KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM

Present: Sri T.K Jose, Chairman
Adv A.J Wilson, Member
Sri B Pradeep, Member

OP No. 12/2024

In the matter of	:	Petition for approving Cost Data -2024 and per kVA rates for distribution works based on revised Uniform Labour Data and rate of materials
Petitioner	:	Thrissur Corporation Electricity Department
Petitioner represented by	:	Sri Jose T.S, Electrical Engineer
Date of hearing	:	09.07.2024, 11 AM
Venue	:	Court hall of the Commission (Hybrid hearing mode)

Order dated 26.11.2024

1. Thrissur Corporation Electricity Department (hereinafter called TCED), filed a petition on 26.02.2024 before the Commission with the following prayers.

   "It is humbly prayed that the Hon. Commission may kindly approve the Cost Data -2024, ULD -2024 and the per kVA rates for recovery of expenditure under section 46 of Electricity Act, 2003. TCED may also be authorized to collect the applicable GST from consumers based on the orders issued by the Government in this behalf from time to time"

2. Summary of the petition filed by the petitioner is given below.

   (a) As per the Regulation 33(1) of the Supply Code 2014, the licensee shall annually obtain the approval of the Commission for cost data of materials and work for recovery of expenditure under Section 46 of Electricity Act 2003. The Commission vide order dated 12.02.2019 in OP No. 08 of 2018 had approved the cost data of TCED for the FY 2018-19 based on DSR 2016. The Government of Kerala vide order dated 22.12.2019 had decided that the estimates for all public works being executed through all

Engineering Departments, PSU's and Accredited Agencies shall be prepared based on DSR 2018 rates of each item plus applicable cost indices effective from 1.4.2020 onwards. Thereafter, the Government vide GO dated 26.6.2020 deferred the implementation of DSR 2018 and ordered to continue with DSR 2016. Later on, Public Works Department of Kerala vide Circular dated 09.09.2021 published the cost indices to applied while preparing estimates based on DSR 2018 and informed that DSR 2018 would be mandatory for all estimates with effect from 15/08/2021 based on Government order dated 13/08/2021.

(b) The inflationary trend in the economy does have its impact in the cost of labour and materials in the electricity sector. In accordance with the Government order mentioned in pre-paragraph, the labour rates of distribution works were revised in accordance with DSR 2018 applying revised cost index. The methodology followed in estimation of Cost Data approved by KSERC on 12.02.2019 is generally followed this time also. However, standardization of works and materials under distribution sector had been undertaken this time. The methodology followed in arriving at the cost data is as follows.

(c) *Uniform Labour Data -2024* is used for estimation of Probable Amount of Contract of various works. The Uniform Labour Data 2024 (ULD-24) was prepared based on DSR 2018 applying cost index of Thrissur as per the latest cost index published by Chief Engineer (Administration), PWD on 9.9.2021. The cost index for Thrissur is **1.3559** as per the above order. Since the contractor's profit was taken as 15% in PRICE software and DSR 2018, the Uniform Labour Data was also calculated by providing **15%** contractor's profit. The ULD-2024 contains certain new works added as part of standardization and rates for HT & LT ABC works. The ULD-2024 had been approved by the Thrissur Corporation Municipal Council for submission before the Commission.

(d) *Standard Rate of Distribution Materials:* The materials rates had been arrived by adopting the rates from TCED store and from KSEBL, for items not purchased internally. The latest market price for materials like distribution transformer and RMU's were adopted.

(e) *Transportation charges:* In cases where basic data is not available, transportation cost is arrived by applying inflation in the earlier approved transportation charges of the prevailing Cost Data. In other cases, transportation charge had been arrived based on the rates taken from DSR 2018.

(f) *Cost Data 2024:* The Cost Data 2024 has been prepared by adopting the rates of materials and labour rates as per Uniform Labour Data 2024 (ULD -

2024). There are altogether 134 items in the cost data. New additions to the Cost Data are mostly related to works with ABC conductors. Also use of GI posts is being promoted in the electrical jurisdictional area of TCED rather than PSC poles and the estimates for line construction as well as installation of transformers with GI poles are included in the Cost Data.

(g) *Per KVA Rates:* As per clause 4(13) of Electricity (Right of Consumers) Rules 2020, notified by the Central Government, for electrified areas up to 150 KW or such other higher load as the Commission may specify, connection charges shall be fixed on the basis of load, category of connection sought and average cost of connection of the distribution licensee. In compliance to the above, a methodology for arriving at per KVA rates had been formulated.

(3) After detailed scrutiny of the petition, TCED was requested vide letter dated 29.04.2024 to submit certain clarifications & additional documents and to rectify the defects noticed in the petition. The content of the letter is extracted below.

*" **I) Cost Data 2024***

1) Copy of latest purchase orders of major materials such as RMUs, Transformers, GI & PSC Poles, UG & ABC cables and ACSR conductors

2) In the estimates for transportation of single poles by hired vehicles, the rates for transportation of four number of poles as per labour data is adopted resulting in quadrupling of rates.

3) For the construction of LT lines/pole insertion /providing strut, etc GI poles of 9 metre length are proposed and for construction of HT lines/pole insertion/providing strut etc GI poles of 11 metre length are proposed. The reason for proposing poles of higher length shall be reported. Also the cost of GI poles appears to be on the higher side. The technical specification of GI poles shall also be reported.

4) In the material portion of the estimate for installation of transformers, 5 numbers of earth pipes are included whereas in labour portion, labour charges for 10 numbers earthing are claimed.

5) There is considerable increase in the number of poles for drawing HT lines (29 numbers in lieu of 24) and LT lines (33 numbers in lieu of 28) compared to the earlier approved Cost Data 2018-19.

6) As part of standardization of distribution lines, transformers stations and RMU stations, a lot of new materials are seen proposed in the cost data. In case of transformer installation; transformer fencing, distribution boxes

and transformer meter box etc. are newly proposed. Please clarify whether the lines, transformers stations, RMUs installed as part of normal and deposit works are presently being constructed as per the standards proposed.

7) *The cost of most of the materials in the petition of TCED are much higher than the cost of similar items of KSEB Limited . A comparison statement showing the cost of some high value items of materials proposed by TCED and that of KSEB Limited (Approved for the cost data of distribution works of KSEB Limited vide OP No 36/2023) is given below.*

Sl No.	*Name of Material*	*UoM*	*Rate proposed by TCED (₹)*	*Rate approved to KSEB Ltd (₹)*	*Difference in percentage*
1	*Pole PSC 8 M*	*No*	*3850*	*3364*	***14.4***
2	*Pole PSC 9 M*	*No*	*4725*	*3908*	***21***
3	*A type GI Pole 12 M*	*No*	*36946*	*18665*	***98***
4	*Conductor ACSR Rabbit*	*metre*	*48*	*42*	***14***
5	*11 KV UG Cable 3x 300 sq mm*	*metre*	*1770*	*1316*	***34.5***
6	*Distribution Transformer 3 Phase 100 kVA 11kV/433 V ONAN*	*No*	*295826*	*227681*	***30***
7	*Distribution Transformer 3 Phase 160 kVA 11kV/433 V ONAN*	*No*	*440258*	*342554*	***28.5***
8	*Distribution Transformer 3 Phase 250 kVA 11kV/433 V ONAN*	*No*	*573952*	*453592*	***26.5***

For most of the other items of materials also, the rates are higher compared to that of KSEB Limited. The reason for the much higher rates may be reported. The Commission while approving the Cost Data of distribution works of TCED for 2018-19 on 12.02.2019 (OP No. 8/2018) observed as follows.

" During the State Advisory Committee meeting held on 17.12.2018, the KSEB Ltd submitted that, if the material requirements of small licensees such as distribution poles, transformers and other similar materials are informed to KSEB Ltd in advance, the same also can be arranged along with the bulk purchase of such items by KSEB Ltd. Hence, the Commission is of the view

that, the small licensees including TCED may communicate the requirements of distribution poles, transformers and other similar items in advance so that, KSEB Ltd can purchase such items along with their annual procurement of materials". Action taken by TCED in this regard may be reported.

8) *For the tasks of giving weather proof connections (Annexures 1 to 5 of the petition) transportation charges for minor materials are claimed even though the labour charges as per Uniform Labour Data includes conveyance of materials also.*

9) *While approving the Cost Data of distribution works of KSEB Limited vide OP No 36/2023 on 8.2.2024, the Commission has approved the Cost Data of 42 items of works excluding service connections for which KVA/KW rates are proposed by KSEB Limited. On verifying the estimates for such works proposed by TCED, it is noted that the estimated costs proposed for 36 items of work by TCED are higher than that approved by the Commission for KSEB Limited. Out of this, for 31 items of work, the rates proposed are higher than 10% of the rates approved for KSEB Limited and for 24 items the rates are higher than 20%. The rates proposed in the following cases are more than 30% of the rates approved for KSEB Limited. a) Post insertion for LT single phase overhead line (without stay) (30.17%) b) Providing LT stay (33.52%) and c) Constructing 11 kV OH Line with ACSR Raccoon using A type Poles (30.5%). Since the estimated cost claimed by TCED is much higher than that of KSEB Limited, new applicants/consumers in the small distribution area of TCED have to pay much higher rates compared to applicants/consumers coming under the distribution area of KSEB Limited.*

10) *Copies of resolution/orders of appropriate authority approving the uniform labour data and standard rates of distribution materials.*

II) Per KVA/KW rates

As per rule 4(13) of Electricity (Right of Consumers) Rules 2020 notified by the Government of India," for electrified areas up to 150 kW or such higher load as the Commission may specify the connection charges for new connection shall be fixed on the basis of the load, category of connection sought and average cost of connection of the distribution licensee so as to avoid site inspection and estimation of demand charges for each and every case individually". As per the addendum to the draft of the Kerala Electricity Supply (Fifth Amendment) Code published by the Commission, the following amendment is proposed to Regulation 32(2) of Supply Code 2014. "For consumers/ applicants availing supply at LT and 11kV, excluding those consumers under Regulation 36 of this Code and consumers/ applicants whose premises is at a distance of over 200m from the existing distributing main at the applicable voltage level, the licensee shall recover the

expenditure based on the per kVA/ kW rate approved by the Commission. The per kVA/ kW rates shall be differentiated based on the load factor, power factor, category of connection, voltage, total consumption of electricity during any specified period of time, geographical position etc. of the consumers. Provided that for consumers/ applicants with connected load up to 10 kW, the connection charges as above shall be based on appropriate slabs of connected load and as approved by the Commission from time to time" The draft of the amendment to the Supply Code implies that per KVA/KW rates have to be implemented to all LT consumers/applicants and HT consumers/applicants excluding those consumers coming under Regulation 36 of Supply Code.

In the present proposal, TCED has proposed per KVA rates only for LT consumers with loads in the range of 50 KVA to 100 KVA. In the light of the above, TCED shall file a separate petition for approval of per KVA/KW rates taking into consideration of all the points mentioned above within three months from the date of notification of Kerala Electricity Supply (Fifth Amendment) Code by the Commission."

(4)

(a) In response to the anomalies pointed out by the Commission, the licensee submitted an additional submission on 31/05/2024 and a reply on the observations for the kind consideration of the Commission. On scrutiny of the additional submission, it is noted that the licensee rectified most of the anomalies pointed out by the Commission. But the estimates for drawing High Tension Aerial Bunched Cables (HT ABC) and Low-Tension Aerial Bunched Cables (LT ABC) were revised considering the latest purchase order costs of HT & LT ABC as approved by the Commission for KSEB Limited during February 2024. The estimates for HT ABC have been revised upward, while the estimates for LT ABC have decreased.

(b) Replies of TCED to the some of the observations of the Commission are detailed here. In reply to query (item 3 of the letter to TCED) regarding use of GI poles of higher length for construction of LT and HT lines as well as pole insertion/providing strut etc., TCED informed as follows. "*Height of LT post with 9 m and HT post with 11 m has been standardized in the distribution areas of the TCED, since the distribution area of the TCED covers central part of Thrissur town where the famous Thrissur pooram, Pulikali cultural festival celebrated in association with Onam, Buon Natale cultural festival organized by the Thrissur archdiocese and Thrissur citizenry in association with Christmas celebration, Republic Day parades etc. are being hosted every year. So, for the smooth functioning of all these programs and to ensure safety to the public, line clearance from the ground is very important, that's the reason, why the TCED is opting posts with higher length. If the length of posts is reduced, elephants, tableau etc. in association all these functions will find it difficult to move across the town area. The other advantage of using posts with higher length is that it maintains proper line*

clearance from the ground even if there is sag which will ensure safety to public".

In reply to another query (item 7 of the letter to TCED) regarding the much higher rates of materials in TCED compared to KSEBL, and the possibility of sourcing the same from the purchases made by KSEBL, TCED informed as follows. "The rates of the TCED are higher because of the price difference of the materials. When compared with the KSEBL, the requirement of the TCED is very little, so the TCED will not get the same rates as that of KSEBL from the vendors. Even Honorable KSERC has approved 10% increase in the material in previous year cost data considering the higher purchase rate of the TCED. As per the direction of the Commission, the TCED has approached the KSEBL multiple times with the requirement of various items, but the result was negative. The TCED has also raised this issue in the meeting with Honorable Minister of electricity and the KSEBL higher officials, but the request was again denied by the KSEBL. Therefore, the TCED has no other option but to buy the materials from various vendors by floating tenders so the price will vary according to the market price. It is also stated that the TCED is still open for discussion with the KSEBL to include TCED's requirements in their annual procurement of materials."

(c) TCED further submitted that as per the instruction given by Honorable Commission vide letter dated 29/04/2024, TCED will be filing a separate petition for the approval of per KVA/KW rates, taking into consideration of all the points mentioned in the said letter within three months from the date of notification of Kerala Electricity Supply (Fifth Amendment) Code.

(5) The licensee prayed the Honorable Commission to approve the revised Cost Data-2024 for recovery of expenditure under section 46 of Electricity Act, 2003. It is also requested to authorize them to collect the applicable GST from consumers based on the orders issued by the Government in this behalf from time to time.

(6) Copy of the petition was made available in the website of the Commission and also in the website of TCED. Further an abstract of the petition was published in local dailies of Thrissur district for the information to the public. The public hearing on the petition was conducted at Commission's headquarters on 09/07/2024 in hybrid mode. Sri T.S. Jose, Electrical Engineer, TCED presented the petition on behalf of TCED.

(7) **Comments/views expressed by the stake holders during the public hearing:**

List of stake holders who participated in the public hearing is appended as Annexure A. Gist of comments/views expressed by stakeholders relevant to the petition is given below.

(a) Sri Rajesh R, Assistant Executive Engineer of KSEB Limited raised concerns about TCED's transportation cost estimation for single LT poles, pointing out that TCED calculated costs based on transporting four poles instead of one, which significantly raises costs for consumers. He requested the Commission to re-examine the rates, as the high costs will burden the applicants/consumers of TCED. Sri Rajesh further added that TCED proposed 9 metre length GI poles for construction of LT lines/providing insertion/providing strut etc. and 11 metre length GI poles for constructions of HT lines/pole insertion/providing strut etc. citing the reason for maintaining statutory clearances. KSEB Limited opined that poles of higher length need to be used only where sufficient statutory clearances cannot be maintained with standard poles. KSEB Limited further stated that, the per KVA proposal submitted by TCED is not in accordance with the provisions in clause 4(13) of Electricity (Right of Consumers) Rules 2020 notified by the Central Government. Commission informed that, Kerala Electricity Supply (Fifth Amendment) Code will be notified soon and per KVA/KW rates for recovery of expenditure for providing various service connections will be in force, once the amended Code is notified. Commission clarified that, out of the estimates for approval of Cost Data submitted by TCED, sixty three items will come under the purview of per KVA/KW rates, requiring TCED to file separate petition for approval and those items will not be approved as part of the present Cost Data petition.

(b) Sri Mathew K.D emphasized that TCED’s consumer base is limited to 40,000 within the old Thrissur Corporation area, while KSEB Limited services the rest of the Corporation area. He further argued that, it is not proper and fair to realize cost for providing various services at TCED distribution area, in excess of what is permitted for KSEB Limited. He criticized inefficiencies in TCED's operations, urging the Commission to reject excessive cost pass-through that would impact tariffs unfairly. He urged the Commission to reject the proposal of TCED and to allow only the rates as per the Cost Data approved for KSEB Limited.

(c) During the deliberations, the Commission observed that many materials procured by TCED are significantly more expensive than those procured by KSEB Limited. The Commission recommended TCED to consider rationalizing costs by sourcing high value items like A-poles, PSC poles, transformers, conductors, cables etc. directly from KSEB Limited or by contracting with KSEB suppliers at similar rates, provided they align with store purchase rules. The deliberations emphasized cost rationalization to protect consumers from excessive costs. The Commission also observed that TCED proposed more items in the Cost Data compared to KSEB Limited and directed them to furnish the details and amount collected as deposit works during the last five years.

(8) As per the direction of the Commission, TCED furnished the details of service connections given and amount collected as consumer contribution during the last five years vide its letter dated 22.07.2024. Details are provided in the following table.

