UG Cable - 150 Sqmm	No	288052	23100	23754
133	19.03	33 kV, 3 Core XLPE UG Cable - 240 Sqmm	No	288054	34060	35025
134	19.04	33 kV, 3 Core XLPE UG Cable - 300 Sqmm	No	288055	34060	35025
135	19.05	33 kV, 3 Core XLPE UG Cable - 400 Sqmm	No	288056	39500	40619
		B. Heat Shrinkable indoor type cable termination kit				
136	19.06	33 kV, 3 Core XLPE UG Cable - 95 Sqmm	No	288060	5840	6960
137	19.07	33 kV, 3 Core XLPE UG Cable - 150 Sqmm	No	288062	5840	6960
138	19.08	33 kV, 3 Core XLPE UG Cable - 240 Sqmm	No	288064	7990	9360
139	19.09	33 kV, 3 Core XLPE UG Cable - 300 Sqmm	No	288065	7990	9360
140	19.10	33 kV, 3 Core XLPE UG Cable - 400 Sqmm	No	288066	8740	10516
		C. Heat Shrinkable outdoor type cable termination kit				
141	19.11	33 kV, 3 Core XLPE UG Cable - 95 Sqmm	No	288070	7255	8160
142	19.12	33 kV, 3 Core XLPE UG Cable - 150 Sqmm	No	288072	7255	8160

Sl. No.	Item No.	Name of the Material	UoM	Material Code	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
143	19.13	33 kV, 3 Core XLPE UG Cable - 240 Sqmm	No	288074	9030	10200
144	19.14	33 kV, 3 Core XLPE UG Cable - 300 Sqmm	No	288075	9030	10200
145	19.15	33 kV, 3 Core XLPE UG Cable - 400 Sqmm	No	288076	10730	12600
		D. Heat Shrinkable Straight through jointing kits with Aluminum lugs & ferrules				
146	19.16	33 kV, 3 Core XLPE UG Cable - 95 Sqmm	No	288080	18920	21600
147	19.17	33 kV, 3 Core XLPE UG Cable - 150 Sqmm	No	288082	18920	21600
148	19.18	33 kV, 3 Core XLPE UG Cable - 240 Sqmm	No	288084	25320	28800
149	19.19	33 kV, 3 Core XLPE UG Cable - 300 Sqmm	No	288085	25320	28800
150	19.20	33 kV, 3 Core XLPE UG Cable - 400 Sqmm	No	288086	30160	31800
		20. Miscellaneous Station Materials				
		A. Fire fighting equipment (Mech) 9 Ltr capacity				
151	20.01	Foam type extinguisher (Mech) 9 Ltr Capacity	No		New Item	3456
152	20.02	Foam type extinguisher (Mech) 45 Ltr Capacity	No		New Item	10436
153	20.03	Carbon Dioxide type 6Ltr capacity	No		New Item	6651
		B. Sand type				
154	20.04	G.I Bucket 9 Ltr Capacity	No		New Item	425
155	20.05	Steel Mounting stand for above buckets (Each stand for 3 buckets)	No		New Item	1688
156	20.06	Water type (Gas pressure type) 9 Ltr capacity	No		New Item	2043

**Deleted items of Schedule of Rate for Standard Stock Materials
Common SR 2018-19 (33kV System)**

Sl. No.	Item No.	Name of the Material	UoM	Material Code	CSR 2016-17 Ford Rates in Rs inclusive of Taxes	CSR 2018-19 Ford Rates in Rs inclusive of Taxes
	1	11 kV Kiosk				
1	1.01	11 kV 350 MVA, 800 Amps Outdoor Type, kiosk comprising of 1I+4F+1AP 3 PCVCB	Set	309214	2080800	Deleted
2	1.02	Procurement of PCVCBs to Batkal Station (1I/C+4F+1AP)	Set		2309181	Deleted
3	1.03	Procurement of PCVCBs to 33/11 KV station Kahanagaon Belagaum	Set		3760310	Deleted
	2	Instrument Transformers				
		Current Transformers				
		33 kV class CT with 0.2 Accuracy Class				
4	2.01	33 KV Outdoor CT's 400-200/1-1	No.		35620	Deleted

PART - 5

Labour Rates for Common SR 2018-19 for 33 kV System

LABOUR RATES FOR COMMON SR 2018-19 for 33 kV SYSTEM

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
	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	898	1781
2	b)	Plain terrain	km	873	1687
	ii)	Detailed Survey, fixing anchor points and taking levels at 20 mtrs intervals, drawing route profile on Graph paper indicating geographical features like Nalas, Rivers, Gardens, P&T Lines, Railway-crossings etc., and enroute villages furnishing Geo- coordinates of each location with survey Nos of the lands through which the line is passing duly covering the corridor proposed to be cleared.			
3	a)	Hilly terrain	km	4445	8601
4	b)	Plain terrain	km	2968	5748
5	iii)	Fixing marking stones of size 200X200 x 1000 mm 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 1 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	442	486
6	iv)	Burgie details for identification for all Anchor towers with existing permanent marks like poles, telephone lines, buildings, etc.,	Per Anchor Tower	400	440
7	v)	v) Conducting soil resistivity tests	Per Test	766	843
	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	1326	1459
9	b)	Plain terrain	KM	886	975
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	270	297