New Connection (W/P)		**Additional Load (W/P)**		**New connection requiring poles**		**New connection requiring DTR/RMU**	
Nos.	Amount (lakh)	Nos.	Amount (lakh)	Nos.	Amount (lakh)	Nos.	Amount (lakh)
4291	**192.7**	471	**46.85**	26	**9.92**	67	**83.1**

The data reveals that TCED's average yearly deposit work collection totals 66.6 lakhs only.

(9) **Analysis and Decision of the Commission:**

(a) Section 46 of the Electricity Act, 2003 empowers the distribution licensee to charge from a person requiring supply of electricity, any expenses reasonably incurred in providing any electric line or electrical plant used for the purpose of giving that supply. Regulation 33 (1) of the Kerala Electricity Supply Code, 2014 as amended vide Kerala Electricity Supply (Fifth Amendment) Code, 2024 stipulates that the licensee shall obtain from the Commission annually, approval of the per KVA/KW rates to be collected from different categories consumers, as per Section 46 of the Act and Regulation 32(2) and the cost data of materials and work, at which the expenditure is to be recovered from applicants as per Section 46 of the Act and Regulations 36,37 and 49(1) of the Code. The Regulation 33(1) of the Kerala Electricity Supply Code, 2014 is extracted below.

"1) the licensee shall submit once in a year, a proposal to the Commission for approval of:
(i) the per kVA/kW rates to be collected from the different categories of consumers, as per Section 46 of the Act and Regulation 32(2) of this Code;
(ii) the cost data of materials and work, at which the expenditure is to be recovered from applicants as per Section 46 of the Act and Regulations 36,37 and 49(1) of this Code;
(iii) the energization charges applicable for consumers in different dwellings/ units in respect of cases covered under sub regulations (iii) and (iv) of Regulation 36 below;"

Regulation 32(2) of the code is extracted below

" (2) The expenditure charged by the licensee shall be based on the cost data approved by the Commission and published by the licensee effective for the period mentioned therein, as follows:

(i) for consumers/ applicants availing supply at LT and 11 kV, excluding those consumers under Regulation 36 of this Code and consumers/ applicants whose premises are at a distance of over 200 m from the existing distributing main at the applicable voltage level, the licensee shall recover the expenditure based on the per kVA/ kW rate approved by the Commission. The per kVA/ kW rates shall be differentiated based on the load factor, power factor, category of connection, voltage, total consumption of electricity during any specified period of time, geographical position etc. of the consumers:

Provided that for consumers/ applicants with connected load up to 10 kW, the connection charges as above shall be based on appropriate slabs and as approved by the Commission from time to time;

(ii) per kVA/ kW rates shall not be applicable for the individual consumers/ applicants in separate dwelling/ units covered under sub regulations (iii) or (iv) of Regulation 36 below. For such consumers energization charges as approved by the Commission shall be applicable;

(iii) for consumers/ applicants requiring additional connected load or contract demand, as the case may be, shall remit the cost based on per kW/ kVA rate applicable for the additional connected load or contract demand. Such consumers need not remit the connection charges, if the additional connected load or contract demand is less than 10% of the approved connected load or contract demand or 20 kW/ kVA, whichever is lower, unless such additional connected load or contract demand require change in the existing service line/ voltage level.

(iv) for consumers/ applicants covered under Regulations 36, 37 and 49 (1) of this Code, the licensee shall recover the expenditure based on the rates in the cost data of materials and work as approved by the Commission."

Further the following proviso is inserted to Regulation 49(7) of the Supply Code vide the Kerala Electricity (Fifth Amendment) Code, 2024

"Provided that, individual consumers have to remit the charges based on normal per kVA/ kW rates."

(b) The Commission conducted a detailed scrutiny of the petition filed by TCED, along with the comments and views expressed by various stakeholders during the public hearing on 09/07/2024. The observations of the Commission are summarized below. The Commission approved the prevailing Cost Data of TCED vide order dated 12.02.2019 in O.P No 8 of 2018. Nearly five and a half years have passed since the approval of the Cost Data. The Commission observed that there is considerable inflation during the period. The All-India Consumer Price Index has increased by 33% during the above period. The Commission verified the rates of high value items of materials in the petition with the rates approved for TCED during 2019 and noted that there is considerable increase in the prices of distribution materials. The price of one 8 metre pole increased by around 29 %, prices of ACSR conductors increased by around 30%, prices of distribution transformers of various capacities increased by 90% to 145%

and Ring Main Units of different configurations by 72 % to 155%. Changes in specifications of certain materials have also resulted in increased costs, over and above the impact of inflation. The distribution transformers presently procured by TCED is compliant with BEE standards and the Ring Main Units are motorised units with SCADA systems. The labour rates were also increased by 44% in comparison with the rates of 2018 (labour rates of DSR 2018 with applicable cost index with respect to the labour rates of DSR 2016 with applicable cost index). Further the contractor's profit and overhead charges increased to 15% as per price software and DSR 2018. Commission observed that, the estimated costs for distribution works increased due to inflationary factors, further compounded due to adoption of standardised construction practices. Standardised construction practices improve the quality of work, easy of workmanship and ensure safety to employees as well as to public. The Commission reviewed the cost data proposed by the Thrissur Corporation Electricity Department (TCED) for 2024, comparing it with both the TCED's 2019 approved cost data and the recent 2024 cost data approved for the Kerala State Electricity Board (KSEB Ltd). The comments of stake holders have been appropriately considered wherever applicable.

Key findings include:

(i) Labour Costs: TCED's labour costs are slightly lower than KSEB's due to a lower cost index for Thrissur (1.3559) compared to the average for district headquarters used by KSEB Ltd. (1.3662).

(ii) Material Costs: TCED's material costs are generally higher than those of KSEB Ltd. According to TCED, smaller volume of material procurement leads to higher costs, as KSEB Ltd benefits from bulk purchasing.

(iii) To address this cost discrepancy while maintaining consistency across licensees, the Commission decided to set a cap on allowable material costs for TCED. Specifically, the Commission decided to approve TCED's material costs as the lesser of (a) the costs proposed by TCED or (b) KSEB's approved 2024 material costs with an additional 10% increase. This approach mirrors the Commission's 2019 decision, providing TCED with a slight allowance due to its limited procurement volume without creating a substantial cost disparity between TCED and KSEB Ltd.

The Commission also made certain modifications to the specifications and quantities of materials in TCED's estimates to align with the approved estimates for KSEB Limited's Cost Data. Significant modifications were implemented regarding the length of GI poles used for drawing lines and transportation costs associated with poles. TCED proposed using 9-meter

GI poles for drawing LT lines and 11-meter poles for HT lines. However, for drawing LT and HT lines with PSC poles, TCED proposed only 8-meter and 9-meter poles. Since the cost of longer GI poles is significantly higher, the Commission has decided to approve only the use of 8-meter GI poles for LT lines and 9-meter poles for HT lines, with these costs recoverable from applicants/consumers. Regarding transportation costs, TCED calculated transportation for single LT poles based on the cost of transporting four poles at once, which significantly raised the deposit work costs for consumers. To prevent this additional burden on applicants/consumers in the TCED license area, the Commission decided to approve only the transportation cost for a single pole (one-fourth of the cost of transporting four poles), in alignment with the rates approved for KSEB Limited.

(c) The Cost Data 2024 proposal contains 134 items, compared to the 71 items approved by the Commission for TCED in February 2019. Of the 134 items submitted for approval, 63 pertain to estimates for various types of service connections and service connection conversions, which fall under per KVA/KW rates. On examining the remaining 71 items, 8 numbers relate to the installation of cable-entry type transformers and the installation of 315 KVA/500 KVA transformers using GI/PSC poles. Since KSEB Limited, the major licensee in Kerala did not propose similar items in their Cost Data, and given that such works are unlikely to be required within TCED's limited distribution area, the Commission decided to approve the remaining 63 items as part of TCED's Cost Data 2024.

(d) Regarding the per KVA/KW rates proposed by TCED, the Commission had previously directed TCED, via letter dated 29.04.2024, to file a separate petition within three months from the date of that letter, as outlined in paragraph 3 of this order. TCED is required to file a separate petition for the approval of per KVA/KW rates within one month from the date of this order, in accordance with the provisions of Supply Code 2024, as explained in paragraph 9(a) of this order.

(e) The Commission decided to approve 63 items of Cost Data (excluding service connections for which per KVA/KW rates are proposed) with certain modifications and the abstract of the Cost Data 2024 is appended to this order. Detailed estimates are given in Annexures 1 to Annexures 63.

(f) Of the 63 items in the Cost Data 2024 estimates that fall under per KVA/KW rates, 40 items are newly proposed by TCED, while the remaining 23 items have approved rates as per the existing Cost Data order dated 12.02.2019. Commission decided to allow an interim increase for these 23 items as detailed below, till per KVA/KW rates are approved to TCED. As allowed to KSEB Limited vide order in OP number 36/2023 dated 08.02.2024, Commission decided to allow an interim increase of 10% (ten percent only) over the rates for items in Annexures 1 to 5, Annexures 7 to 14 and

Annexures 21 to 30 of the Commission's Order in O.P No 8 of 2018 dated 12.02.2019 (Cost Data items relating to service connections for which KVA/KW rates are to be determined) or the rates proposed by TCED, whichever is lower, for a period of four months or till the approval of per KVA/KW rates, whichever is earlier.

(g) For individual consumers/ applicants in separate dwelling/ units covered under sub regulations (iii) or (iv) of Regulation 36 of Supply Code 2014, energization charge of ₹300 per applicant/consumer shall be collected.

(h) The Ministry of Finance, Government of India vide notification No. 08/2024 - Central Tax Rate dated 08.10.2024 exempted the following services from GST with effect from 10.10.2024

> *"Supply of services by way of providing metering equipment on rent, testing for meters/transformers/capacitors etc., releasing electricity connection, shifting of meters/service lines, issuing duplicate bills etc., which are incidental or ancillary to the supply of transmission and distribution of electricity provided by electricity transmission and distribution utilities to their consumers"*

As per the said notification, all the services which are incidental or ancillary to the supply of transmission and distribution of electricity provided by distribution utilities are exempt from GST. Hence the taxability of various transactions, on which presently GST is collected, will undergo major changes, as GST will not be applicable to most of the services provided by TCED.

(10) **Orders of the Commission:**

Duly considering the provisions in the Electricity Act, 2003, Rules and Regulations made thereunder, petition filed by TCED and the objections and comments of various stakeholders, the Commission hereby orders that,

(1) TCED is authorised to recover from a person requiring supply of electricity in pursuance of Section 46 of Electricity Act 2003, the expenditure incurred by it for various works in connection with providing electric lines or electrical plant required for giving the supply at the rates given in the Abstract of Approved Cost of Distribution Works appended to this order. Detailed estimates are given in Annexures 1 to 63.

(2) TCED shall file a separate petition for approval of per KVA/KW rates as explained in paragraph 9(a) & 9(d) of this order, within one month from the date of this order.

(3) TCED is authorised to collect a rate of 10% (ten percentage only) over the rates for items in Annexures 1 to 5, Annexures 7 to 14 and Annexures 21 to 30 of the Commission's Order in O.P No 8 of 2018 dated 12.02.2019 (Cost Data items relating to service connections for which KVA/KW rates are to be determined) or the rates proposed by TCED, whichever is lower, for a period of four months or till the approval of per KVA/KW rates, whichever is earlier.

(4) TCED is authorised to collect energization charges at the rates of ₹ 300/- per consumer for individual consumers/ applicants in separate dwelling/ units covered under sub regulations (iii) or (iv) of Regulation 36 of Supply Code 2014.

(5) TCED shall explore the possibility of reducing material costs by sourcing distribution materials, such as lattice towers, A-poles, cross arms, etc., from KSEB Limited's manufacturing facilities. Additionally, TCED shall consider contracting with KSEB Limited's suppliers to procure other high-value distribution materials at the rates applicable to KSEB Limited.

(6) The order has prospective effect only.

The petition in OP No.12/2024 is disposed of as above.

Sd/-	**Sd/-**	**Sd/-**
T K Jose	**Adv. A J Wilson**	**B Pradeep**
Chairman	**Member**	**Member**

Approved for issue

Sd/-
C R Satheesh Chandran
Secretary

ANNEXURE - A

LIST OF PERSONS PARTICIPATED IN THE PUBLIC HEARING ON 09.07.2024

Persons present at the Court Hall of the Commission, Thiruvananthapuram:

1. Sri. Jose T S, Electrical Engineer, TCED
2. Sri. Rajesh. R, Assistant Executive Engineer, TRAC, KSEB Ltd
3. Sri. Shan B S, Assistant Executive Engineer, KSEB Ltd
4. Sri. Manoj N G, Assistant Engineer i/c, TCED
5. Sri. Shemeer N, Assistant Engineer, TCED
6. Sri. Abdu Rahiman E K, E K Sands

Persons participated in the public hearing on online mode:

1. Sri. N.K. Krishnakumar, Assistant Secretary, TCED
2. Sri. Mathew K.D

KERALA STATE ELECTRICITY REGULATORY COMMISSION

ORDER IN OP No 12/2024 dated 26/11/2024

Approved Cost Data of distribution works for TCED

Abstract

Sl.No	Description of the work	Rate approved by the Commission in Rupees
1	Providing support pole for weather proof service connection	**7917**
2	Post insertion for LT single phase over head line (without stay) using PSC pole	**8999**
3	Post insertion for LT single phase over head line (with stay) using PSC pole	**12245**
4	Post insertion for LT single phase over head line (with strut) using PSC pole	**17261**
5	Post insertion for LT three phase over head line (without stay) using PSC pole	**9849**
6	Post insertion for LT three phase over head line (with stay) using PSC pole	**13151**
7	Post insertion for LT three phase over head line (with strut) using PSC pole	**18112**
8	Shifting Single Phase Energy Meters	**902**
9	Shifting Three Phase Energy Meters	**1186**
10	Shifting Three Phase CT Meters	**1778**

Sd/-
T K Jose
Chairman

Sd/-
Adv. A J Wilson
Member

Sd/-
B Pradeep
Member

Approved for issue

Sd/-
C R Satheesh Chandran
Secretary

Abstract		
Sl.No	**Description of the work**	**Rate approved by the Commission in Rupees**
11	HT pole insertion in HT/LT line (with stay) using PSC pole	**19298**
12	HT pole insertion in HT/LT line (with strut using 8m PSC pole)	**23154**
13	Providing strut using LT PSC pole	**8047**
14	Providing strut using HT PSC pole	**10346**
15	Providing LT stay	**3302**
16	Providing HT stay	**4216**
17	Adding one conductor (ACSR Rabbit) on the existing poles (where cross arm is not available) inclusive of cost of pin, insulator etc.	**90 (per metre)**
18	Conversion of LT single phase 2 wire line to LT Three phase 4 wire line	**192 (per metre)**
19	Conversion of LT single phase 2 wire line to LT Three phase 5 wire line	**277 (per metre)**
20	Conversion of LT 3 wire OH line to 5 wire OH line	**200 (per metre)**
21	Drawing LT OH Line on existing poles 2 wire ACSR Rabbit	**168 (per metre)**

Sd/-
T K Jose
Chairman

Sd/-
Adv. A J Wilson
Member

Sd/-
B Pradeep
Member

Approved for issue

Sd/-
C R Satheesh Chandran
Secretary

Abstract		
Sl.No	**Description of the work**	**Rate approved by the Commission in Rupees**
22	Drawing LT OH Line on existing poles 3 wire ACSR Rabbit	**247 (per metre)**
23	Drawing LT OH Line on existing poles 4 wire ACSR Rabbit	**311 (per metre)**
24	Drawing LT OH Line on existing poles 5 wire ACSR Rabbit	**408 (per metre)**
25	Constructing LT OH line 2 wire with Rabbit using PSC poles	**515 (per metre)**
26	Constructing LT OH line 3 wire with Rabbit using PSC poles	**597 (per metre)**
27	Constructing LT OH line 4 wire with Rabbit using PSC poles	**675 (per metre)**
28	Constructing LT OH line 5 wire with Rabbit using PSC poles	**767 (per metre)**
29	Constructing 11 kV OH Line with ACSR Raccoon using PSC poles	**977 (per metre)**
30	Constructing 11 kV HT UG Cable 300 sq mm by open trench using PSC pole	**2804 (per metre)**
31	Constructing 11 kV OH Line with ACSR Raccoon using A type poles	**1561 (per metre)**
32	Installation of 1 No. 11 KV/ 433 V , 100 KVA Transformer without stay (PSC pole mounted)	***512723**

*Estimated cost does not include cost of fencing and construction of yard

Sd/-
T K Jose
Chairman

Sd/-
Adv. A J Wilson
Member

Sd/-
B Pradeep
Member

Approved for issue

Sd/-
C R Satheesh Chandran
Secretary

Abstract		
Sl.No	**Description of the work**	**Rate approved by the Commission in Rupees**
33	Installation of 1 No. 11 KV/ 433 V , 160 KVA Transformer without stay (pole mounted) using PSC pole	***659201**
34	Installation of 11KV/433V 250 KVA Transformer using PSC pole	***861546**
35	Installation of Data Acquisition compatible Extensible type Ring Main Unit without VCB -CCC (E) (Cable -Cable -Cable)	***922145**
36	Installation of Data Acquisition compatible Extensible type Ring Main Unit with VCB -CTC (E) (Cable -Transformer -Cable)	***967899**
37	Installation of Data Acquisition compatible Extensible add-on type Ring Main Unit without VCB (Single Switch C-Extension)	**428034**
38	Installation of Data Acquisition compatible, Extensible, add-on type Ring Main Unit with VCB (Single Switch T-Extension)	**557918**
39	Drawing 1Km of HT ABC of size 3x150 + 1x120 sqmm on 9 mts PSC pole supports	**2197 (per metre)**
40	Drawing 1Km of HT ABC of size 3x120 + 1x95 on PSC pole supports	**2014 (per metre)**
41	Drawing 1Km of LT ABC of size 3x70 + 1x50 +1x16 on 8 mts PSC pole supports	**805 (per metre)**
42	Post insertion for LT single phase over head line (without stay) using GI pole	**25586**

*Estimated cost does not include cost of fencing and construction of yard

Sd/-
T K Jose
Chairman

Sd/-
Adv. A J Wilson
Member

Sd/-
B Pradeep
Member

Approved for issue

Sd/-
C R Satheesh Chandran
Secretary

Abstract		
43	Post insertion for LT single phase over head line (with stay) using GI pole	**29041**
44	Post insertion for LT single phase over head line (with strut) GI pole	**50436**
45	Post insertion for LT three phase over head line (without stay) using GI pole	**26436**
46	Post insertion for LT three phase over head line (with stay) using GI pole	**29892**
47	Post insertion for LT three phase over head line (with strut) using GI pole	**51286**
48	HT pole insertion in HT/LT line (with stay) using GI pole	**37388**
49	Estimate for HT pole insertion in HT/LT line (with strut using GI post 9 meter)	**41653**
50	Providing strut using LT GI pole	**24898**
51	Providing strut using HT GI pole	**29132**
52	Constructing LT OH line 2 wire with Rabbit using GI poles	**1067 (per metre)**
53	Constructing LT OH line 3 wire with Rabbit using GI poles	**1149 (per metre)**

Sd/-
T K Jose
Chairman

Sd/-
Adv. A J Wilson
Member

Sd/-
B Pradeep
Member

Approved for issue

Sd/-
C R Satheesh Chandran
Secretary

Abstract		
Sl.No	**Description of the work**	**Rate approved by the Commission in Rupees**
54	Constructing LT OH line 4 wire with Rabbit using GI poles	**1226 (per metre)**
55	Constructing LT OH line 5 wire with Rabbit using GI poles	**1318 (per metre)**
56	Constructing 11 kV OH Line with ACSR Raccoon using GI poles	**1516 (per metre)**
57	Constructing 11 kV HT UG Cable 300 sq mm by open trench using GI pole	**2860 (per metre)**
58	Installation of 1 No. 11 KV/ 433 V , 100 KVA Transformer without stay (GI pole mounted)	***549476**
59	Installation of 1 No. 11 KV/ 433 V , 160 KVA Transformer without stay (pole mounted) using GI pole	***697203**
60	Installation of 11KV/433V 250 KVA Transformer using GI pole	***894552**
61	Drawing 1Km of LT ABC of size 3x70 + 1x50 +1x16 on 8 mts GI pole supports	**1419 (per metre)**
62	Drawing 1Km of HT ABC of size 3x150 + 1x120 sqmm on GI pole supports	**2906 (per metre)**
63	Drawing 1Km of HT ABC of size 3x120 + 1x95 on GI pole supports	**2711 (per metre)**

*Estimated cost does not include cost of fencing and construction of yard

Sd/-	**Sd/-**	**Sd/-**
T K Jose	**Adv. A J Wilson**	**B Pradeep**
Chairman	**Member**	**Member**

Approved for issue

Sd/-
C R Satheesh Chandran
Secretary

Annexure 1

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Providing support pole for weather proof service connection					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8 M	3700.60	E	1	3700.60
2	Service Clamp	100.00	E	1	100.00
(a)	**Cost of material**				**3800.60**
(b)	Centage charges @16%				608.10
	Expenditure on material				4408.69
(c)	Cost of labour				2404.15
(d)	Cost of Transportation				785.57
(e)	**Cost of labour & transportation sub- total (c &d)**				**3189.72**
(f)	Overhead charges on (c) &(d) above @10%				318.97
(g)	Total (a +b +c +d +f)				7917.38
	Expenditure to be recovered				7917.38
	Rounded to				**7917.00**
(Rupees Seven thousand nine hundred and seventeen only)					

Annexure 2

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT single phase over head line (without stay) using PSC pole					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8 M	3700.60	E	1	3700.60
2	Pin Insulator 415V set (with pin)	67.10	Set	1	67.10
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	2	108.00
4	Cross Arm GI Channel 2 Line (2 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	573.00	Set	1	573.00
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
(a)	**Cost of material**				**4486.70**
(b)	Centage charges @16%				717.87
	Expenditure on material				5204.57
(c)	Cost of labour				2663.50
(d)	Cost of Transportation				785.57
(e)	**Cost of labour & transportation sub- total (c &d)**				**3449.07**
(f)	Overhead charges on (c) &(d) above @10%				344.91
(g)	Total (a +b +c +d +f)				8998.54
	Expenditure to be recovered				8998.54
	Rounded to				**8999.00**
(Rupees Eight thousand nine hundred and ninety-nine only)					

Annexure 3

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT single phase over head line (with stay) using PSC pole					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8 M	3700.60	E	1	3700.60
2	Pin Insulator 415V set (with pin)	67.10	Set	1	67.10
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	2	108.00
4	Cross Arm GI Channel 2 Line (2 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	573.00	Set	1	573.00
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
6	Stay Insulator Porcelain 415/240 V	15.00	E	1	15.00
7	Clamp GI for LT Stay for Angular location	240.99	E	1	240.99
8	Stay set complete(Anchor Plate, stay rod& tightner)	839.30	E	1	839.30
9	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	2.5	220.00
10	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	4	120.00
11	Helically formed Guy-Grip LT	80.00	E	6	480.00
(a)	**Cost of material**				**6401.99**
(b)	Centage charges @16%				1024.32
	Expenditure on material				7426.31
(c)	Cost of labour				3595.33
(d)	Cost of Transportation				785.57
(e)	**Cost of labour & transportation sub- total (c &d)**				**4380.90**
(f)	Overhead charges on (c) &(d) above @10%				438.09
(g)	Total (a +b +c +d +f)				12245.30
	Expenditure to be recovered				12245.00
	Rounded to				**12245.00**
(Rupees Twelve thousand two hundred and forty-five only)					

Annexure 4

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT single phase over head line (with strut) using PSC pole					
Sl No.	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8M	3700.60	E	2	7401.20
2	Pin Insulator 415V Set (with pin)	67.10	Set	1	67.10
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	2	108.00
4	Cross Arm GI Channel 2 Line (2 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	573.00	Set	1	573.00
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
6	Stay clamp 3.5" LT	206.50	E	2	413.00
7	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	Kg	0.33	37.95
(a)	**Cost of material**				**8638.25**
(b)	Centage charges @16%				1382.12
	Expenditure on material				10020.37
(c)	Cost of labour				5011.67
(d)	Cost of Transportation				1571.13
(e)	**Cost of labour & transportation sub- total (c &d)**				**6582.80**
(f)	Overhead charges on (c) &(d) above @10%				658.28
(g)	Total (a +b +c +d +f)				17261.45
	Expenditure to be recovered				17261.45
	Rounded to				**17261.00**
(Rupees Seventeen thousand two hundred and sixty-one only)					

Annexure 5

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT three phase over head line (without stay) using PSC pole					
SL No.	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8M	3700.60	E	1	3700.60
2	Pin Insulator 415V Set (with pin)	67.10	Set	3	201.30
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	4	216.00
4	Cross Arm GI Channel 4Line (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	1	907.21
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
(a)	**Cost of material**				**5063.11**
(b)	Centage charges @16%				810.10
	Expenditure on material				5873.21
(c)	Cost of labour				2828.54
(d)	Cost of Transportation				785.57
(e)	**Cost of labour & transportation sub- total (c &d)**				**3614.11**
(f)	Overhead charges on (c) &(d) above @10%				361.41
(g)	Total (a +b +c +d +f)				9848.73
	Expenditure to be recovered				9848.73
	Rounded to				**9849.00**
(Rupees Nine thousand eight hundred and forty-nine only)					

Annexure 6

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT three phase over head line (with stay) using PSC pole					
Sl. No.	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8M	3700.60	E	1	3700.60
2	Pin Insulator 415V Set(with pin)	67.10	Set	3	201.30
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	4	216.00
4	Cross Arm GI Channel 4 Line (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	1	907.21
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
6	Stay Insulator Porcelain 415/240 V	15.00	E	1	15.00
7	Clamp GI for LT Stay for Angular location	240.99	E	1	240.99
8	Stay Set Complete (Anchor plate, stay rod& tightner)	839.30	E	1	839.30
9	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	2.5	220.00
10	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	4	120.00
11	Helically formed Guy-Grip LT	88.00	E	6	528.00
(a)	**Cost of material**				**7026.40**
(b)	Centage charges @16%				1124.22
	Expenditure on material				8150.63
(c)	Cost of labour				3760.32
(d)	Cost of Transportation				785.57
(e)	**Cost of labour & transportation sub- total (c &d)**				**4545.89**
(f)	Overhead charges on (c) &(d) above @10%				454.59
(g)	Total (a +b +c +d +f)				13151.11
	Expenditure to be recovered				13151.11
	Rounded to				**13151.00**
(Rupees Thirteen thousand one hundred and fifty one only)					

Annexure 7

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT three phase over head line (with strut) using PSC pole					
Sl No.	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8M	3700.60	E	2	7401.20
2	Pin Insulator 415V Set (with pin)	67.10	Set	3	201.30
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	4	216.00
4	Cross Arm GI Channel 4 Line(4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	1	907.21
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
6	Stay clamp 3.5" LT	206.50	E	2	413.00
7	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	Kg	0.33	37.95
(a)	**Cost of material**				**9214.66**
(b)	Centage charges @16%				1474.35
	Expenditure on material				10689.01
(c)	Cost of labour				5176.66
(d)	Cost of Transportation				1571.13
(e)	**Cost of labour & transportation sub- total (c &d)**				**6747.79**
(f)	Overhead charges on (c) &(d) above @10%				674.78
(g)	Total (a +b +c +d +f)				18111.57
	Expenditure to be recovered				18111.57
	Rounded to				**18112.00**
(Rupees Eighteen thousand one hundred and twelve only)					

Annexure 8

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Shifting Single Phase Energy Meters					
Sl No.	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Shifting one no. single phase service connection metering equipment with all fittings including lowering down the WP service wire, dismantling meter board without making damage and refitting the same at a new location and redoing the WP service wire with all fittings.	819.72	Each	1	819.72
	Add 10% overhead charges				81.97
	Total				901.69
	Expenditure to be recovered				901.69
	Rounded to				**902.00**
(Rupees Nine hundred and two only)					

Annexure 9

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Shifting Three Phase Energy Meters					
Sl No.	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Shifting one no.three phase service connection metering equipment with all fittings including lowering down the WP service wire, dismantling meter board without making damage and refitting the same at a new location and redoing the WP service wire with all fittings.	1078.08	Each	1	1078.08
	Add 10% overhead charges				107.81
	Total				1185.89
	Expenditure to be recovered				1186.00
	Rounded to				**1186.00**
(Rupees One thousand one hundred and eighty-six only)					

Annexure 10

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Shifting Three Phase CT Meters					
Sl No.	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Shifting one no.three phase service connection metering equipment (CT Connected) with all fittings including lowering down the WP service wire, dismantling meter board without making damage and refitting the same at a new location and redoing the WP service wire with all fittings.	1616.60	Each	1	1616.60
	Add 10% overhead charges				161.66
	Total				1778.26
	Expenditure to be recovered				1778.26
	Rounded to				**1778.00**
(Rupees One thousand seven hundred and seventy-eight only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

HT pole insertion in HT/LT line (with stay) using PSC pole					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 9M	4298.80	E	1	4298.80
2	Composite Pin Insulator 11kV with pin	171.60	Set	3	514.80
3	GI wire 6mm Dia 4 SWG	93.00	kg	4	372.00
4	V Cross Arm GI 11kV with clamp	1542.62	E	1	1542.62
6	Pole top bracket -F type GI -11kV	165.00	E	1	165.00
7	Bolt & Nut GI FT M 12×150 (6”×1/2”)	115.00	kg	0.4	46.00
8	Bolt & Nut GI FT M 16×75	115.00	kg	0.42	48.30
9	Helically formed fitting -Distribution top tie for ACSR Raccoon	36.00	E	3	108.00
10	Stay Insulator Porcelain 11kV	40.00	E	1	40.00
11	Stay wire 7/8 GI (HT stay wire)	88.00	Kg	4	352.00
12	Stay set complete(Anchor Plate, stay rod& tightner)	1283.25	E	1	1283.25
13	Helically formed Guy-Grip HT	91.00	E	6	546.00
14	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	4	120.00
15	Pin insulator 415V set (with pin)	67.10	Set	3	201.30
16	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	4	216.00
17	Cross Arm GI Channel 4line (4line channel cross arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	1	907.21
18	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
(a)	**Cost of material**				**10799.28**
(b)	Centage charges @16%				1727.89
	Expenditure on material				12527.17
(c)	Cost of labour				5369.65
(d)	Cost of Transportation				785.57
(e)	**Cost of labour & transportation sub- total (c &d)**				**6155.22**
(f)	Overhead charges on (c) &(d) above @10%				615.52
(g)	Total (a +b +c +d +f)				19297.91
	Expenditure to be recovered				19297.91
	Rounded to				**19298.00**
(Rupees Nineteen thousand two hundred and ninety-eight only)					

Annexure 12

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

HT pole insertion in HT/LT line (with strut using 8m PSC pole)					
Sl No.	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 9M	4298.80	E	1	4298.80
2	Composite Pin Insulator 11kV with pin	171.60	Set	3	514.80
3	GI wire 6mm Dia 4 SWG	93.00	kg	4	372.00
4	V Cross Arm GI 11kV	1332.58	E	1	1332.58
5	Pole top bracket -F type GI -11kV	165.00	E	1	165.00
6	Bolt & Nut GI FT M 12×150 (6”×1/2”)	115.00	kg	0.4	46.00
7	Bolt & Nut GI FT M 16×75	115.00	kg	0.42	48.30
8	Helically formed fitting -Distribution top tie for ACSR Raccoon	36.00	E	3	108.00
9	Pole PSC 8M	3700.60	E	1	3700.60
10	Clamp GI For 8mt strut pole (for pole)	113.58	E	2	227.15
11	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	Kg	0.33	37.95
12	Clamp GI For 8 mt Strut Pole (For Strut)	113.58	No	2	227.15
13	Pin insulator 415V Set (With Pin)	68.44	Set	3	205.32
14	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	4	216.00
15	Cross Arm GI Channel 4 Line (4 Line Channel Cross Arm) with clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	1	907.21
16	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
(a)	**Cost of material**				**12444.87**
(b)	Centage charges @16%				1991.18
	Expenditure on material				14436.04
(c)	Cost of labour				6354.35
(d)	Cost of Transportation				1571.13
(e)	**Cost of labour & transportation sub- total (c &d)**				**7925.48**
(f)	Overhead charges on (c) &(d) above @10%				792.55
(g)	Total (a +b +c +d +f)				23154.07
	Expenditure to be recovered				23154.07
	Rounded to				**23154.00**
(Rupees Twenty three thousand one hundred and fifty four only)					

Annexure 13

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Providing strut using LT PSC pole					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8M	3700.60	E	1	3700.60
2	Clamp GI for 8 mt strut pole (for pole)	113.58	E	2	227.15
3	Bolt & Nut GI M 12 × 65 (2 1/2"x 1/2")	115.00	Kg	0.33	37.95
(a)	**Cost of material**				**3965.70**
(b)	Centage charges @16%				634.51
	Expenditure on material				4600.21
(c)	Cost of labour				2348.12
(d)	Cost of Transportation				785.57
(e)	**Cost of labour & transportation sub- total (c &d)**				**3133.69**
(f)	Overhead charges on (c) &(d) above @10%				313.37
(g)	Total (a +b +c +d +f)				8047.27
	Expenditure to be recovered				8047.27
	Rounded to				**8047.00**
(Rupees Eight thousand and forty-seven only)					