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
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)		270	297
12	Viii)	a) Preparing the Schedules: PTCC Proposal : Containing PTCC questionnaire, topo sheet extracts with marking of the proposed line, SR Report, tower sketch, station single line diagram etc., (30 Copies/Sets)	Set	1069	1176
13	b)	Railway Crossing proposal with drawing are inclusive of graph sheets and other stationery materials, labour etc., (10 Sets)	Per crossing	1069	1176
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	766	843
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	4985	5484
	2	Check Survey by using their own Equipment			
16	a)	Hilly terrain	KM	2298	4290
17	b)	Plain Terrain	KM	1538	2864
18	3 a)	Taking block levels for Sub-stations: 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	1479	1627
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	1479	1627
20	c)	Taking level at 5M suitable grid interval in the sub-station area for plotting block levels, contour map.	No	32	35

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
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	14780	16258
22	e)	Furnishing cutting and filling quantities using appropriate software for earth work calculation.	Per Project	4434	4877
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	11823	13005
	4	Geo Technical Investigations:			
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 soil 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 specification and instruction of the engineers, for depths up to 6.0 m below natural ground level or refusal strata.	Mtrs	2212	2433
	b)	Conducting various laboratory tests on soil samples at approved laboratory including preparation of soil samples for determination of soil, Properties etc., Complete as per specification. Note: Laboratory identified shall be approved by ESCOM Engineers not below the rank of EE(Civil).			
25	i)	Bulk density and moisture content	Each	886	975
26	ii)	Sieve analysis	Each	886	975
27	iii)	Hydrometer Analysis	Each	886	975
28	iv)	Liquid limit and plastic limit	Each	886	975
29	v)	Shrinkage limits	Each	1035	1139
30	iv)	Specific gravity	Each	1035	1139
31	vii)	Standard proctor density test	Each	1035	1139
32	viii)	Swell pressure	Each	1187	1306
33	ix)	Free swell index	Each	1187	1306
34	x)	Uncombined Compressive strength	Each	1187	1306
35	xi)	Triaxial shear test	Each	1187	1306
36	xii)	One dimensional consolidation test	Each	1187	1306

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
37	xiii)	California bearing ratio	Each	1187	1306
38	C)	Submitting final report in 6 copies including all field records and laboratory test results, graphs and recommendations etc., complete as per specifications. 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 admissible for mobilization & Demobilization	Per Job	17738	19512
	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)	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	Latest KPWD SR Rates for hard soil	Latest KPWD SR Rates for hard soil
40	ii)	B.C. Soil	Cmt	Latest KPWD SR Rates for Ordinary soil	Latest KPWD SR Rates for Ordinary soil
41	iii)	Partially Submerged soil	Cmt	Latest KPWD SR Rates for Ordinary soil	Latest KPWD SR Rates for Ordinary soil
42	iv)	Fully submerged soil	Cmt	Latest KPWD SR Rates for Ordinary soil	Latest KPWD SR Rates for Ordinary soil
43	v)	Wet black cotton soil	Cmt	Rate for ordinary rock (Without blasting) of latest KPWD SR	Rate for ordinary rock (Without blasting) of latest KPWD SR
44	iv)	Dry fissured/Ordinary rock	Cmt	Latest KPWD SR Rates for Ordinary soil	Latest KPWD SR Rates for Ordinary soil

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
45	vii)	Latterite soil	Cmt	Rate for ordinary rock (Without blasting) of latest KPWD SR	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	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)			
47	i)	Normal Soil	Cmt	Rates as per item 5 + 50% extra	Rates as above per item 5 + 50% extra
48	ii)	B.C. Soil	Cmt		
49	iii)	Partially Submerged soil	Cmt		
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. Note: This item is applicable only when Black cotton, soil, wet black cotton soil, dry fissured rock, ordinary rock, Hard rock are encountered.	Cmt	Rates as per KPWD SR applicable to respective area +10% extra	Rates as per KPWD SR applicable to respective area +10% extra
	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.	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.

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
57	i)	1:4:8 concrete (M 7.5)	Cmt	Rates under plain concrete for foundation of latest KPWD SR	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	Rates under basement of latest KPWD SR
59	iii)	1:2:4 concrete (M-15)	Cmt	Rates under raft foundation of latest KPWD SR	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	Rates under raft foundation of latest KPWD SR
61	b)	<p>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.</p> <p>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. d) 50% above KPWD SR is proposed only for Tr line works from 2016.</p>	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 50% weightage to the basic rates of different proportion of concrete proposed above.
		Providing and fabricating TMT Steel reinforcement including straightning, cutting, bending, hooking, lapping and / or welding wherever required placing in position tying with binding wire and anchoring to the adjoining members wherever necessary including laps and wastages etc., complete as per design, and specification and directions (Laps and wastages not to be measured and paid)	kgs	New Item	For sub - station works, rate as per KPWD SR and for Transmission line works, add 10% extra
	9	Towers			
62	a)	Sorting of tower parts made of fabricated angle iron	MT	346	381
63	b)	Setting up of stubs templates and from one location to another location	Per Location	450	495
64	c)	Assembling and erection of towers including tightening of bolts and nuts including loading,unloading at store and site (Including the Wt. of stubs)	MT	2513	2764
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 - proof (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	12	13

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
66	e)	Welding of bolts and nuts	Per Bolt	12	13
		Note: For tower erections 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	2459	2705
68	b)	Supplying and fixing barbed wire as per specification	Rmtr	47	52
	11	Fixing of Boards			
69	a)	Fixing Danger Board	Nos	48	53
70	b)	Fixing Number Plate	Nos	48	53
71	c)	Fixing Phase plate	Set (3 Nos)	141	155
72	d)	Fixing Circuit Plates	Nos	48	53
	12	Stringing conductor with out allowing the conductor to touch the ground and with out 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 T & 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	10269 With Coyote ACSR	11296
74	ii		KM	10269 with Rabbitt on towers	proposed for deletion
75	i	For plain Tarrian	KM	7528 With Coyote ACSR	8281
76	ii		KM	3763 with Rabbitt on towers	proposed for deletion
		Stringing of Ground Conductor as above			
77		For hilly tarrian	KM	5025	5528
78		For plain Tarrian	KM	3764	4140