Annexure 14

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Providing strut using HT PSC pole					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 9 M	4298.80	E	1	4298.80
2	Bolt & Nut GI M 12 × 65 (2 1/2"x 1/2")	115.00	kg	0.33	37.95
3	Clamp GI for 9 mt strut pole(for pole)	121.61	E	2	243.21
(a)	**Cost of material**				**4579.96**
(b)	Centage charges @16%				732.79
	Expenditure on material				5312.75
(c)	Cost of labour				3790.40
(d)	Cost of Transportation				785.57
(e)	**Cost of labour & transportation sub- total (c &d)**				**4575.97**
(f)	Overhead charges on (c) &(d) above @10%				457.60
(g)	Total (a +b +c +d +f)				10346.32
	Expenditure to be recovered				10346.32
	Rounded to				**10346.00**
(Rupees Ten thousand three hundred and forty-six only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Providing LT stay					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Stay Insulator Porcelain 415/240 V	15.00	E	1	15.00
2	Clamp GI for LT Stay for Angular location	240.99	E	1	240.99
3	Stay set complete(Anchor Plate, stay rod& tightner)	839.30	E	1	839.30
4	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	2.5	220.00
5	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HTand LT)	30.00	E	4	120.00
6	Helically formed Guy-Grip LT	88.00	E	6	528.00
(a)	**Cost of material**				**1963.29**
(b)	Centage charges @16%				314.13
	Expenditure on material				2277.42
(c)	**Cost of labour**				**931.78**
(d)	Overhead charges on (c) above @10%				93.18
(e)	Total (a +b +c +d)				3302.37
	Expenditure to be recovered				3302.37
	Rounded to				**3302.00**
(Rupees Three thousand three hundred and two only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Providing HT stay					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Stay Insulator Porcelain 11k V	40.00	E	1	40.00
2	Stay set complete(Anchor Plate, stay rod& tightner)	1283.25	E	1	1283.25
3	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	4	352.00
4	Helically formed Guy-Grip HT	91.00	E	6	546.00
5	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HTand LT)	30.00	E	4	120.00
(a)	**Cost of material**				**2341.25**
(b)	Centage charges @16%				374.60
	Expenditure on material				2715.85
(c)	**Cost of labour**				**1363.43**
(d)	Overhead charges on (c) above @10%				136.34
(e)	Total (a +b +c +d)				4215.62
	Expenditure to be recovered				4215.62
	Rounded to				**4216.00**
(Rupees Four thousand two hundred and sixteen only)					

Annexure 17

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Adding one conductor (ACSR Rabbit) on the existing poles (where cross arm is not available) inclusive of cost of pin, insulator etc.					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Shackle insulator 415V set(with strap bolt & nut)	68.20	set	14	954.80
2	Cross arm GI channel 2line (2 line channel cross arm) with clamp, bolt&nut for PSC pole 8M/200kg	573.00	set	31	17763.03
3	Pin insulator 415V set(with pin)	67.10	set	23	1543.30
4	Helically formed fitting -distribution side tie for ACSR Rabbit	54.00	E	23	1242.00
5	Conductor ACSR Rabbit	46.20	m	1050	48510.00
(a)	**Cost of material**				**70013.13**
(b)	Centage charges @16%				11202.10
	Expenditure on material				81215.23
(c)	**Cost of labour**				**7607.78**
(d)	Overhead charges on (c)above @10%				760.78
(e)	Total (a +b +c +d)				89583.79
	Expenditure to be recovered				89583.79
	Expenditure to be recovered per metre				89.58
	Rounded to				**90.00**
(Rupees Ninety per metre only)					

Annexure 18

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Conversion of LT single phase 2 wire line to LT Three phase 4 wire line					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Conductor ACSR Rabbit	46.20	m	2100	97020.00
2	Shackle insulator 415V set(with strap bolt& nut)	68.20	set	26	1773.20
3	Cross arm 2 line set(with clamp bolt & nut)	286.51	set	-30	-8595.18
4	Cross arm GI channel 4 line (4 line channel cross arm) with clamp, bolt & nut for PSC pole 8M/200kg	907.21	set	30	27216.42
5	Pin insulator 415V set (with pin)	67.10	set	46	3086.60
6	Cable 1.1kV XLPE AL 1c x 120 sq mm(Un armoured)	108.90	m	48	5227.20
7	Crimping socket palm type 120 sq mm - Al (Cable Lug)	16.50	E	8	132.00
8	Fuse unit 415V 100A porcelain	414.00	E	3	1242.00
9	Base frame SMC for LT section fuse with neutral link	1522.00	E	1	1522.00
(a)	**Cost of material**				**128624.24**
(b)	Centage charges @16%				20579.88
	Expenditure on material				149204.12
(c)	**Cost of labour**				**38909.43**
(d)	Overhead charges on (c) above @10%				3890.94
(e)	Total (a +b +c +d)				192004.49
	Expenditure to be recovered				**192004.49**
	Expenditure to be recovered per metre				192.00
	Rounded to				**192.00**
(Rupees One hundred and ninety two per metre only)					

Annexure 19

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Conversion of LT single phase 2 wire line to LT Three phase 5 wire line					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Conductor ACSR Rabbit	46.20	m	3150	145530.00
2	Shackle insulator 415V set(with strap bolt& nut)	68.20	set	39	2659.80
3	Cross arm GI channel 4 line (4 line channel cross arm) with clamp, bolt & nut for PSC pole 8M/200kg	907.21	set	30	27216.42
4	Pin insulator 415V set (with pin)	67.10	set	69	4629.90
5	Helically formed fitting-distribution side tie for ACSR Rabbit	54.00	E	115	6210.00
6	Cable 1.1kV XLPE AL 1c x 120 sq mm(Un armoured)	108.90	m	48	5227.20
7	Crimping socket palm type 120 sq mm - Al (Cable Lug)	16.50	E	8	132.00
8	Fuse unit 415V 100A porcelain	414.00	E	3	1242.00
9	Base frame SMC for LT section fuse with neutral link	1522.00	E	1	1522.00
(a)	**Cost of material**				**194369.32**
(b)	Centage charges @16%				31099.09
	Expenditure on material				225468.41
(c)	**Cost of labour**				**46517.25**
(d)	Overhead charges on (c) above @10%				4651.73
(e)	Total (a +b +c +d)				276637.39
	Expenditure to be recovered				**276637.39**
	Expenditure to be recovered per metre				**276.64**
	Rounded to				**277.00**
(Rupees Two hundred and seventy seven per metre only)					

Annexure 20

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Conversion of LT 3 wire OH line to 5 wire OH line					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pin insulator 415V set (with pin)	67.10	set	46	3086.60
2	Cross arm GI channel 4 line (4 line channel cross arm) with clamp, bolt & nut for PSC pole 8M/200kg	907.21	set	30	27216.42
3	Cross arm 2 line set (with clamp bolt & nut)	286.51	set	-30	-8595.18
4	Conductor ACSR Rabbit	46.20	m	2100	97020.00
5	Shackle insulator 415V set(with strap bolt & nut)	68.20	set	26	1773.20
6	Cable 1.1kV XLPE AL 1c x 120 sq mm(Un armoured)	108.90	m	48	5227.20
7	Crimping socket palm type 120 sq mm - Al (Cable Lug)	16.50	E	8	132.00
8	Fuse unit 415V 100A porcelain	414.00	E	3	1242.00
9	Base frame SMC for LT section fuse with neutral link	1522.00	E	1	1522.00
(a)	**Cost of material**				**128624.24**
(b)	Centage charges @16%				20579.88
	Expenditure on material				149204.12
(c)	**Cost of labour**				**46190.41**
(d)	Overhead charges on (c) above @10%				4619.04
(e)	Total (a +b +c +d)				200013.57
	Expenditure to be recovered				200013.57
	Expenditure to be recovered per metre				200.01
	Rounded to				**200.00**
(Rupees Two hundred per metre only)					

Annexure 21

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Drawing LT OH Line on existing poles 2 wire ACSR Rabbit					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Conductor ACSR Rabbit	46.20	m	2100	97020.00
2	Shackle insulator 415V set(with strap bolt& nut)	68.20	set	27	1841.40
3	Cross arm GI channel 2 line (2 line channel cross arm) with clamp, bolt & nut for PSC pole 8M/200kg	573.00	set	30	17190.03
4	Ferrules 5 sq mm (GI)	12.00	E	7	84.00
5	Earthing coil GI 115 turns 50 mm internal dia	208.00	E	7	1456.00
6	Earth knob (Aluminium) for LT line	124.00	E	7	868.00
7	Helically formed fitting-distribution side tie for ACSR Rabbit	54.00	E	52	2808.00
8	Pin insulator 415V set (with pin)	67.10	set	23	1543.30
9	Reel insulator porcelain 415/240 V	38.00	No	23	874.00
10	Cable 1.1kV XLPE AL 1c x 120 sq mm (Un armoured)	108.90	m	24	2613.60
11	Crimping socket palm type 120 sq mm - Al(Cable lug)	16.50	E	4	66.00
12	Base frame SMC for LT section fuse with neutral link	1522.00	E	1	1522.00
13	Fuse unit 415 V 100A porcelain	414.00	E	1	414.00
(a)	**Cost of material**				**128300.33**
(b)	Centage charges @16%				20528.05
	Expenditure on material				148828.38
(c)	**Cost of labour**				**17317.77**
(d)	Overhead charges on (c) above @10%				1731.78
(e)	Total (a +b +c +d)				167877.93
	Expenditure to be recovered				167877.93
	Expenditure to be recovered per metre				167.88
	Rounded to				**168.00**
(Rupees One hundred and sixty eight per metre only)					

Annexure 22

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Drawing LT OH Line on existing poles 3 wire ACSR Rabbit					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Conductor ACSR Rabbit	46.20	m	3150	145530.00
2	Shackle insulator 415V set(with strap bolt& nut)	68.20	set	41	2796.20
3	Cross arm GI channel 4 line (4 line channel cross arm) with clamp, bolt & nut for PSC pole 8M/200kg	907.21	set	30	27216.42
4	Ferrules 5 sq mm (GI)	12.00	E	7	84.00
5	Earthing coil GI 115 turns 50 mm internal dia	208.00	E	7	1456.00
6	Earth knob (Aluminium) for LT line	124.00	E	7	868.00
7	Pin insulator 415V set (with pin)	67.10	set	46	3086.60
8	Reel insulator porcelain 415/240 V	38.00	No	23	874.00
9	Helically formed fitting-distribution side tie for ACSR Rabbit	54.00	E	69	3726.00
10	Cable 1.1kV XLPE AL 1c x 120 sq mm (Un armoured)	108.90	m	24	2613.60
11	Crimping socket palm type 120 sq mm - Al(Cable lug)	16.50	E	4	66.00
12	Base frame SMC for LT section fuse with neutral link	1522.00	E	1	1522.00
13	Fuse unit 415 V 100A porcelain	414.00	E	1	414.00
(a)	**Cost of material**				**190252.82**
(b)	Centage charges @16%				30440.45
	Expenditure on material				220693.27
(c)	**Cost of labour**				**24063.30**
(d)	Overhead charges on (c) above @10%				2406.33
(e)	Total (a +b +c +d)				247162.90
	Expenditure to be recovered				**247162.90**
	Expenditure to be recovered per metre				247.16
	Rounded to				**247.00**
(Rupees Two hundred and forty seven per metre only)					

Annexure 23

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Drawing LT OH Line on existing poles 4 wire ACSR Rabbit					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Shackle insulator 415V set(with strap bolt& nut)	68.20	set	52	3546.40
2	Cross arm GI channel 4 line (4 line channel cross arm) with clamp, bolt & nut for PSC pole 8M/200kg	907.21	set	30	27216.42
3	Ferrules 5 sq mm (GI)	12.00	E	7	84.00
4	Earthing coil GI 115 turns 50 mm internal dia	208.00	E	7	1456.00
5	Earth knob (Aluminium) for LT line	124.00	E	7	868.00
6	Pin insulator 415V set (with pin)	67.10	set	69	4629.90
7	Helically formed fitting-distribution side tie for ACSR Rabbit	54.00	E	92	4968.00
8	Reel insulator porcelain 415/240 V	38.00	No	23	874.00
9	Conductor ACSR Rabbit	46.20	m	4200	194040.00
(a)	**Cost of material**				**237682.72**
(b)	Centage charges @16%				38029.24
	Expenditure on material				275711.96
(c)	**Cost of labour**				**31717.77**
(d)	Overhead charges on (c) above @10%				3171.78
(e)	Total (a +b +c +d)				310601.50
	Expenditure to be recovered				**310601.50**
	Expenditure to be recovered per metre				**310.60**
	Rounded to				**311.00**
(Rupees Three hundred and eleven per metre only)					

Annexure 24

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Drawing LT OH Line on existing poles 5 wire ACSR Rabbit					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Shackle insulator 415V set(with strap bolt& nut)	68.20	set	65	4433.00
2	Cross arm GI channel 4 line (4 line channel cross arm) with clamp, bolt & nut for PSC pole 8M/200kg	907.21	set	30	27216.42
3	Cross arm GI channel 2 line (2 line channel cross arm) with clamp, bolt & nut for PSC pole 8M/200kg	573.00	set	30	17190.03
4	Ferrules 5 sq mm (GI)	12.00	E	7	84.00
5	Earthing coil GI 115 turns 50 mm internal dia	208.00	E	7	1456.00
6	Earth knob (Aluminium) for LT line	124.00	E	7	868.00
7	Pin insulator 415V set (with pin)	67.10	set	92	6173.20
8	Reel insulator porcelain 415/240 V	38.00	No	23	874.00
9	Helically formed fitting-distribution side tie for ACSR Rabbit	54.00	E	92	4968.00
10	Conductor ACSR Rabbit	46.20	m	5250	242550.00
11	Cable 1.1kV XLPE AL 1c x 120 sq mm (Un armoured)	108.90	m	48	5227.20
12	Crimping socket palm type 120 sq mm - Al(Cable lug)	16.50	E	8	132.00
13	Fuse unit 415 V 100A porcelain	414.00	E	3	1242.00
14	Base frame SMC for LT section fuse with neutral link	1522.00	E	1	1522.00
(a)	**Cost of material**				**313935.85**
(b)	Centage charges @16%				50229.74
	Expenditure on material				364165.59
(c)	**Cost of labour**				**39417.90**
(d)	Overhead charges on (c) above @10%				3941.79
(e)	Total (a +b +c +d)				407525.28
	Expenditure to be recovered				**407525.28**
	Expenditure to be recovered per metre				407.53
	Rounded to				**408.00**
(Rupees Four hundred and eight per metre only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing LT OH line 2 wire with Rabbit using PSC poles					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8 M	3700.60	E	33	122119.73
2	Shackle insulator 415V SET(With Strap Bolt&Nut)	68.20	Set	32	2182.40
3	Earth Knob (Aluminium) for LT Line	124.00	E	8	992.00
4	Earthing Coil GI 115 Turns 50 mm internal Dia	208.00	E	8	1664.00
5	Cross arm GI channel 2 line (2 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	573.00	Set	41	23493.04
6	Ferrules 5 Sq.mm(GI)	12.00	E	7	84.00
7	GI Wire 8 SWG	73.70	kg	1	73.70
8	Pin insulator 415V set (with pin)	67.10	Set	25	1677.50
9	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	50	2700.00
10	Reel Insulator Porcelain 415/240 V	38.00	No	25	950.00
11	Conductor ACSR Rabbit	46.20	m	2100	97020.00
12	Stay Insulator Porcelain 415/240 V	15.00	E	24	360.00
13	Clamp GI for LT Stay for Angular location	240.99	E	24	5783.76
14	Stay set complete(Anchor plate, stay rod and tightner)	839.30	E	24	20143.20
15	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	60	5280.00
16	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	96	2880.00
17	Helically formed Guy-Grip LT	88.00	E	144	12672.00
18	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	24	2613.60
19	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	4	66.00
20	Base Frame SMC for LT Section Fuse with neutral Link	1522.00	E	1	1522.00
21	Fuse Unit 415 V 100 A Porcelain	414.00	E	1	414.00
(a)	**Cost of material**				**304690.94**
(b)	Centage charges @16%				48750.55
	Expenditure on material				353441.48
(c)	Cost of labour				122146.39

(d)	Cost of Transportation	25138.08
(e)	**Cost of labour & transportation sub- total (c &d)**	**147284.47**
(f)	Overhead charges on (c) &(d) above @10%	14728.45
(g)	Total (a +b +c +d +f)	515454.40
	Expenditure to be recovered	**515454.40**
	Expenditure to be recovered per metre	515.45
	Rounded to	**515.00**
(Rupees Five hundred and fifteen per metre only)		

Annexure 26

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing LT OH line 3 wire with Rabbit using PSC poles					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8 M	3700.60	E	33	122119.73
2	Shackle Insulator 415V Set (With Strap Bolt&Nut)	68.20	Set	47	3205.40
3	Cross Arm GI Channel 4 Line (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	37	33566.92
4	Earthing Coil GI 115 Turns 50 mm internal Dia	208.00	E	8	1664.00
5	Earth Knob (Aluminium) for LT Line	124.00	E	8	992.00
6	GI Wire 8 SWG	73.70	kg	1	73.70
7	Pin Insulator 415V Set(With Pin)	67.10	Set	75	5032.50
8	Reel Insulator Porcelain 415/240 V	38.00	No	25	950.00
9	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	75	4050.00
10	Conductor ACSR Rabbit	46.20	m	3150	145530.00
11	Stay Insulator Porcelain 415/240 V	15.00	E	24	360.00
12	Clamp GI for LT Stay for Angular location	240.99	E	24	5783.76
13	Stay set complete(Anchor plate, stay rod and tightner)	839.30	E	24	20143.20
14	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	60	5280.00
15	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	96	2880.00
16	Helically formed Guy-Grip LT	88.00	E	144	12672.00
17	Clamp for 2/4 line channel Cross Arm for PSC Poles 200kg	55.08	E	1	55.08
18	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	0.22	25.30
19	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	24	2613.60
20	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	4	66.00
21	Base Frame SMC for LT Section Fuse with neutral Link	1522.00	E	1	1522.00
22	Fuse Unit 415 V 100 A Porcelain	414.00	E	1	414.00
(a)	**Cost of material**				**368999.19**
(b)	Centage charges @16%				59039.87
	Expenditure on material				428039.06