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
		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).		50% more above the rates specified for normal works is admissible for shutdown works of 33 kV and above lines, CTs, PTs, Las only. This is not applicable for 11 kV and LT Line shut down works.	50% more above the rates specified for normal works is admissible for shutdown works of 33 kV and above lines, CTs, PTs, Las only. This is not applicable for 11 kV and LT Line shut down works.
80		III) (A) River Crossing works (B) Railway Crossing Works (C) Breakdown works in substations & lines		100% extra	100% extra
81		IV) 2nd Circuit stringing with 1st circuit under live condition		75% extra	75% extra
82		V) (A) National highway and State highway crossing works (B) Works under shutdown condition in both substation and lines (Pre-programed works)		50% extra	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 terrain			
83		a) Anchoring single span upto 320 mtrs.	1 Span	5795 With Coyote	6375
84				2837 With Rabitt	proposed for deletion
85		b) Anchoring 2 span interval upto 640 mtrs with 1 (ONE) tangent tower only	2 Spans	7185 With Coyote	7904
86				3432 With Rabitt	proposed for deletion
87		c) Anchoring 3 span interval up to 960 mtrs with two tangent towers only	3 Spans	8425 With Coyote	9268
88				4054 With Rabitt	proposed for deletion

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
		ii) For plain terrian			
89		a) Anchoring single span up to 320 Mtrs	1 Span	4347 With Coyote	4782
90				2094 With Rabitt	proposed for deletion
91		b) Anchoring 2 span interval upto 640 Mtrs with 1 (ONE) tangent tower only	2 Spans	5566 With Coyote	6123
92				2567 With Rabitt	proposed for deletion
93		c) Anchoring 3 span interval up to 960 mtrs with two tangent towers only	3 Spans	6236 With Coyote	6860
94				3011 With Rabitt	proposed for deletion
		Stringing Ground Conductor			
		i) For Hilly terrian			
		a) Anchoring Single span upto 320 mtrs	1 span	New Item	2822
		b) Anchoring 2 span interval upto 640 mtrs with one tangent tower only	2 Spans	New Item	3364
		c) Anchoring 3 span interval up to 960 mtrs with two tangent towers only	3 Spans	New Item	3999
		ii) For plain terrian			
		a) Anchoring Single span upto 320 mtrs	1 span	New Item	2124
		b) Anchoring 2 span interval upto 640 mtrs with one tangent tower only.	2 Spans	New Item	2583
		c) Anchoring 3 span interval up to 960 mtrs with two tangent towers only.	3 Spans	New Item	3041
		NOTE: 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. 11kV & LT line shutdown works not included).			
	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	863 With Coyote	949

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
96			1 Span	423 With Rabbit	Proposed for deletion
97		b) Anchoring 2 span interval upto 640 Mtrs with 1 tangent tower only	2 Spans	1435 With Coyote	1579
98				692 With Rabbit	Proposed for deletion
99		c) Anchoring 3 Span interval up to 960 Mtrs with two tangent towers only	3 Spans	2104 With Coyote	2314
100		Proposed for deletion		1015 With Rabbit	Proposed for deletion
		ii) For Plain terrian			
101		a) Anchoring single span upto 320 Mtrs	1 Span	647 With Coyote	712
102				314 With Rabbit	Proposed for deletion
103		b) Anchoring 2 span interval upto 640 Mtrs with 1 tangent tower only	2 Spans	1057 With Coyote	1163
104				518 With Rabbit	Proposed for deletion
105		c) Anchoring 3 Span interval upto 960 Mtrs with two tangent towers only	3 Spans	1563 With Coyote	1719
106				788 With Rabbit	Proposed for deletion
		Stringing Ground Conductor			
		i) For Hilly terrian			
		a) Anchoring Single span upto 320 mtrs	1 Span	New Item	427
		b) Anchoring 2 span interval upto 640 mtrs with one tangent tower only	2 Spans	New Item	677
		c) Anchoring 3 span interval up to 960 mtrs with two tangent towers only	3 Spans	New Item	1000
		ii) For plain terrian			
		a) Anchoring Single span upto 320 mtrs	1 Span	New Item	323
		b) Anchoring 2 span interval upto 640 mtrs with one tangent tower only	2 Spans	New Item	521
		c) Anchoring 3 span interval up to 960 mtrs with two tangent towers only	3 Spans	New Item	760

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
	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	3010+832	3010+832
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	789+832	789+832
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 around the pipe using cast iron welding electrodes as per drawing including the cost of excavation (All materials to be supplied by the contractor)	Set	1582+1055	7370+2011
		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	2143+1916	2143+1916
	17	Station Structures			
111	a)	Errection, assembly and alignment of Station structure as per the directions of site Engineer.	MT	2372	2609
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	2210	2431
	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	47	51
114	b)	Assembly of Transformer parts like bushings, radiators, filling oil into Tr. etc., (for the total wt. of the Tr.)	MT	1059	1165
	c)	Filling oil to the power Tr., Conservator and radiator (for maintenance purpose only).			
115	i)	For 5 MVA to 20 MVA Tr.	Litre	2.26	2.49
116	d)	Filtration of oil using filter set of the contractor, to bring the insulation value to I.E. Specifications.	Litre	4.24	4.66
117	e)	Filtering Oil as above but with the filter set supplied by the ESCOM	Litre	2.26	2.49