(c)	Cost of labour	128891.91
(d)	Cost of Transportation	25138.08
(e)	**Cost of labour & transportation sub- total (c &d)**	**154029.99**
(f)	Overhead charges on (c) &(d) above @10%	15403.00
(g)	Total (a +b +c +d +f)	597472.05
	Expenditure to be recovered	**597472.05**
	Expenditure to be recovered per metre	597.47
	Rounded to	**597.00**
(Rupees Five hundred and ninety seven per metre only)		

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing LT OH line 4 wire with Rabbit using PSC poles					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Shackle Insulator 415V Set (with strap bolt & nut)	68.20	Set	64	4364.80
2	Cross Arm GI Channel 4 Line (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	41	37195.77
3	Pole PSC 8 M	3700.60	E	33	122119.73
4	Earth Knob (Aluminium) for LT Line	124.00	E	8	992.00
5	Earthing Coil GI 115 Turns 50 mm internal Dia	208.00	E	8	1664.00
6	GI Wire 9 SWG	73.70	kg	1	73.70
7	Pin Insulator 415V Set(With Pin)	67.10	Set	75	5032.50
8	Reel Insulator Porcelain 415/240 V	38.00	No	25	950.00
9	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	100	5400.00
10	Conductor ACSR Rabbit	46.20	m	4200	194040.00
11	Stay Insulator Porcelain 415/240 V	15.00	E	24	360.00
12	Clamp GI for LT Stay for Angular location	240.99	E	24	5783.76
13	Stay set complete(Anchor plate, stay rod and tightner)	839.30	E	24	20143.20
14	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	60	5280.00
15	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	96	2880.00
16	Helically formed Guy-Grip LT	88.00	E	144	12672.00
17	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	48	5227.20
18	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	8	132.00
19	Fuse Unit 415 V 100 A Porcelain	414.00	E	3	1242.00
20	Base Frame SMC for LT Section Fuse with neutral Link	1522.00	E	1	1522.00
(a)	**Cost of material**				**427074.67**
(b)	Centage charges @16%				68331.95
	Expenditure on material				495406.61
(c)	Cost of labour				137848.59
(d)	Cost of Transportation				25138.08

(e)	**Cost of labour & transportation sub- total (c &d)**	**162986.67**
(f)	Overhead charges on (c) &(d) above @10%	16298.67
(g)	Total (a +b +c +d +f)	674691.95
	Expenditure to be recovered	**674691.95**
	Expenditure to be recovered per metre	674.69
	Rounded to	**675.00**
(Rupees Six hundred and seventy five per metre only)		

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing LT OH line 5 wire with Rabbit using PSC poles					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 8 M	3700.60	E	33	122119.73
2	Shackle Insulator 415V Set (with strap bolt & nut)	68.20	Set	80	5456.00
3	Cross Arm GI Channel 4 Line (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	38	34474.13
4	Cross Arm GI Channel 2 Line (2 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	573.00	Set	38	21774.04
5	Earth Knob (Aluminium) for LT Line	124.00	E	8	992.00
6	Earthing Coil GI 115 Turns 50 mm internal Dia	208.00	E	8	1664.00
7	GI Wire 8 SWG	73.70	kg	1	73.70
8	Reel Insulator Porcelain 415/240 V	38.00	No	25	950.00
9	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	125	6750.00
10	Pin Insulator 415V Set(With Pin)	67.10	Set	100	6710.00
11	Conductor ACSR Rabbit	46.20	m	5250	242550.00
12	Stay Insulator Porcelain 415/240 V	15.00	E	24	360.00
13	Clamp GI for LT Stay for Angular location	240.99	E	24	5783.76
14	Stay set complete(Anchor plate, stay rod &tightner)	839.30	E	24	20143.20
15	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	60	5280.00
16	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	96	2880.00
17	Helically formed Guy-Grip LT	88.00	E	144	12672.00
18	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	48	5227.20
19	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	8	132.00
20	Fuse Unit 415 V 100 A Porcelain	414.00	E	3	1242.00
21	Base Frame SMC for LT Section Fuse with neutral Link	1522.00	E	1	1522.00
22	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	0.22	25.30
(a)	**Cost of material**				**498781.06**
(b)	Centage charges @16%				79804.97
	Expenditure on material				578586.03

(c)	Cost of labour	145927.57
(d)	Cost of Transportation	25138.08
(e)	**Cost of labour & transportation sub- total (c &d)**	**171065.65**
(f)	Overhead charges on (c) &(d) above @10%	17106.57
(g)	Total (a +b +c +d +f)	766758.25
	Expenditure to be recovered	**766758.25**
	Expenditure to be recovered per metre	766.76
	Rounded to	**767.00**
(Rupees Seven hundred and sixty seven per metre only)		

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing 11 kV OH Line with ACSR Raccoon using PSC poles					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole PSC 9 M	4298.80	E	29	124665.20
2	Strain set with disc insulator	454.38	E	36	16357.57
3	Knee bracing for HT Cantiliver cross arm	720.00	E	6	4320.00
4	Channel cross arm GI 75x40x6mm 1.8M	1191.93	E	12	14303.16
5	Pole Top Bracket -F Type GI -11 kV	165.00	E	23	3795.00
6	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	10.7	1230.50
7	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	31.5	3622.50
8	Bolt& Nut GI FT M 16 x 75	115.00	kg	10.9	1255.80
9	Composite Pin Insulator 11 kV with Pin	171.60	Set	75	12870.00
10	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
11	GI Wire 6MM DIA 4 SWG	93.00	kg	96	8928.00
12	Channel cross arm GI 75 x 40 x 6 mm 2.4 mt	1748.29	E	12	20979.42
13	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.600 mt (2 line Cross arm)with clamp	448.37	E	3	1345.11
14	Bolt & Nut GI HT 200mm x 19mm	115.00	kg	10.1	1159.20
15	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	66	2376.00
16	Fish Plate GI (GI Flat 260 x 50 x 8 mm)	209.00	E	12	2508.00
17	V cross arm GI 11 kV	1542.62	E	21	32394.98
18	Stay Insulator Porcelain 11k V	40.00	E	27	1080.00
19	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	108	9504.00
20	Stay set complete(Anchor plate, stay rod &tightner)	1283.25	E	27	34647.75
21	Helically formed Guy-Grip HT	91.00	E	162	14742.00
22	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	108	3240.00
23	Conductor ACSR Raccoon	65.00	m	3150	204750.00
24	G.I.WIRE. 4MM (9 SWG)	81.00	kg	39	3159.00
25	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	8	8448.00

26	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	8	8072.00
27	Earth Connector 95 Sqmm	91.00	E	8	728.00
28	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.96	110.40
29	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	8	52.80
30	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	23	4784.00
31	Ferrules 5 Sq.mm(GI)	12.00	E	23	276.00
32	Stainless Steel Buckle Slot width 10.5 mm x 1.5 mm,Thickness 1.2 mm.	10.00	E	184	1840.00
33	SS strap for clamping earth wire	36.00	m	92	3312.00
(a)	Cost of material				562833.39
(b)	Centage charges @16%				90053.34
	Expenditure on material				**652886.74**
(c)	Cost of labour				269768.27
(d)	Cost of transportation				25138.08
(e)	**Cost of labour & transportation sub- total (c &d)**				**294906.35**
(f)	Overhead charges on (c) &(d) above @10%				29490.64
(g)	Total (a +b +c +d +f)				977283.72
	Expenditure to be recovered				**977.28**
	Expenditure to be recovered per metre				977.28
	Rounded to				**977.00**
(Rupees Nine hundred and seventy seven per metre only)					
1 Amount for PTCC clearance, if any, shall be collected extra. 2 Tree cutting compensation based on actual expenditure shall be collected extra.					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing 11 kV HT UG Cable 300 sq mm by open trench using PSC pole					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Cable 11kV XLPE AL UG 3c X300 sq mm (Armoured)	1447.60	m	1058	1531560.80
2	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
3	GI Wire 6MM Dia 4 SWG	93.00	kg	4	372.00
4	Channel cross arm GI 75 x 40 x 6 mm 2.4 mt	1748.29	E	3	5244.86
5	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.510 mt (2 line Cross arm)	448.37	E	3	1345.11
6	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	1.5	172.50
7	Bolt & Nut GI HT 200mm x 19mm	115.00	kg	8.04	924.60
8	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	6.75	776.25
9	Stay Insulator Porcelain 11k V	40.00	E	2	80.00
10	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	8	704.00
11	Stay set complete(Anchor plate, stay rod & tightner)	1283.25	E	2	2566.50
12	Helically formed Guy-Grip HT	91.00	E	12	1092.00
13	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	8	240.00
14	G.I.Wire. 4MM (9 SWG)	81.00	kg	2	162.00
15	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	1	1056.00
16	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	1	1009.00
17	Earth Connector 95 Sqmm	91.00	E	1	91.00
18	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.12	13.80
19	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	1	6.60
20	Cable End Termination Kit 11 kV XLPE 3c x 300 Sq.mm - Heat Shrinkable (Outdoor)	2821.50	E	4	11286.00
21	Cable Straight Joint Kit 11 kV XLPE 3c x 300 Sq.mm -Heat Shrinkable (Outdoor)	6074.20	E	2	12148.40
22	UG Cable Route Marker HT	173.00	E	20	3460.00
23	Pipe HDPE 110 mm	366.00	m	12	4392.00
24	Pole PSC 9 M	4298.80	E	3	12896.40
25	Clamp for 2/4 line channel Cross Arm for PSC Poles 200kg	55.08	E	6	330.48

26	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	1.32	151.80
27	Cross Arm GI Channel 100X50 mm 2.4 M	2005.66	E	3	6016.98
(a)	**Cost of material**				**1610076.08**
(b)	Centage charges @16%				257612.17
	Expenditure on material				1867688.25
(c)	Cost of labour				833257.71
(d)	Cost of transportation				17828.00
(e)	**Cost of labour & transportation sub- total (c &d)**				**851085.71**
(f)	Overhead charges on (c) &(d) above @10%				85108.57
(g)	Total (a +b +c +d +f)				2803882.53
	Expenditure to be recovered				**2803882.53**
	Expenditure to be recovered per metre				2803.88
	Rounded to				**2804.00**
(Rupees Two thousand eight hundred and four per metre only)					
Road cutting, Restoration, PTCC Clearance and other charges extra.					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing 11 kV OH Line with ACSR Raccoon using A type poles					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Pole A Type 12 M	20531.93	E	29	595425.94
2	Strain set with Disc Insulator	454.38	E	36	16357.57
3	Composite Pin Insulator 11 kV with Pin	171.60	Set	69	11840.40
4	Channel cross arm GI 75x40x6mm 1.8M	1191.93	E	12	14303.16
5	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	2.3	264.50
6	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	31.5	3622.50
7	Bolt& Nut GI FT M 16 x 75	115.00	kg	10.1	1159.20
8	V cross arm GI 11 kV with clamp	1542.62	E	23	35480.21
9	Cantiliver Cross arm HT	1589.35	E	6	9536.10
10	Clamp GI for HT Cantiliver Cross arm	173.65	E	6	1041.90
11	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
12	GI Wire 6MM DIA 4 SWG	93.00	kg	96	8928.00
13	Channel cross arm GI 75 x 40 x 6 mm 2.4 mt	1748.29	E	12	20979.42
14	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.510 mt (2 line Cross arm)	448.37	E	3	1345.11
15	Bolt & Nut GI HT 200mm x 19mm	115.00	kg	10.1	1159.20
16	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	69	2484.00
17	Fish Plate GI (GI Flat 260 x 50 x 8 mm)	209.00	E	6	1254.00
18	Stay Insulator Porcelain 11k V	40.00	E	27	1080.00
19	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	108	9504.00
20	Stay set complete(Anchor plate, stay rod &tightner)	1283.25	E	27	34647.75
21	Helically formed Guy-Grip HT	91.00	E	162	14742.00
22	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	108	3240.00
23	Conductor ACSR Raccoon	65.00	m	3150	204750.00
24	G.I.Wire. 4MM (12 SWG)	89.10	kg	39	3474.90
25	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	8	8448.00

26	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	8	8072.00
27	Earth Connector 95 Sqmm	91.00	E	8	728.00
28	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.96	110.40
29	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	8	52.80
30	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	23	4784.00
31	Ferrules 5 Sq.mm(GI)	12.00	E	23	276.00
32	Stainless Steel Buckle Slot width 10.5 mm x 1.5 mm,Thickness 1.2 mm.	10.00	E	184	1840.00
33	SS strap for clamping earth wire	36.00	m	92	3312.00
(a)	**Cost of material**				**1036220.07**
(b)	Centage charges @16%				165795.21
	Expenditure on material				1202015.28
(c)	Cost of labour				300839.88
(d)	Cost of transportation				25138.08
(e)	**Cost of labour & transportation sub- total (c &d)**				**325977.96**
(f)	Overhead charges on (c) &(d) above @10%				32597.80
(g)	Total (a +b +c +d +f)				1560591.04
	Expenditure to be recovered				**1560591.04**
	Expenditure to be recovered per metre				1560.59
	Rounded to				**1561.00**
(Rupees One thousand five hundred and sixty one per metre only)					
1 Amount (₹) for PTCC clearance, if any, shall be collected extra. 2 Tree cutting compensation based on actual expenditure shall be collected extra.					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Installation of 1 No. 11 KV/ 433 V , 100 KVA Transformer without stay (PSC pole mounted)					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Distribution Transformer 3 Phase 100 kVA 11kV/433 V ONAN	250449.10	E	1	250449.10
2	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	35	3811.50
3	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	12	198.00
4	Crimping Socket Palm Type 95 Sq.mm -Al (Cable Lug)	12.10	E	3	36.30
5	Pole PSC 9 M	4298.80	E	2	8597.60
6	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
7	Strain set with Disc Insulator	454.38	E	3	1363.13
8	Composite Pin Insulator 11 kV with Pin	171.60	Set	3	514.80
9	G.I.Wire 4MM (8 SWG)	81.00	kg	30	2430.00
10	Channel cross arm GI 75x40x6mm 1.8M	1191.93	E	2	2383.86
11	Cross Arm GI Channel 100X50 mm 3 M	2985.75	E	7	20900.25
12	V cross arm GI 11 kV with clamp	1542.62	E	2	3085.24
13	Pole Top SPL pole cap	169.40	E	1	169.40
14	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm -0.510 mt (2 line Cross arm)	448.37	E	4	1793.48
15	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	2	230.00
16	Fuse Drop Out 11 kV	1057.00	E	3	3171.00
17	Fuse Wire 200A	874.00	kg	0.1	87.40
18	Bolt& Nut GI 40mm x 16mm (1 1/2 x 5/8)	115.00	kg	0.12	13.80
19	Bolt& Nut GI HT 200mm x 19mm	115.00	kg	5.04	579.60
20	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	10.5	1207.50
21	Bolt& Nut GI FT M 16 x 75	115.00	kg	0.84	96.60
22	Bolt& Nut GI HT 300mm x 19mm	115.00	kg	5	575.00
23	Clamp GI For Transformer Side Belting Angle	198.95	No	2	397.90
24	Plate washer GI M16	115.00	kg	0.2	23.00
25	Distribution Box LT Outdoor 2 Way 200 A	23666.00	E	1	23666.00