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
	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	4875	5363
		10 MVA to 12.5 MVA Tr. 119	LS	New Item	9414
	20	Fabrication of Transformer railing and embedding in Transformer plinth. (Rails to be supplied by the ESCOMs)	LS	979	1077
120	21	Fixing of H.T. fuse units & wiring	Per Set (3 Nos)	1138	1252
	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			
		5/6.3 MVA		5917	6509
		8/10 MVA		New Item	6575
		Above 10 MVA		New Item	9862
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	23668	26035
	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	6654	7319
124	ii)	Assisting in Testing and Commissioning	Each	1333	1466
		Testing & Commissioning:			
125		Wiring: Identification, of wires Ferruling crimping and termination of wires in Breaker & Wiring up to control panel / Relay panels.	Set	5917	6509

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
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 through relays, operation of interlocks etc.,	Set	23668	26035
	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.	1729	1902
128	b)	Assisting in Testing and Commissioning	Set	520	572
	c)	Testing & Commissioning			
		Current transformers:			
		Wiring: Identification of wires Ferruling Crimping of lugs Connections up to marshalling box and Control panel. Current transformers:		1972	2169
		Tests: Insulation, Polarity, Ratio, Excitation			
129	i)	Testing & Commissioning of CTs : Tests: Insulation, Polarity, Ratio, Excitation	Set 3 Nos.	7888	8677
130	ii)	Potential Transformers: Wiring: Identification of wires Ferruling Crimping of lugs Connections up to marshalling box.	Set 3 Nos.	1972	2169
		Testing & Commissioning of PTs: Tests: Insulation, Polarity, Ratio, excitation.	Set 3 Nos.	7888	8677
	25	Erection of NCTs			
131	a)	Erection of NCTs with ground including movement from the point of unloading to the point of erection	Set	500	550
132	b)	Assisting in Testing and Commissioning	Set	64	70
	26	Erection of Isolators			
133	a)	Assembly, Erection alignment and wiring including movement from the point of unloading to the point of erection. (Upright)	Set	1040	1144
134	b)	Assisting in Testing and Commissioning (Upright)	Set	106	117
		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 by the firms themselves using their own testing equipments and staff in presence of the MRT staff who will witness the tests.			

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
	27	Erection of Lightning Arrestors			
135		Erection of Lightning arrestors and wiring including movement from the point of unloading to the point of erection	Set	260	286
136	28	Fixing of Solid Core insulator	Per Stack	86	95
137	29	Testing & Commissioning: Capacitor Bank with reactors	Each	15325	16858
		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 excavated soil, duct covering with RCC slabs.		As per Latest KPWD electrical SR applicable to respective areas.	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.		As per Latest KPWD electrical SR applicable to respective areas.	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 Latest KPWD electrical SR applicable to respective areas.	As per Latest KPWD electrical SR applicable to respective areas.
141	i)	25 mm dia (outer) 2mm to 2.5mm thick	Mtr	As per Latest KPWD electrical SR applicable to respective areas.	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	Material+ Labour		
149	i)	Cable tray of 600mm width (suitable for cable ducts of A,B & C type)	Rmtr	302+209	302+230
150	ii)	Cable tray of 300mm width (suitable for cable ducts of A,B & C type)	Rmtr	221+141	221+155
151	e)	Laying of control cables from equipments to control panels.	Rmtr	10	11

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
	31	Control Panels			
152	a)	Erection of control panels, auxiliary 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	3452	3797
153	b)	Wiring & assisting in testing and commissioning of panels.	Per Panel	5394	5933
154	c)	Test & Commissioning:			
		i) C & R Panels Wiring & Testing:			
		Wiring: Identification, Ferruling, Crimping, termination of wires in C&R panels.	Per Panel	5917	6509
		Testing: Testing for insulation level, Testing of relays, control operations for closing tripping etc., interlocks Alarm, Annunciation and Indication Checks.	Per Panel	23668	26035
	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	2078	2286
156	ii)	11kV Kiosk	Per Panel	1729	1902
	b)	Wiring & assisting in testing & Commissioning			
157	i)	11 kV indoor/ outdoor switchgear	Per Panel	689	758
158	ii)	11kV Kiosk	Per Panel	689	758
	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	65503	72053
160	ii)	For single 11kV panel indoor/outdoor type /Kiosk Nos	Nos.	13098	14408
161	iii)	For additional 11kV panel indoor	Nos.	6549	7204
162	iv)	For each additional 11kV panel out door type/Kiosk	Nos.	10009	11010
		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.			

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
163	a)	Main Bus/Cross Bus as above using Single Lynx Conductor		6152	6767
	b)	Main Bus/Cross Bus as above using Single Coyote Conductor		6152	6767
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	Deleted	Deleted
165	34	Faradays Cage Formation as per specification:	Per Bay	254	279
	35	Groundmat	Nos.	10009	11010
166	a)	Laying of M.S. Flats, welding, applying ACB paint to welded portion and covering with sodium bentonite clay	Rmtr.	33	36
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.		50x6mm - 273 50x8mm - 291 75x6mm - 566 75x8mm - 505 75x12mm - 535	50x6mm - 314 50x8mm - 335 75x6mm - 651 75x8mm - 581 75x12mm - 615
168	c)	Same as above but without sodium bentonite clay		50x6mm - 135 50x8mm - 152 75x6mm - 367 75x8mm - 395 75x12mm - 429	50x6mm - 155 50x8mm - 175 75x6mm - 422 75x8mm - 454 75x12mm - 493
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.		50x6mm - 226 50x8mm - 253 75x6mm - 541 75x8mm - 571 75x12mm - 618	50x6mm - 260 50x8mm - 296 75x6mm - 633 75x8mm - 656 75x12mm - 710
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	260	299
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	864	994
	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".			