26	Cable Tray GI (Perforated) 300 x 30 x 1.6mm-2.5 mt	1633.00	E	2	3266.00
27	Cable Tray GI 300mmX1.6 mm	1167.00	m	1	1167.00
28	Bolt& Nut GI M 12 x 90 (3 1/2"x 1/2")	115.00	kg	0.98	112.24
29	Plate Washer SS M12	115.00	kg	0.16	18.40
30	Copper Flat Strip 40 x 3 mm length 115mm	125.00	E	4	500.00
31	GI Flat Strip 40 x 6 mm	80.00	kg	14	1120.00
32	Crimping Socket Palm Type 50 Sq.mm -Al (Cable Lug)	6.60	E	15	99.00
33	SS strap for clamping earth wire	36.00	m	10	360.00
34	Conductor ACSR Rabbit	46.20	m	20	924.00
35	Earth Wire GI 7/9	73.00	kg	5	365.00
36	Bolt & Nut GI M 10 x 25 (1"x 3/8")	115.00	kg	0.08	9.20
37	Square Washer GI M10	16.67	No	1	16.67
38	Alkathene Pipe 50 mm	70.80	m	30	2124.00
39	Transformer Side Belting Angle	2873.00	No	2	5746.00
40	Clamp GI for Danger Board (HT)	93.00	No	1	93.00
41	Bolt & Nut GI M 6 x 25 (1"x 1/4")	115.00	kg	3	345.00
42	Danger Board 250 x 200 mm (11000 V)	101.20	E	1	101.20
43	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	3	108.00
44	GI Flat Strip 25 x 3 mm	98.00	m	2.4	235.20
45	LA Supporting Plate GI 500 x 300 x 3 mm	112.00	kg	3	336.00
46	Angle cross arm GI 35 x 35 x 6 mm 0.5 mt	685.00	E	6	4110.00
47	Lightning Arrester 9 kV,10 KA (Station class) Composite Polymer Housing	2028.00	E	3	6084.00
48	Stainless steel Buckles [20.5 mm x 1.5 mm; thickness 1.2 mm]	6.00	E	20	120.00
49	Clamp GI for Cable Tray in Transformer DP	472.00	E	6	2832.00
50	CT Resin Cast 0.415KV 10VA Class 0.5 200/5A	0.00	E	4	0.00
51	EM 3X 230V CLASS 0.5S --/5A LCD(DTR /LT CT Meter)	0.00	E	1	0.00
52	Meter Box For Distribution Transformer With Clamps (FRP)	3248.30	E	1	3248.30
53	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	5	5280.00

54	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	5	5045.00
55	Earth Connector 95 Sqmm	91.00	E	5	455.00
56	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.6	69.00
(a)	**Cost of material**				**382046.67**
(b)	Centage charges @16%				61127.47
	Expenditure on material				443174.14
(c)	Cost of labour				58513.02
(d)	Cost of transportation				4713.39
(e)	**Cost of labour & transportation sub- total (c &d)**				**63226.41**
(f)	Overhead charges on (c) &(d) above @10%				6322.64
(g)	Total (a +b +c +d +f)				512723.19
	Expenditure to be recovered				512723.19
	Rounded to				**512723.00**
(Rupees Five lakh twelve thousand seven hundred and twenty three only)					
Note 1: If transformer fencing as per standards is provided, an Amount (₹) of Rs.38153/- can be collected extra Note 2: If transformer yard is constructed as per standards, an Amount (₹) of Rs.23075/- can be collected extra					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Installation of 1 No. 11 KV/ 433 V , 160 KVA Transformer without stay (pole mounted) using PSC pole					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Distribution Transformer 3 Phase 160 kVA 11kV/433 V ONAN (1 Star Rated)	376809.40	E	1	376809.40
2	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	35	3811.50
3	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	12	198.00
4	Crimping Socket Palm Type 95 Sq.mm -Al (Cable Lug)	12.10	E	3	36.30
5	Pole PSC 9 M	4298.80	E	2	8597.60
6	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
7	Strain set with Disc Insulator	454.38	E	3	1363.13
8	Composite Pin Insulator 11 kV with Pin	171.60	Set	3	514.80
9	G.I.WIRE. 4MM (9 SWG)	81.00	kg	30	2430.00
10	Channel cross arm GI 75x40x6mm 1.8M	1191.93	E	2	2383.86
11	Cross Arm GI Channel 100X50 mm 3 M	2985.75	E	7	20900.25
12	V cross arm GI 11 kV with clamp	1542.62	E	2	3085.24
13	Special Pole cap	169.40	E	1	169.40
14	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.510 mt (2 line Cross arm)	448.37	E	4	1793.48
15	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	2	230.00
16	Fuse Drop out 11 kV	1057.00	E	3	3171.00
17	Fuse Wire 200A	874.00	kg	0.1	87.40
18	Bolt& Nut GI 40mm x 16mm (1 1/2 x 5/8)	115.00	kg	0.12	13.80
19	Bolt& Nut GI HT 200mm x 19mm	115.00	kg	5.04	579.60
20	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	10.5	1207.50
21	Bolt& Nut GI FT M 16 x 75	115.00	kg	0.84	96.60
22	Bolt& Nut GI HT 300mm x 19mm	115.00	kg	5	575.00
23	Clamp GI For Transformer Side Belting Angle	198.95	No	2	397.90
24	Plate washer GI M16	115.00	kg	0.2	23.00
25	Distribution Box LT Outdoor 2 Way 200 A	23666.00	E	1	23666.00

26	Cable Tray GI (Perforated) 300 x 30 x 1.6mm-2.5 mt	1633.00	E	2	3266.00
27	Cable Tray GI 300mmX1.6 mm	1167.00	m	1	1167.00
28	Bolt& Nut GI M 12 x 90 (3 1/2"x 1/2")	115.00	kg	0.98	112.24
29	Plate Washer SS M12	115.00	kg	0.16	18.40
30	Copper Flat Strip 40 x 3 mm length 115mm	125.00	E	4	500.00
31	GI Flat Strip 40 x 6 mm	80.00	kg	14	1120.00
32	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	15	99.00
33	SS strap for clamping earth wire	36.00	m	10	360.00
34	Conductor ACSR Rabbit	46.20	m	20	924.00
35	Earth Wire GI 7/9	73.00	kg	5	365.00
36	Bolt & Nut GI M 10 x 25 (1"x 3/8")	115.00	kg	0.08	9.20
37	Square Washer GI M10	16.67	No	1	16.67
38	Alkathene Pipe 50 mm	70.80	m	30	2124.00
39	Transformer Side Belting Angle	2873.00	No	2	5746.00
40	Spacer LT 4 line Composit (For Cable Tray)	215.00	E	15	3225.00
41	Clamp GI for Danger Board (HT)	93.00	No	1	93.00
42	Bolt & Nut GI M 6 x 25 (1"x 1/4")	115.00	kg	3	345.00
43	Danger Board 250 x 200 mm (11000 V)	101.20	E	1	101.20
44	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	3	108.00
45	GI Flat Strip 25 x 3 mm	98.00	m	2.4	235.20
46	LA Supporting Plate GI 500 x 300 x 3 mm	112.00	kg	3	336.00
47	Angle cross arm GI 35 x 35 x 6 mm 0.5 mt	685.00	E	6	4110.00
48	Lightning Arrester 9 kV,10 KA (Station class) Composite Polymer Housing	2028.00	E	3	6084.00
49	Stainless steel Buckles [20.5 mm x 1.5 mm; thickness 1.2 mm]	6.00	E	20	120.00
50	Clamp GI for Cable Tray in Transformer DP	472.00	E	6	2832.00
51	CT Resin Cast 0.415KV 15VA Class 0.5 300/5A	0.00	E	4	0.00
52	EM 3X 230V CLASS 0.5S --/5A LCD(DTR /LT CT METER)	0.00	E	1	0.00
53	Meter Box For Distribution Transformer With Clamps (FRP)	3248.30	E	1	3248.30

54	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	5	5280.00
55	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	5	5045.00
56	Earth Connector 95 Sqmm	91.00	E	5	455.00
57	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.6	69.00
(a)	**Cost of material**				**511631.97**
(b)	Centage charges @16%				81861.12
	Expenditure on material				593493.09
(c)	Cost of labour				55021.50
(d)	Cost of transportation				4713.39
(e)	**Cost of labour & transportation sub- total (c &d)**				**59734.89**
(f)	Overhead charges on (c) &(d) above @10%				5973.49
(g)	Total (a +b +c +d +f)				659201.47
	Expenditure to be recovered				659201.47
	Rounded to				**659201.00**
(Rupees Six lakh fifty nine thousand two hundred and one only)					
Note 1: If transformer fencing as per standards is provided, an Amount (₹) of Rs.38153/- can be collected extra Note 2: If transformer yard is constructed as per standards, an Amount (₹) of Rs.23075/- can be collected extra					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Installation of 11KV/433V 250 KVA Transformer using PSC pole					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Distribution Transformer 3 Phase 250 kVA 11kV/433 V ONAN	498951.20	E	1	498951.20
2	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	35	3811.50
3	Crimping Socket Palm Type 300 Sq.mm -Al (Cable Lug)	16.50	E	12	198.00
4	Crimping Socket Palm Type 95 Sq.mm -Al (Cable Lug)	12.10	E	3	36.30
5	Pole PSC 9 M	4298.80	E	2	8597.60
6	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
7	Strain set with Disc Insulator	454.38	E	3	1363.13
8	Composite Pin Insulator 11 kV with Pin	171.60	Set	3	514.80
9	G.I.Wire. 4MM (8 SWG)	81.00	kg	30	2430.00
10	Channel cross arm GI 75x40x6mm 1.8M	1191.93	E	2	2383.86
11	Cross Arm GI Channel 100X50 mm 3 M	2985.75	E	7	20900.25
12	V cross arm GI 11 kV	1542.62	E	2	3085.24
13	Pole Top Bracket -F Type GI -11 kV	169.40	E	1	169.40
14	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.510 mt (2 line Cross arm) with clamp	448.37	E	4	1793.48
15	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	2	230.00
16	Fuse drop out 11 kV	1057.00	E	3	3171.00
17	Fuse Wire 200A	874.00	kg	0.1	87.40
18	Bolt& Nut GI 40mm x 16mm (1 1/2 x 5/8)	115.00	kg	0.12	13.80
19	Bolt& Nut GI HT 200mm x 19mm	115.00	kg	5.04	579.60
20	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	10.5	1207.50
21	Bolt& Nut GI FT M 16 x 75	115.00	kg	0.84	96.60
22	Bolt& Nut GI HT 300mm x 19mm	115.00	kg	5	575.00
23	Clamp GI For Transformer Side Belting Angle	198.95	No	2	397.90
24	Plate washer GI M16	115.00	kg	0.2	23.00
25	Distribution Box LT Outdoor 2 Way 200 A	23666.00	E	1	23666.00

26	Cable Tray GI (Perforated) 300 x 30 x 1.6mm-2.5 mt	1633.00	E	2	3266.00
27	Cable Tray GI 300mmX1.6 mm	1167.00	m	1	1167.00
28	Bolt& Nut GI M 12 x 90 (3 1/2"x 1/2")	115.00	kg	0.98	112.24
29	Plate Washer SS M12	115.00	kg	0.16	18.40
30	Copper Flat Strip 40 x 3 mm length 115mm	125.00	E	4	500.00
31	GI Flat Strip 40 x 6 mm	80.00	kg	14	1120.00
32	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	15	99.00
33	SS strap for clamping earth wire	36.00	m	10	360.00
34	Conductor ACSR Rabbit	46.20	m	20	924.00
35	Earth Wire GI 7/9	73.00	kg	5	365.00
36	Bolt & Nut GI M 10 x 25 (1"x 3/8")	115.00	kg	0.08	9.20
37	Square Washer GI M10	16.67	No	1	16.67
38	Alkathene Pipe 50 mm	70.80	m	30	2124.00
39	Transformer Side Belting Angle	2873.00	No	2	5746.00
40	Spacer LT 4 line Composit (For Cable Tray)	215.00	E	15	3225.00
41	Clamp GI for Danger Board (HT)	93.00	No	1	93.00
42	Bolt & Nut GI M 6 x 25 (1"x 1/4")	115.00	kg	3	345.00
43	Danger Board 250 x 200 mm (11000 V)	101.20	E	1	101.20
44	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	3	108.00
45	GI Flat Strip 25 x 3 mm	98.00	m	2.4	235.20
46	LA Supporting Plate GI 500 x 300 x 3 mm	112.00	kg	3	336.00
47	Angle cross arm GI 35 x 35 x 6 mm 0.5 mt	685.00	E	6	4110.00
48	Lightning Arrester 9 kV,10 KA (Station class) Composite Polymer Housing	2028.00	E	3	6084.00
49	Stainless steel Buckles [20.5 mm x 1.5 mm; thickness 1.2 mm]	6.00	E	20	120.00
50	Clamp GI for Cable Tray in Transformer DP	472.00	E	6	2832.00
51	Stay Insulator Porcelain 11k V	40.00	E	4	160.00
52	Stay Set complete(Anchor plate, Stay rod & tightner)	1283.25	E	2	2566.50
53	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	14	1232.00

54	Helically formed Guy-Grip HT	91.00	E	16	1456.00
55	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	8	240.00
56	CT Resin Cast 0.415kV 15VA Class 0.5 400/5A	0.00	E	4	0.00
57	EM 3X 230V CLASS 0.5S --/5A LCD(DTR /LT CT Meter)	0.00	E	1	0.00
58	Meter Box For Distribution Transformer With Clamps (FRP)	2953.00	E	1	2953.00
59	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	5	5280.00
60	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	5	5045.00
61	Earth Connector 95 Sqmm	91.00	E	5	455.00
62	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.6	69.00
(a)	**Cost of material**				**639132.97**
(b)	Centage charges @16%				102261.28
	Expenditure on material				741394.25
(c)	Cost of labour				106086.24
(d)	Cost of transportation				3142.26
(e)	**Cost of labour & transportation sub- total (c &d)**				**109228.50**
(f)	Overhead charges on (c) &(d) above @10%				10922.85
(g)	Total (a +b +c +d +f)				861545.60
	Expenditure to be recovered				861545.60
	Rounded to				**861546.00**
(Rupees Eight lakh sixty one thousand five hundred and forty six only)					
Note 1:If transformer fencing as per standards is provided, an Amount (₹) of Rs.38153/- can be collected extra Note 2:If transformer yard is constructed as per standards, an Amount (₹) of Rs.23075/- can be collected extra					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Installation of Data Acquisition compatible Extensible type Ring Main Unit without VCB -CCC (E) (Cable - Cable -Cable)					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	RMU 11kV 630 A CCC(E) -(CCC+) or (RRR+)	684046.00	E	1	684046.00
2	CROSS ARM GI CHANNEL 100X50 mm 3 M	2985.75	E	1	2985.75
3	Cable 11kV XLPE AL UG 3c X300 sq mm (Armoured)	1447.60	m	15	21714.00
4	GI STRIP 32X6	91.00	kg	16	1456.00
5	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	2	2112.00
6	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	2	2018.00
7	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.24	27.60
8	Cable End Termination Kit 11 kV XLPE 3c x 300 Sq.mm - Heat Shrinkable (In door)	1758.90	E	3	5276.70
(a)	**Cost of material**				**719636.05**
(b)	Centage charges @16%				115141.77
	Expenditure on material				834777.82
(c)	Cost of labour				76282.05
(d)	Cost of transportation				3142.26
(e)	**Cost of labour & transportation sub- total (c &d)**				**79424.31**
(f)	Overhead charges on (c) &(d) above @10%				7942.43
(g)	Total (a +b +c +d +f)				922144.56
	Expenditure to be recovered				922144.56
	Rounded to				**922145.00**
(Rupees Nine lakh twenty two thousand one hundred and forty five only)					
Note 1: If RMU fencing as per standards is provided, an Amount (₹) of Rs.38153/- can be collected extra Note 2: If RMU yard is constructed as per standards, an Amount (₹) of Rs.11538/- can be collected extra					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for installation of Data Acquisition compatible Extensible type Ring Main Unit with VCB -CTC (E) (Cable -Transformer -Cable)					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	RMU 11kV 630 A CTC(E) + DA-(CCV+ +DA) or (RRL + +DA)	746350.00	E	1	746350.00
2	Cross arm GI Channel 100X50 mm 3 M	2985.75	E	1	2985.75
3	Cable End Termination Kit 11 kV XLPE 3c x 185 Sq.mm - Heat Shrinkable (Outdoor)	2714.00	E	2	5428.00
4	Cable 11kV XLPE AL UG 3c X185 sq mm (Armoured)	1298.00	m	5	6490.00
5	GI Strip 32X6	91.00	kg	16	1456.00
6	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	2	2112.00
7	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	2	2018.00
8	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.24	27.60
9	Cable End Termination Kit 11 kV XLPE 3c x 300 Sq.mm - Heat Shrinkable (In door)	1758.90	E	2	3517.80
(a)	**Cost of material**				**770385.15**
(b)	Centage charges @16%				123261.62
	Expenditure on material				893646.77
(c)	Cost of labour				64360.07
(d)	Cost of transportation				3142.26
(e)	**Cost of labour & transportation sub- total (c &d)**				**67502.33**
(f)	Overhead charges on (c) &(d) above @10%				6750.23
(g)	Total (a +b +c +d +f)				967899.34
	Expenditure to be recovered				967899.34
	Rounded to				**967899.00**
(Rupees Nine lakh sixty seven thousand eight hundred and ninety nine only)					
Note 1: If RMU fencing as per standards is provided, an Amount (₹) of Rs.38153/- can be collected extra Note 2: If RMU yard is constructed as per standards, an Amount (₹) of Rs.11538/- can be collected extra					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for installation of Data Acquisition compatible Extensible add-on type Ring Main Unit without VCB (Single Switch C-Extension)					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	RMU 11kV 630 A C(E) + DA-(C+DA) or (R+DA)	340000.00	E	1	340000.00
2	Cross arm GI Channel 100X50 mm 3 M	2985.75	E	1	2985.75
3	GI Strip 32X6	91.00	kg	8	728.00
4	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	1	1056.00
5	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	1	1009.00
6	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.12	13.80
7	Cable End Termination Kit 11 kV XLPE 3c x 300 Sq.mm - Heat Shrinkable (In door)	1758.90	E	1	1758.90
(a)	**Cost of material**				**347551.45**
(b)	Centage charges @16%				55608.23
	Expenditure on material				403159.68
(c)	Cost of labour				19470.82
(d)	Cost of transportation				3142.26
(e)	**Cost of labour & transportation sub- total (c &d)**				**22613.08**
(f)	Overhead charges on (c) &(d) above @10%				2261.31
(g)	Total (a +b +c +d +f)				428034.07
	Expenditure to be recovered				428034.07
	Rounded to				**428034.00**
(Rupees Four lakh twenty eight thousand and thirty four only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for installation of Data Acquisition compatible, Extensible, add-on type Ring Main Unit with VCB (Single Switch T-Extension)					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	RMU 11kV 630 A T (E) + DA-(V+DA) or (L+DA)	435007.00	E	1	435007.00
2	Cross arm GI Channel 100X50 mm 3 M	2985.75	E	1	2985.75
3	Cable End Termination Kit 11 kV XLPE 3c x 185 Sq.mm - Heat Shrinkable (Outdoor)	2714.00	E	2	5428.00
4	Cable 11kV XLPE AL UG 3c X185 sq mm (Armoured)	1298.00	m	5	6490.00
5	GI Strip 32X6	91.00	kg	16	1456.00
6	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	2	2112.00
7	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	2	2018.00
8	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.24	27.60
(a)	**Cost of material**				**455524.35**
(b)	Centage charges @16%				72883.90
	Expenditure on material				528408.25
(c)	Cost of labour				23684.57
(d)	Cost of transportation				3142.26
(e)	**Cost of labour & transportation sub- total (c &d)**				**26826.83**
(f)	Overhead charges on (c) &(d) above @10%				2682.68
(g)	Total (a +b +c +d +f)				557917.76
	Expenditure to be recovered				557917.76
	Rounded to				**557918.00**
(Rupees Five lakh fifty seven thousand nine hundred and eighteen only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for drawing 1Km of HT ABC of size 3x150 + 1x120 sqmm on 9 mts PSC Pole supports					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
2	GI Wire 6MM DIA 4 SWG	93.00	kg	12	1116.00
3	Channel cross arm GI 75 x 40 x 6 mm 2.4 mt	1748.29	E	9	15734.57
4	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.510 mt (2 line Cross arm) with clamp	448.37	E	3	1345.11
5	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	1.5	172.50
6	Bolt& Nut GI HT 200mm x 19mm	115.00	kg	7.56	869.40
7	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	10.5	1207.50
8	Pole PSC 9 M	4298.80	E	38	163354.40
9	Stay Insulator Porcelain 11k V	40.00	E	29	1160.00
10	Stay set complete (Anchor plate, stay rod,&tightner)	1283.25	E	28	35931.00
11	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	114	9996.80
12	Helically formed Guy-Grip HT	91.00	E	168	15288.00
13	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	112	3360.00
14	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	33	6864.00
15	Ferrules 5 Sq.mm(GI)	12.00	E	33	396.00
16	G.I.WIRE. 4MM (8 SWG)	81.00	kg	41	3321.00
17	Stainless Steel Buckle Slot width 10.5 mm x 1.5 mm,Thickness 1.2 mm.	10.00	E	264	2640.00
18	SS strap for clamping earth wire	36.00	m	132	4752.00
19	Termination Kit(3 Nos) for HT ABC 150 Sq.mm	1878.00	Set	6	11268.00
20	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	4	4224.00
21	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	4	4036.00
22	Earth Connector 95 Sqmm	91.00	E	4	364.00
23	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.48	55.20
24	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	4	26.40
25	Aerial Bunched Cable HT 3x150 + 1x120 sq.mm (Insulated Messenger)	1117.77	m	1106	1236253.62

26	Lightning Arrester 9 kV,10 KA (Station class) Composite Polymer Housing	2028.00	E	6	12168.00
27	Cable Tie UV Plastic Heavy Duty 500 mm Length	4.00	No	20	80.00
28	Stainless Steel Strap [20 mm x 0.7 mm]	36.00	m	43	1548.00
29	Stainless steel Buckles [20.5 mm x 1.5 mm; thickness 1.2 mm]	6.00	E	86	516.00
30	Suspension Clamp Assembly for HT AB Cables up to 150 sq.mm	416.00	E	27	11232.00
31	Anchoring /Dead end Clamp Assembly for HT AB Cables up to 150 sq.mm	571.00	E	16	9136.00
(a)	**Cost of material**				**1570392.50**
(b)	Centage charges @16%				251262.80
	Expenditure on material				1821655.30
(c)	Cost of labour				313302.53
(d)	Cost of transportation				27494.78
(e)	**Cost of labour & transportation sub- total (c &d)**				**340797.31**
(f)	Overhead charges on (c) &(d) above @10%				34079.73
(g)	Total (a +b +c +d +f)				2196532.34
	Expenditure to be recovered				2196532.34
	Expenditure to be recovered per metre				2196.53
	Rounded to				**2197.00**
(Rupees Two thousand one hundred and ninety seven per metre only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for drawing 1Km of HT ABC of size 3x120 + 1x95 on PSC post supports					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
2	GI WIRE 6MM DIA 4 SWG	93.00	kg	12	1116.00
3	Channel cross arm GI 75 x 40 x 6 mm 2.4 mt	1748.29	E	9	15734.57
4	Ferrules 5 Sq.mm(GI)	448.37	E	3	1345.11
5	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	1.5	172.50
6	Bolt & Nut GI HT 200mm x 19mm	115.00	kg	7.56	869.40
7	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	10.5	1207.50
8	Pole PSC 9 M	4298.80	E	38	163354.40
9	Stay Insulator Porcelain 11k V	40.00	E	29	1160.00
10	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	114	9996.80
11	Stay set complete(Anchor plate, stay rod & tightner)	1283.25	E	28	35931.00
12	Ferrules 5 Sq.mm(GI)	91.00	E	168	15288.00
13	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	112	3360.00
14	Aerial Bunched Cable HT 3x120 + 1x95 sq.mm (Insulated Messenger)	1000.22	m	1105	1105243.10
15	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	33	6864.00
16	Ferrules 5 Sq.mm(GI)	12.00	E	33	396.00
17	G.I.WIRE. 4MM (9 SWG)	81.00	kg	41	3321.00
18	Stainless Steel Buckle Slot width 10.5 mm x 1.5 mm,Thickness 1.2 mm.	10.00	E	264	2640.00
19	SS strap for clamping earth wire	36.00	m	132	4752.00
20	MVT Kit For HT ABC	3852.00	E	1	3852.00
21	Heat Shrinkable Termination Kit (3 Nos) for 120 Sq.mm Three phase Aerial Bunched Cable	1009.00	Set	4	4036.00
22	Stainless Steel Strap [20 mm x 0.7 mm]	36.00	m	43	1548.00
23	Stainless steel Buckles [20.5 mm x 1.5 mm; thickness 1.2 mm]	6.00	E	86	516.00
24	Anchoring /Dead end Clamp Assembly for HT AB Cables up to 120 sq.mm	468.00	E	16	7488.00
25	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	4	4224.00

26	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	4	4036.00
27	Earth Connector 95 Sqmm	91.00	E	4	364.00
28	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.48	55.20
29	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	4	26.40
30	Cable Tie UV Plastic Heavy Duty 500 mm Length	4.00	No	20	80.00
31	Suspension Clamp Assembly for HT AB Cables up to 120 sq.mm	316.00	E	27	8532.00
(a)	**Cost of material**				**1419485.98**
(b)	Centage charges @16%				227117.76
	Expenditure on material				1646603.73
(c)	Cost of labour				306420.97
(d)	Cost of transportation				27494.78
(e)	**Cost of labour & transportation sub- total (c &d)**				**333915.75**
(f)	Overhead charges on (c) &(d) above @10%				33391.57
(g)	Total (a +b +c +d +f)				2013911.05
	Expenditure to be recovered				2013911.05
	Expenditure to be recovered per metre				2013.91
	Rounded to				**2014.00**
(Rupees Two thousand and fourteen per metre only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for drawing 1Km of LT ABC of size 3x70 + 1x50 +1x16 on 8 mts PSC Pole supports					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	End Cap for ABC 50 Sq mm	7.00	E	2	14.00
2	End Cap for ABC 16 Sq mm	5.00	E	2	10.00
3	Anchoring /Dead end Clamp Assembly for LT AB Cables up to 70 sq.mm	281.00	E	18	5058.00
4	End Cap for ABC 70 Sq mm	5.00	E	6	30.00
5	Stainless Steel Buckle Slot width 20.5 mm x 1.5 mm,Thickness 1.2 mm	9.00	E	68	612.00
6	Stainless Steel Strap 20 mm x 0.7 mm	31.00	m	26	806.00
7	Cable Tie UV Plastic Heavy Duty 500 mm Length	4.00	E	20	80.00
8	Suspension Clamp for LT AB Cables up to 70 sq.mm	222.00	E	24	5328.00
9	Pole PSC 8 M	3700.60	E	37	136922.13
10	Stay Insulator Porcelain 415/240 V	15.00	E	35	525.00
11	Clamp GI for LT Stay	224.00	E	34	7616.00
12	Stay set complete(Anchor plate,stay rod& tightner)	839.30	E	2	1678.60
13	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	88	7744.00
14	Helically formed Guy-Grip HT	91.00	E	6	546.00
15	Helically formed Guy-Grip LT	88.00	E	204	17952.00
16	Clamp GI for 8 mt Strut Pole (For Pole)	113.58	E	6	681.45
17	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	Kg	0.99	113.85
18	Clamp GI for 8 mt Strut Pole Top	113.58	E	6	681.45
19	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	136	4080.00
20	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	8	1664.00
21	Ferrules 5 Sq.mm(GI)	12.00	E	8	96.00
22	G.I.wire 4 mm(8 SWG)	81.00	kg	12	972.00
23	Stainless Steel Buckle Slot width 10.5 mm x 1.5 mm,Thickness 1.2 mm	10.00	E	64	640.00
24	SS strap for clamping earth wire	36.00	m	32	1152.00
25	Aerial Bunched Cable LT 3x70 + 1x50 + 1x16 sq.mm (Insulated Messenger)	280.00	m	1100	308000.00

26	Pre-Insulated Midspan Joints and Terminal Lugs 16 Sq.mm	93.00	E	3	279.00
27	Pre-Insulated Midspan Joints and Terminal Lugs 50 Sq.mm	91.00	E	3	273.00
28	Pre-Insulated Midspan Joints and Terminal Lugs 70 Sq.mm	77.00	E	12	924.00
29	Pipe GI 40 mm dia -2.5 mLength(Earth Pipe)	1056.00	E	2	2112.00
30	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	2	2018.00
31	Earth Connector 95 Sqmm	91.00	E	2	182.00
32	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.24	27.60
33	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	2	13.20
34	Insulation Piercing Connector (IPC Connector) Main 16 sq mm to 95 sq mm; Tap 4 sq.mm to 50 sq.mm	64.00	E	4	256.00
(a)	**Cost of material**				**509087.28**
(b)	Centage charges @16%				81453.96
	Expenditure on material				590541.24
(c)	Cost of labour				189391.29
(d)	Cost of transportation				5784.62
(e)	**Cost of labour & transportation sub- total (c &d)**				**195175.91**
(f)	Overhead charges on (c) &(d) above @10%				19517.59
(g)	Total (a +b +c +d +f)				805234.74
	Expenditure to be recovered				805234.74
	Expenditure to be recovered per metre				805.23
	Rounded to				**805.00**
(Rupees Eight hundred and five per metre only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT single phase over head line (without stay) using GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI Post 8m	18000.00	E	1	18000.00
2	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	1	67.10
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	2	108.00
4	CROSS ARM GI CHANNEL 2 LINE (2 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	573.00	Set	1	573.00
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
(a)	**Cost of material**				18786.10
(b)	Centage Charge(16%)				3005.78
	Expenditure on material				21791.88
(c)	Cost of labour				2663.55
(d)	Cost of transportation				785.57
(e)	**Cost of labour & transportation sub- total (c & d)**				3449.12
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				344.91
(g)	Total (a+b+c+d+f)				25585.90
	Rounded to				**25586.00**
(Twenty Five thousand five hundred and eighty six only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT single phase over head line (with stay) using GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI Post 8m	18000.00	E	1	18000.00
2	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	1	67.10
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	2	108.00
4	CROSS ARM GI CHANNEL 2 LINE (2 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	573.00	Set	1	573.00
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
6	Stay Insulator Porcelain 415/240 V	15.00	E	1	15.00
7	Clamp GI for LT Stay for Angular location	240.99	E	1	240.99
8	stay set complete(Anchor plate,stay rod & tightner)	839.30	E	1	839.30
9	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	4	352.00
10	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	4	120.00
11	Helically formed Guy-Grip LT	88.00	E	6	528.00
(a)	**Cost of material**				20881.39
(b)	Centage Charge(16%)				3341.02
	Expenditure on material				24222.41
(c)	Cost of labour				3595.33
(d)	Cost of transportation				785.57
(e)	**Cost of labour & transportation sub- total (c & d)**				4380.90
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				438.09
(g)	Total (a+b+c+d+f)				29041.40
	Rounded to				**29041.00**
(Rupees Twenty nine thousand and forty one only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT single phase over head line (with strut) GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI Post 8m	18000.00	E	2	36000.00
2	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	1	67.10
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	2	108.00
4	CROSS ARM GI CHANNEL 2 LINE (2 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	573.00	Set	1	573.00
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
6	stay clamp 3.5" LT	206.50	E	2	413.00
7	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	0.33	37.95
(a)	**Cost of material**				37237.05
(b)	Centage Charge(16%)				5957.93
	Expenditure on material				43194.98
(c)	Cost of labour				5011.65
(d)	Cost of transportation				1571.13
(e)	**Cost of labour & transportation sub- total (c & d)**				6582.78
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				658.28
(g)	Total (a+b+c+d+f)				50436.04
	Rounded to				**50436.00**
(Rupees Fifty thousand four hundred and thirty six only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for post insertion for LT three phase over head line (without stay) using GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI Post 8m	18000.00	E	1	18000.00
2	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	3	201.30
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	4	216.00
4	CROSS ARM GI CHANNEL 4 LINE (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	1	907.21
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
(a)	**Cost of material**				19362.51
(b)	Centage Charge(16%)				3098.00
	Expenditure on material				22460.52
(c)	Cost of labour				2828.54
(d)	Cost of transportation				785.57
(e)	**Cost of labour & transportation sub- total (c & d)**				3614.11
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				361.41
(g)	Total (a+b+c+d+f)				26436.03
	Rounded to				**26436.00**
(Rupees Twenty six thousand four hundred and thirty six only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT three phase over head line (with stay) using GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI Post 8m	18000.00	E	1	18000.00
2	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	3	201.30
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	4	216.00
4	CROSS ARM GI CHANNEL 4 LINE (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	1	907.21
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
6	Stay Insulator Porcelain 415/240 V	15.00	E	1	15.00
7	Clamp GI for LT Stay for Angular location	240.99	E	1	240.99
8	stay set complete(Anchor plate,stay rod & tightner)	839.30	E	1	839.30
9	Stay Wire 7/8 GI (HT Stay Wire)	88.00	kg	4	352.00
10	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	4	120.00
11	Helically formed Guy-Grip LT	88.00	E	6	528.00
(a)	**Cost of material**				21457.80
(b)	Centage Charge(16%)				3433.25
	Expenditure on material				24891.05
(c)	Cost of labour				3760.32
(d)	Cost of transportation				785.57
(e)	**Cost of labour & transportation sub- total (c & d)**				4545.89
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				454.59
(g)	Total (a+b+c+d+f)				29891.53
	Rounded to				**29892.00**
(Twenty Nine thousand eight hundred and ninety two only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Post insertion for LT three phase over head line (with strut) using GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI POST 8 M	18000.00	E	2	36000.00
2	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	3	201.30
3	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	4	216.00
4	CROSS ARM GI CHANNEL 4 LINE (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	1	907.21
5	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
6	stay clamp 3.5" LT	206.50	E	2	413.00
7	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	0.33	37.95
(a)	**Cost of material**				37813.46
(b)	Centage Charge(16%)				6050.15
	Expenditure on material				43863.62
(c)	Cost of labour				5176.66
(d)	Cost of transportation				1571.13
(e)	**Cost of labour & transportation sub- total (c & d)**				6747.79
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				674.78
(g)	Total (a+b+c+d+f)				51286.19
	Rounded to				**51286.00**
(Rupees Fifty one thousand two hundred and eighty six only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for HT pole insertion in HT/LT line (with stay) using GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Steel post GI 9 meter	20250.00	E	1	20250.00
2	COMPOSITE PIN INSULATOR 11 kV with Pin	171.60	Set	3	514.80
3	GI WIRE 6MM DIA 4 SWG	93.00	kg	4	372.00
4	V cross arm GI 11 kV with clamp	1542.62	E	1	1542.62
5	Pole Top Bracket -F Type GI -11 kV	165.00	E	1	165.00
6	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	0.4	46.00
7	Bolt& Nut GI FT M 16 x 75	115.00	kg	0.42	48.30
8	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	3	108.00
9	Stay Insulator Porcelain 11k V	40.00	E	1	40.00
10	Stay Wire 7/8 GI (HT Stay wire)	88.00	kg	5	440.00
11	stay set complete(Anchor plate,stay rod & tightner)	839.30	E	1	839.30
12	Helically formed Guy-Grip HT	91.00	E	6	546.00
13	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	4	120.00
14	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	3	201.30
15	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	4	216.00
16	CROSS ARM GI CHANNEL 4 LINE (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	1	907.21
17	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
(a)	**Cost of material**				26394.53
(b)	Centage Charge(16%)				4223.13
	Expenditure on material				30617.66
(c)	Cost of labour				5369.65
(d)	Cost of transportation				785.57
(e)	**Cost of labour & transportation sub- total (c & d)**				6155.22
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				615.52
(g)	Total (a+b+c+d+f)				37388.40
	Rounded to				**37388.00**
(Rupees Thirty seven thousand three hundred and eighty eight only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for HT pole insertion in HT/LT line (with strut using GI post 9 meter)					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Steel post GI 9 meter	20250.00	E	1	20250.00
2	COMPOSITE PIN INSULATOR 11 kV with Pin	171.60	Set	3	514.80
3	GI WIRE 6MM DIA 4 SWG	93.00	kg	4	372.00
4	V cross arm GI 11 kV	1332.58	E	1	1332.58
5	Pole Top Bracket -F Type GI -11 kV	165.00	E	1	165.00
6	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	0.4	46.00
7	Bolt& Nut GI FT M 16 x 75	115.00	kg	0.42	48.30
8	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	3	108.00
9	Pole PSC 8 M	3700.60	E	1	3700.60
10	Clamp GI For 8 mt Strut Pole (For Pole)	113.58	E	2	227.16
11	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	0.33	37.95
12	Clamp GI For 8 mt Strut Pole (For Strut)	113.58	No	2	227.15
13	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	3	201.30
14	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	4	216.00
15	CROSS ARM GI CHANNEL 4 LINE (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	1	907.21
16	Reel Insulator Porcelain 415/240 V	38.00	No	1	38.00
(a)	**Cost of material**				28392.05
(b)	Centage Charge(16%)				4542.73
	Expenditure on material				32934.78
(c)	Cost of labour				6354.35
(d)	Cost of transportation				1571.13
(e)	**Cost of labour & transportation sub- total (c & d)**				7925.48
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				792.55
(g)	Total (a+b+c+d+f)				41652.81
	Rounded to				**41653.00**
(Rupees Forty one thousand six hundred and fifty three only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Providing strut using LT GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI POST 8 M	18000.00	E	1	18000.00
2	Clamp GI For 8 mt Strut Pole (For Pole)	113.58	E	2	227.16
3	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	0.33	37.95
4	Clamp GI For 8 mt Strut Pole (For Strut)	113.58	E	2	227.15
(a)	**Cost of material**				18492.26
(b)	Centage Charge(16%)				2958.76
	Expenditure on material				21451.02
(c)	Cost of labour				2348.12
(d)	Cost of transportation				785.57
(e)	**Cost of labour & transportation sub- total (c & d)**				3133.69
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				313.37
(g)	Total (a+b+c+d+f)				24898.08
	Rounded to				**24898.00**
(Rupees Twenty four thousand eight hundred and ninety eight only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Providing strut using HT GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Steel post GI 9 meter	20250.00	E	1	20250.00
2	Clamp GI For 9 mt Strut Pole (For Pole)	121.61	E	2	243.21
3	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	0.33	37.95
4	Clamp GI For 9 mt Strut Pole (For Strut)	121.61	E	2	243.21
(a)	**Cost of material**				20774.37
(b)	Centage Charge(16%)				3323.90
	Expenditure on material				24098.27
(c)	Cost of labour				3790.40
(d)	Cost of transportation				785.57
(e)	**Cost of labour & transportation sub- total (c & d)**				4575.97
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				457.60
(g)	Total (a+b+c+d+f)				29131.83
	Rounded to				**29132.00**
(Rupees Twenty nine thousand one hundred and thirty two only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing LT OH line 2 wire with Rabbit using GI Poles					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI POST 8 M	18000.00	E	33	594000.00
2	SHACKLE INSULATOR 415V SET(WITH STRAP BOLT&NUT)	68.20	Set	32	2182.40
3	Earth Knob (Aluminium) for LT Line	124.00	E	8	992.00
4	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	8	1664.00
5	CROSS ARM GI CHANNEL 2 LINE (2 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	573.00	Set	41	23493.00
6	Ferrules 5 Sq.mm(GI)	12.00	E	7	84.00
7	GI Wire 9 SWG	73.70	kg	1	73.70
8	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	25	1677.50
9	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	50	2700.00
10	Reel Insulator Porcelain 415/240 V	38.00	No	25	950.00
11	Conductor ACSR Rabbit	46.20	m	2100	97020.00
12	Stay Insulator Porcelain 415/240 V	15.00	E	24	360.00
13	Clamp GI for LT Stay for Angular location	240.99	E	24	5783.76
14	stay set complete(Anchor plate,stay rod & tightner)	839.30	E	24	20143.20
15	Stay Wire 7/8 GI (HT stay wire)	88.00	kg	96	8448.00
16	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	96	2880.00
17	Helically formed Guy-Grip LT	88.00	E	144	12672.00
18	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	24	2613.60
19	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	4	66.00
20	Base Frame SMC for LT Section Fuse with neutral Link	1522.00	E	1	1522.00
22	FUSE UNIT 415 V 100 A PORCELAIN	414.00	E	1	414.00
(a)	**Cost of material**				779739.16
(b)	Centage Charge(16%)				124758.27
	Expenditure on material				904497.43
(c)	Cost of labour				122146.39