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
172		a) Drilling 150mm dia bore	Rmtr	687	687
173		b) 40 mm dia MS rod	Rmtr	541	638
174		c) Bentonite Clay	Kgs	15	15
175		d) Cost of GI flat for joining two rods by welding to obtain continuous length	Per joint	572	682
	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	1427	1038
		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		
179		c) Supplying and laying of 1.1KV, 6 Sqmm PVC cable or any other specified size, testing and commissioning of yard lights.	Rmtr		
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	
181		a) Supplying and painting of two coats of good quality Red Oxide primer after cleaning and scrapping the surface.	Sq Mtr	23+46	23+51
182		b) As above with 2 coats of good quality Aluminium paint after 2 coats of good quality Red Oxide primer.	Sq Mtr	50+70	50+77
183		c) Supplying and painting two coats of aluminium paint after cleaning and scrapping the surface without applying Red Oxide primer	Sq Mtr	24+39	24+44
184		d) As per (b) but with synthetic enamel paint	Sq Mtr	60+77	60+85
185		e) Supplying and painting two coats of Synthetic enamel paint after cleaning and scrapping the surface without applying red oxide primer.	Sq Mtr	32+37	35+41
	40	Battery Set and charger			
	a)	Installing, assembling, filling of acid, wiring, assisting, test-charging and discharging Battery set.			

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
186	i)	110 Volts	Set	8632	8632
187	ii)	48/24 Volts	Set	3456	3456
	b)	Erection of Battery Charger and wiring			
188	i)	110 Volts	Set	1379	1379
189	ii)	48/24 Volts	Set	1379	1379
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 33 kV Stations)	Per Set	17042	17042
	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		As per KPWD SR applicable to respective area	As per KPWD SR applicable to respective area
	42	PLCC Equipments			
195	a)	Erection of mounting structures for coupling capacitors	Set	4912	5403
196	b)	Erection of Coupling capacitors/wave traps/LMU.	Set	1846	1846
197	c)	Wiring , testing and commissioning	Set	486	486

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
	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	276	304
	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. 60/- per KM, subject to a Min. of Rs.10000/-	Proposed for deletion as KPTCL SR format is adopted
200	ii)	51 to 100 KMs		Min + Rs.45/- per KM	Proposed for deletion as KPTCL SR format is adopted
201	iii)	101 to 150 KMs		Min + Rs.34/- per KM	Proposed for deletion as KPTCL SR format is adopted
202	iv)	Beyond 150 KMs		Min + Rs.21/- per KM	Proposed for deletion as KPTCL SR format is adopted
	b)	Using 10 MT Truck & Trailor			Proposed for deletion as KPTCL SR format is adopted
203	i)	1 to 50 KMs		Rs. 60/- per KM, subject to a Min. of Rs. 2000/-	Proposed for deletion as KPTCL SR format is adopted
204	ii)	51 to 100 KMs		Min + Rs.45/- per KM	Proposed for deletion as KPTCL SR format is adopted
205	iii)	101 to 150 KMs		Min + Rs.34/- per KM	Proposed for deletion as KPTCL SR format is adopted
206	iv)	Beyond 150 KMs		Min + Rs.21/- per KM	Proposed for deletion as KPTCL SR format is adopted

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
	c)	Using 20 MT Truck & Trailor.			Proposed for deletion as KPTCL SR format is adopted
207	i)	1 to 50 KMs		Rs. 475/- per KM, subject to a Min. of Rs. 25000/-	Proposed for deletion as KPTCL SR format is adopted
208	ii)	51 to 100 KMs		Min + Rs 396 /- per KM	Proposed for deletion as KPTCL SR format is adopted
209	iii)	101 to 150 KMs		Min + Rs 215/- per KM	Proposed for deletion as KPTCL SR format is adopted
210	iv)	Beyond 150 KMs		Min + Rs 192/- per KM	Proposed for deletion as KPTCL SR format is adopted
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.		30	Proposed for deletion as KPTCL SR format is adopted
212		b) Transportation of other materials		27% of the above	Proposed for deletion as KPTCL SR format is adopted
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.		Prevailing Board approved Rates	Proposed for deletion as KPTCL SR format is adopted
		Transportation:			
		a) Transportation of Transformer, CTs PTs, Breakers, C & R Panels, 11kV Switchgears and EHT LA's only			
		1. Using 10 MT Lorry			
		Upto 250 kms	km	New Item	40
		greater than 250 kms	km	New Item	35
		2. Using 10 MT Truck & Trailor			
		Upto 250 kms	km	New Item	70
		greater than 250 kms	km	New Item	55
		3. Using 11MT to 20MT Truck & Trailor			
		Upto 250 kms	km	New Item	90
		greater than 250 kms	km	New Item	70

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
		4. Using 21 MT to 40 MT Truck & Tractor			
		Upto 250kms	km	New Item	135
		greater than 250kms	km	New Item	110
		5. Using 41 MT to 80 MT Truck & Tractor			
		Upto 250kms	km	New Item	575
		greater than 250kms	km	New Item	500
		6. Using 81 MT to 120 MT Truck & Tractor			
		Upto 250kms	km	New Item	1400
		greater than 250kms	km	New Item	1100
		b) Crane hiring charges for substation works			
		1. Up to 5 hours	km	New Item	1500
		2. Greater than 5 hours	km	New Item	1200
		NOTE : 1. The rates are for up and down journey and for a minimum distance of 300kms. 2. Detention charges are Rs. 5000.00 per day for vehicles upto 40MT tractor and Rs. 15000.00 for vehicles greater than 40Mt tractor.			
	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	1824	2006
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	1824	2006
216		c) Loading of other materials like structural steel, building materials etc.,	MT	323	355
217		d) Unloading of other materials like structural steel, building materials etc.,	MT	323	355
	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.		For substation works as per KPWD SR and for Transmission line works Add 25% extra	For substation works as per KPWD SR and for Transmission line works Add 25% extra

Sl. No.	Item No.	Description	Unit	Labour Charges Common SR 2016-17 in Rs.	Proposed Labour Charges Common SR 2018-19 in Rs.
	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 including the cost of excavation, backfilling (Concreting charges extra)	Nos	1374	1511
220		b) Erection of DP structure including fixing of braces insulators etc., as per the approved drawings and specifications including the cost of excavation, backfilling (Concreting charges extra).	Set	3250	3575
221		c) Fixing of V-Shape cross arms, single top supports and insulators.	Set	96	106
222		d) Fixing of spiral earth electrodes	Nos	35	39
223		e) Road/P&T Guarding	Set	949	1044
224		f) Stringing Rabbit conductor, fixing disc insulator to cross arms etc.,	KM	2608	2869
225		g) Stringing Coyote conductor, fixing disc insulator to cross arms etc.,	KM	4031	4434
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 concrete with steel reinforcement	Cmt	799	879
229		iii) Dismantling of concrete only	Cmt	390	429
230		iv) Dismantling charges in all other cases		75% of erection charges in general	75% of erection charges in general

PART - 6

- a) Special Locality Allowance
- b) Testing, Pre Commissioning & Transformer Repair (Major and Minor) Charges

Special Locality Allowance:

Locality allowance at the rate noted below is given over and above the schedule of labour for the listed areas.

Sl. No.	Name of ESCOM	Area	As per CSR 16-17	Percentage over & above CSR
1	BESCOM	Davanagere District: Channagiri, Honnalli Taluks	20	20
		Tumkur District: Pavagada Taluk.	15	15
		All Divisions coming under Bangalore Metropolitan Area Zone (BMAZ)	30	30
		Anekal, Chandapura, Hosakote & Devanahalli. In BRAZ	20	20
2	MESCOM	Dakshina Kannada District: Bantwala, Mangalore, Sulya, Puttur, Belthangadi Taluk	45	45
		Udupi District: Udupi, Kundapura, Karkala Taluk	45	45
		Chickmagalur District : Chichmagalur, Koppa, Mudigere, Narasimharajapura, Sringeri Taluk	45	45
		Chickmagalur District : Kadur, Tarikere Taluk	35	35
		Shimoga District : Hosanagara, Thirthalli, Sagara, Taluk	45	45
		Shimoga District : Soraba, Shikaripura	35	35
		Shimoga District : Shimoga, Bhadrawathi Taluks	25	25
3	HESCOM	Dharwad District:		
		a) Kalghatagi	30	30
		b) Dharwad Taluk	20	20
		Haveri District:		
		a) Hanagal, Herikerur	30	30
		b) Byadagi, Shiggon, Savanur Taluks	20	20
		Belgaum District: Hukkeri, Belgaum, Bailahongala, Soundathi Taluks	20	20
Belgaum District : Khanapura Taluk	45	45		
Uttar Kannada District:	45	45		
4	CESCO	Kodagu District: Madikeri, Virajpet, Somwarpet Taluks	40	45
		Mysore District: H.D.Kote, Hunsur and Piriypattana	30	30
		Chamaraj Nagar District: Gundlupet, Chamarajanagar, Kollegal Taluk	30	30
		Chamaraj Nagar District: BR Hills in Yalandur Taluk	15	15
		Hassan District: Sakaleshpura, Hassan, Arakalagudu, Belur, Alur.	40	40
5	GESCOM	Taluks: Raichur, Koppal, Bellary, Gangavathi, Sandur, Manvi, Sindhanur, Shahapur, Jewargi, Sedam	15	15
		Taluks: Surpur, Devadurga	25	25

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

b) Testing, Pre Commissioning & Transformer Repair Charges

Sl. No.	Description	Testing Charges
1	LT Current Transformer Upto 200/5 Amps	Rs. 200/CT
2	LT Current Transformer Above 200/5 Amps	Rs. 350/CT
3	11kV Current Transformer	Rs. 600/CT
4	11kV Potential Transformer	Rs. 400/PT
5	Bidirectional Single Phase Meter	Rs. 200/Meter
6	Uni-directional 3 Phase ETV Meter	Rs. 1000/Meter
7	Bidirectional 3 Phase ETV Meter	Rs. 1800/Meter
8	ABT Feature 3 Phase ETV Meter	Rs.2400/Meter
9	Unidirectional Single Phase Meter	Rs.100/Meter
10	Unidirectional 3 Phase Meters	Rs.600/Meter
11	Onsite testing RMU	Rs. 4080/Unit
12	Onsite testing LBS	Rs. 4080/Unit
13	11 kv METERING Pre-commissioning Test charges free & subsequent testing charges in case of failure	Rs.4080/Unit (New addition) in CSR 2016
14	Onsite Cable Testing a. HT UG Cable 1. Less than 250 Mtrs 2. More than 250 Mtrs b. LT UG Cable	Only Megger Test Rs. 20,000/- Only Megger Test
	Ref No: BESCO/CGM(T)/BC-31/F-2097/2009-10/Cys-152 dtd 09.12.2009	
15	Fault Location for HT UG Cables beyond the meeting point at Consumers request in BESCO and request through ESCOMs for consumers in other ESCOM jurisdiction Ref No: BESCO/CGM(T)/BC-31/F-2097/2009-10/Cys-151 dtd 09.12.2009	Rs. 15,000/- per fault within BESCO Jurisdiction. In addition to above Incidental charges like Pol+Rent on vehicle and TA & DA as applicable for consumers of other ESCOMs
16	Transformer Repair Charges (MINOR) : Capacity	Rate in Rs.
a	Up to 25 kVA	4,200/-
b	Above 25 kVA upto 63 kVA	4,800/-
c	Above 63 kVA upto 100 kVA	6,000/-
d	Above 100 kVA upto 250 kVA	12,000/-
e	Above 250 kVA upto 500 kVA	12,000/-

Sl. No.	Description	Testing Charges
17	Transformer Repair Charges (MAJOR):	
	Capacity	Rate in Rs.
i	25 kVA	12,552/-
ii	63 kVA	17,024/-
iii	100 kVA	20,748/-
18	Conversion of CSP type transformers into Conventional Type Ref No: CGM(OP)/DGM(OP-1)/ AGM (Tr.M.Cell)/ BC-11/F-1351/13-14/CYS-50 "dtd: 25.06.2013"	
	Capacity	Rate in Rs.
i	25 kVA & 63 kVA	
	Material Portion in Rs.	700/-
	Labour Charges in Rs.	200/-
	Total Additional Cost in Rs.	900/-
ii	100 kVA	
	Material Portion in Rs.	800/-
	Labour Charges in Rs.	200/-
	Total Additional Cost in Rs.	1000/-

PART - 7

Technical Specification for Overhead and Underground Service Connection works for the Year 2018-19

Technical Specification for Overhead and Underground Service Connection works for the Year 2018-19

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.,

- 16 SWG braized conduit pipe finished with black stove enamelling both inside and outside.
- PVC conduit pipe
- Class 'A' (light) G.I. Pipe
- 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	1) Using 2 single core wires						
Conduit pipe	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 back with 40x20 mm batten around 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 buried 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 buried 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 buried 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 Cables for 3 phase Using 4 core Cables 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
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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 - 8

Scale of Inspection Fees of Electrical Inspectorate Schedule 2018-19

Scale of Inspection Fees of Electrical Inspectorate Schedule

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.

SI.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 Rules 1956 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.

SI.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

SI. 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.

SI. 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.

SI. 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.	Capacity	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 kVA shall be levied	An additional fee of Rs.500/- per 1000 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 Rs.50/- per kW or part thereof subject to maximum of Rs.500
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)	

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	
	a) Without CT & PT	125/-
	b) 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 :**
- 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.
 - 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.	Capacity	Fees in Rs.
1.	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 : 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.	Particulars	Fees in Rs.
	Single Phase LV installation	300/-
	Three phase MV installation	500/-
	HV installation	1000/-
	EHV installation	3000/-

Note : 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) Above 1000 kVA up to and including 5000 kVA	2000/-
2.	d) Above 500 kVA	2500/-
	Drawing of transformer centers and HT installations	
	a) Up to and including 100 kVA	500/-
	b) Above 100 kVA & upto 1000 kVA	1000/-
3.	c) Above 1000 kVA up to and including 5000 kVA	2000/-
	d) Above 5000 kVA	3000/-
4.	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/-
5.	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/-
	Cinema theatres/ auditorium	1000/-
	Lifts/escalators etc	500/-
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/-

PART - 9

Circulars

**Data sheet for Earth work and concreting works for RMU Foundation
for Different makes presently in use at BESCOM.**

Sl. No	Unit	Shinder		ABB		Seimens		MEI		
		Dimension for 2OD + 1VL	Dimension FOR Additional 1OD or 1VL	Dimension for 2OD + 1VL	Dimension FOR Additional 1OD or 1VL	Dimension for 2OD + 1VL	Dimension FOR Additional 1OD or 1VL	Dimension for 2OD + 1VL	Dimension FOR Additional 1OD or 1VL	
1	Earth Excavation as per labour charges item No. 28 (28.1 to 28.5)	LxBxD in Mtrs CMT	1.0x0.53x1.35 0.72	0.8x0.53x1.35 0.57	1.5x1.23x1.35 2.5	0.5x1.23x1.35 0.83	2.35x0.8x1.05 2	0.75x0.8x1.05 0.63	2.15x1.5x1.35 4.35	0.7x1.5x1.35 1.37
2	Bed concreting with CC 1:2:4 as per labour charges item No.28.9	LxBxD in Mtrs CMT	1.0x0.53x0.15 0.08	0.8x0.53x0.15 0.07	1.5x1.23x0.15 0.28	0.5x1.23x0.15 0.09	2.35x0.8x0.15 0.43	0.75x0.8x0.15 0.1	2.15x1.5x0.15 0.48	0.7x1.5x0.15 0.16
3	Foundation with Reinforcement CC 1:2:4 as per labour charges item No. 28.9	LxBxD in Mtrs CMT	1.0x(0.15x2)x1.2 0.36	0.8x(0.15x2)x1.2 0.29	1.5x(0.3x2)x1.2 1.08	0.5x(0.3x2)x1.2 0.36	2.35x(0.1x2)x0.9 0.42	0.75x(0.1x2)x0.9 0.14	NA NA	NA NA
4	Providing Reinforcement as per labour charges item No. 28.1	Kgs.	30	10	10	3.5	17	6	NA	NA
5	Providing Plinth on the stone masonry as per labour charges item No. 28.9	LxBxD in Mtrs CMT	NA	NA	NA	NA	NA	NA	2.15x0.19x0.15 0.06	0.7x0.19x0.15 0.02
6	Construction of Stone masonry as per labour charges item No. 28.11	LxBxD in Mtrs CMT	NA	NA	NA	NA	NA	NA	2.15x0.19x1.05 0.43	0.7x0.19x1.05 0.14

Approximate Weights of some Standard Materials

Sl. No.	Material	Section Detail	Weight
1	11 KV 3 pin special cross arm	65x65x6 mm - 1980 mm	11.48 kgs per piece
2	4 pin cross arm	45x45x5 mm - 1110 mm	3.774 kgs per piece
3	2 pin cross arm	45x45x5 mm - 510mm	1.724 kgs
4	HT S.T. Supports	50x8 mm	1.178 kgs
5	LT S.T. supports	50x6 mm	0.864
6	RCC Pole Clamp	50x6 mm - 428 mm	1.027 kgs
7	PCC Pole Clamp	50x6 mm - 385mm	0.924 kgs
8	6SWG GI Wire		5 mtrs per KG
9	8 SWG GI Wire		8 mtrs per KG
10	10 SWG GI Wire		12 mtrs per KG
11	12 SWG GI Wire		14 mtrs per KG
12	Barbered Wire		6-6.5 mtr per KG
13	7/10 Guy Wire		6.5-7 mtr per 10 KG
14	45 KN Disc Insulator		4.75 kg
15	No. 15 Strain Insulator		1.5 kg
16	No. 8 Strain insualtor		450 gms
17	Anchor Rod	a) 12mm dia MS round - 1760mm b) MS angle 65x65x6 - 300mm	1.566 kgs 1.74 kgs
18	Horizontal Cross Arm	50x50x6 - 980 mm	4.86 kgs
19	Spiral earthing	No. 8 SWG G.I. wire or higher size closely wound - 115 turns	-
20	No. 4 ACSR (Squirrel)	6/2.11mmAl+1/2.11mmSteel	85 kgs per km
21	No. 2 ACSR (Weasel)	6/2.59mmAl+1/2.59mm Steel	128 kgs/ km
22	No. 1 ACSR (Rabbit)	6/3.35mmAl+1/3.35mm Steel	213 kgs per km
23	Coyote ACSR	26/2.54 mmAl+7/.1.90mm Steel	521 kgs per km

Approximate Dimensions of the terminals (Crimping Type)

Sl. No.	SIZE	TYPE	ID	OD	Length of Barrel	Total length
1	95 Sq.mm	All Dimensions in mm				
		A	13.2	17.4	28	64
		B	12.8	15.6	20	58
		C	13.5	17.4	20	55
		D	12.8	17	32	74
2	150 Sq.mm	A	16.4	21.5	34	62
		B	16	19.6	26	70
		C	16.5	21.2	26	69
		D	16	21.2	38	72
3	185 Sq.mm	A	18.4	24	36	84
		B	18	22	28	83
		C	18.5	23.5	32	78
		D	18	24	43	95
4	240 Sq.mm	A	21	28	44	102
		B	22	26	34	97
		C	21	26.5	38	92
		D	22	28	50	112
5	400 Sq.mm	A	26.8	35.5	56	130
		B	28	33.2	44	89
		C	26.8	34.8	44	114
		D	27.5	38.5	70	115
6	630 Sq.mm	A	34.9	46	59	154
		B	39	46.3	68	165
		C	35	45	56	144
		D				

A - Alluminium lugs,
 B - Tinned Copper Light duty,
 C - Tinned Copper Heavy duty Standard barrel lugs,
 D - Tinned Copper Heavy duty Long Barrel lugs

**HOT DIP GALVANISED BOLTS AND NUTS : GRADE 5.6/5.0 & 4.6/4.0
APPROXIMATE WEIGHTS**

Sl. No.	Size	No. of Pcs per 50 kg	Gms. of Per Pcs.
1	BOLT & NUT M12 X 30MM	852	59
2	BOLT & NUT M12 X 35MM	803	62
3	BOLT & NUT M12 X 40MM	756	66
4	BOLT & NUT M12 X 45MM	711	70
5	BOLT & NUT M12 X 50MM	672	74
6	BOLT & NUT M12 X 55MM	643	78
7	BOLT & NUT M16 X 30MM	430	116
8	BOLT & NUT M16 X 35MM	412	121
9	BOLT & NUT M16 X 40MM	390	128
10	BOLT & NUT M16 X 45MM	370	135
11	BOLT & NUT M16 X 50MM	351	142
12	BOLT & NUT M16 X 55MM	336	149
13	BOLT & NUT M16 X 60MM	317	158
14	BOLT & NUT M16 X 65MM	297	168
15	BOLT & NUT M16 X 70MM	276	181
16	BOLT & NUT M16 X 75MM	271	185
17	BOLT & NUT M16 X 80MM	266	188
18	BOLT & NUT M16 X 40MM	224	223
19	BOLT & NUT M16 X 45MM	213	235
20	BOLT & NUT M16 X 50MM	200	250
21	BOLT & NUT M16 X 55MM	190	263
22	BOLT & NUT M16 X 60MM	181	276
23	BOLT & NUT M16 X 70MM	169	296
24	BOLT & NUT M16 X 45MM	122	410
25	BOLT & NUT M16 X 50MM	119	420
26	BOLT & NUT M16 X 55MM	111	450
27	BOLT & NUT M16 X 60MM	108	463
28	BOLT & NUT M16 X 65MM	102	490
29	BOLT & NUT M16 X 70MM	100	500
30	BOLT & NUT M16 X 75MM	96	521
31	STEP BOLT WITH 2 NUT M 16 X 150 MM	165	303
32	STEP BOLT WITH 2 NUT M 16 X 175 MM	133	376
33	PACK WASHERS M 12 & M 16 5/6/10/12 MM THK	-	34
34	SPRING WASHERS M 12 & M 16	-	-