(d)	Cost of transportation	25138.08
(e)	**Cost of labour & transportation sub- total (c & d)**	147284.47
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%	14728.45
(g)	Total (a+b+c+d+f)	1066510.34
	Expenditure to be recovered	**1066510.34**
	Expenditure to be recovered per metre	1066.51
	Rounded to	**1067.00**
(Rupees One thousand sixty seven per metre only)		

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing LT OH line 3 wire with Rabbit using GI Poles					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI POST 8 M	18000.00	E	33	594000.00
2	SHACKLE INSULATOR 415V SET(WITH STRAP BOLT&NUT)	68.20	Set	47	3205.40
3	CROSS ARM GI CHANNEL 4 LINE (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	37	33566.92
4	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	8	1664.00
5	Earth Knob (Aluminium) for LT Line	124.00	E	8	992.00
6	GI Wire 9 SWG	73.70	kg	1	73.70
7	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	75	5032.50
8	Reel Insulator Porcelain 415/240 V	38.00	No	25	950.00
9	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	75	4050.00
10	Conductor ACSR Rabbit	46.20	m	3150	145530.00
11	Stay Insulator Porcelain 415/240 V	15.00	E	24	360.00
12	Clamp GI for LT Stay for Angular location	240.99	E	24	5783.76
13	stay set complete(Anchor plate,stay rod & tightner)	839.30	E	24	20143.20
14	Stay Wire 7/8 GI (HT stay wire)	88.00	kg	96	8448.00
15	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	96	2880.00
16	Helically formed Guy-Grip LT	88.00	E	144	12672.00
17	Clamp for 2/4 line channel Cross Arm for PSC Poles 200kg	78.80	E	1	78.80
18	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	0.22	25.30
19	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	24	2613.60
20	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	4	66.00
21	Base Frame SMC for LT Section Fuse with neutral Link	1522.00	E	1	1522.00
23	FUSE UNIT 415 V 100 A PORCELAIN	414.00	E	1	414.00
(a)	**Cost of material**				844071.18
(b)	Centage Charge(16%)				135051.39
	Expenditure on material				979122.57

(c)	Cost of labour	128894.31
(d)	Cost of transportation	25138.08
(e)	**Cost of labour & transportation sub- total (c & d)**	154032.39
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%	15403.24
(g)	Total (a+b+c+d+f)	1148558.20
	Expenditure to be recovered	**1148558.20**
	Expenditure to be recovered per metre	1148.56
	Rounded to	**1149.00**
(Rupees One thousand one hundred and forty nine per metre only)		

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing LT OH line 4 wire with Rabbit using GI Poles					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	SHACKLE INSULATOR 415V SET(WITH STRAP BOLT&NUT)	68.20	Set	64	4364.80
2	CROSS ARM GI CHANNEL 4 LINE (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	41	37195.77
3	GI POST 8 M	18000.00	E	33	594000.00
4	Earth Knob (Aluminium) for LT Line	124.00	E	8	992.00
5	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	8	1664.00
6	GI Wire 9 SWG	73.70	kg	1	73.70
7	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	75	5032.50
8	Reel Insulator Porcelain 415/240 V	38.00	No	25	950.00
9	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	100	5400.00
10	Conductor ACSR Rabbit	46.20	m	4200	194040.00
11	Stay Insulator Porcelain 415/240 V	15.00	E	24	360.00
12	Clamp GI for LT Stay for Angular location	240.99	E	24	5783.76
13	stay set complete(Anchor plate,stay rod & tightner)	839.30	E	24	20143.20
14	Stay Wire 7/8 GI (HT stay wire)	88.00	kg	96	8448.00
15	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	96	2880.00
16	Helically formed Guy-Grip LT	88.00	E	144	12672.00
17	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	48	5227.20
18	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	8	132.00
19	FUSE UNIT 415 V 100 A PORCELAIN	414.00	E	3	1242.00
20	Base Frame SMC for LT Section Fuse with neutral Link	1522.00	E	1	1522.00
(a)	**Cost of material**				902122.93
(b)	Centage Charge(16%)				144339.67
	Expenditure on material				1046462.60
(c)	Cost of labour				137848.59
(d)	Cost of transportation				25138.08

(e)	**Cost of labour & transportation sub- total (c & d)**	162986.67
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%	16298.67
(g)	Total (a+b+c+d+f)	1225747.94
	Expenditure to be recovered	**1225747.94**
	Expenditure to be recovered per metre	1225.75
	Rounded to	**1226.00**
(Rupees One thousand two hundred and twenty six per metre only)		

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing LT OH line 5 wire with Rabbit using GI Poles					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI POST 8 M	18000.00	E	33	594000.00
2	SHACKLE INSULATOR 415V SET(WITH STRAP BOLT&NUT)	68.20	Set	80	5456.00
3	CROSS ARM GI CHANNEL 4 LINE (4 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	907.21	Set	38	34474.13
4	CROSS ARM GI CHANNEL 2 LINE (2 Line Channel Cross Arm) with Clamp, Bolt & Nut for PSC Pole 8M/200kg	573.00	Set	38	21774.00
5	Earth Knob (Aluminium) for LT Line	124.00	E	8	992.00
6	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	8	1664.00
7	GI Wire 9 SWG	73.70	kg	1	73.70
8	Reel Insulator Porcelain 415/240 V	38.00	No	25	950.00
9	Helically Formed Fitting -Distribution Side Tie for ACSR Rabbit	54.00	E	125	6750.00
10	PIN INSULATOR 415V SET(WITH PIN)	67.10	Set	100	6710.00
11	Conductor ACSR Rabbit	46.20	m	5250	242550.00
12	Stay Insulator Porcelain 415/240 V	15.00	E	24	360.00
13	Clamp GI for LT Stay for Angular location	240.99	E	24	5783.76
14	stay set complete(Anchor plate,stay rod & tightner)	839.30	E	24	20143.20
15	Stay Wire 7/8 GI (HT stay wire)	88.00	kg	96	8448.00
16	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	96	2880.00
17	Helically formed Guy-Grip LT	88.00	E	144	12672.00
18	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	48	5227.20
19	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	8	132.00
20	FUSE UNIT 415 V 100 A PORCELAIN	414.00	E	3	1242.00
21	Base Frame SMC for LT Section Fuse with neutral Link	1522.00	E	1	1522.00
22	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	0.22	25.30
(a)	**Cost of material**				973829.29
(b)	Centage Charge(16%)				155812.69

	Expenditure on material	1129641.98
(c)	Cost of labour	145927.57
(d)	Cost of transportation	25138.08
(e)	**Cost of labour & transportation sub- total (c & d)**	171065.65
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%	17106.57
(g)	Total (a+b+c+d+f)	1317814.19
	Expenditure to be recovered	**1317814.19**
	Expenditure to be recovered per metre	1317.81
	Rounded to	**1318.00**
(Rupees One thousand three hundred and eighteen per metre only)		

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing 11 kV OH Line with ACSR Raccoon using GI Poles					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	GI POLE 9 M	20250.00	E	29	587250.00
2	Strain set with disc insulator	454.38	E	36	16357.57
3	Knee bracing for HT Cantiliver cross arm	720.00	E	6	4320.00
4	Channel cross arm GI 75x40x6mm 1.8M	1191.93	E	12	14303.16
5	Pole Top Bracket -F Type GI -11 kV	165.00	E	23	3795.00
6	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	10.7	1230.50
7	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	31.5	3622.50
8	Bolt& Nut GI FT M 16 x 75	115.00	kg	10.9	1255.80
9	COMPOSITE PIN INSULATOR 11 kV with Pin	171.60	Set	75	12870.00
10	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
11	GI WIRE 6 MM DIA 4 SWG	93.00	kg	96	8928.00
12	Channel cross arm GI 75 x 40 x 6 mm 3 mt	1748.29	E	12	20979.42
13	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.600 mt (2 line Cross arm) with clamp	448.37	E	3	1345.11
14	BOLT & NUT GI HT 200mm x 19mm	115.00	kg	10.1	1159.20
15	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	66	2376.00
16	Fish Plate GI (GI Flat 260 x 50 x 8 mm)	209.00	E	12	2508.00
17	V cross arm GI 11 kV with clamp	1542.62	E	21	32395.02
18	Stay Insulator Porcelain 11k V	40.00	E	27	1080.00
19	Stay Wire 7/8 GI (HT stay wire)	88.00	kg	135	11880.00
20	stay set complete(Anchor plate,stay rod & tightner)	1283.25	E	27	34647.75
21	Helically formed Guy-Grip HT	91.00	E	162	14742.00
22	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	108	3240.00
23	Conductor ACSR Raccoon	65.00	m	3150	204750.00
24	G.I.WIRE. 9 SWG	73.70	kg	39	2874.30
25	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	8	8448.00

26	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	8	8072.00
27	Earth Connector 95 Sqmm	91.00	E	8	728.00
28	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.96	110.40
29	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	8	52.80
30	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	23	4784.00
31	Ferrules 5 Sq.mm(GI)	12.00	E	23	276.00
32	Stainless Steel Buckle Slot width 10.5 mm x 1.5 mm,Thickness 1.2 mm.	10.00	E	184	1840.00
33	SS strap for clamping earth wire	36.00	m	92	3312.00
(a)	**Cost of material**				1027509.54
(b)	Centage Charge(16%)				164401.53
	Expenditure on material				1191911.06
(c)	Cost of labour				269768.34
(d)	Cost of transportation				25138.08
(e)	**Cost of labour & transportation sub- total (c & d)**				294906.42
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				29490.64
(g)	Total (a+b+c+d+f)				1516308.12
	Expenditure to be recovered				1516308.12
	Expenditure to be recovered per metre				1516.31
	Rounded to				**1516.00**
(Rupees One thousand five hundred and sixteen per metre only)					
1 Amount for PTCC clearance, if any, shall be collected extra. 2 Tree cutting compensation based on actual expenditure shall be collected extra.					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Constructing 11 kV HT UG Cable 300 sq mm by open trench using GI poles					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Cable 11kV XLPE AL UG 3c X300 sq mm (Armoured)	1447.60	m	1058	1531560.80
2	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
3	GI WIRE 6 MM DIA 4 SWG	93.00	kg	4	372.00
4	Channel cross arm GI 75 x 40 x 6 mm 3 mt	1748.29	E	3	5244.86
5	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.600 mt (2 line Cross arm) with clamp	448.37	E	3	1345.11
6	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	1.5	172.50
7	BOLT & NUT GI HT 200mm x 19mm	115.00	kg	8.04	924.60
8	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	6.75	776.25
9	Stay Insulator Porcelain 11k V	40.00	E	2	80.00
10	stay set complete(Anchor plate,stay rod & tightner)	1283.25	E	2	2566.50
11	Stay Wire 7/8 GI (HT stay wire)	88.00	kg	10	880.00
12	Helically formed Guy-Grip HT	91.00	E	12	1092.00
13	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	8	240.00
14	G.I.WIRE. 9 SWG	73.70	kg	2	147.40
15	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	1	1056.00
16	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	1	1009.00
17	Earth Connector 95 Sqmm	91.00	E	1	91.00
18	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.12	13.80
19	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	1	6.60
20	Cable End Termination Kit 11 kV XLPE 3c x 300 Sq.mm - Heat Shrinkable (Outdoor)	2821.50	E	4	11286.00
21	Cable Straight Joint Kit 11 kV XLPE 3c x 300 Sq.mm -Heat Shrinkable (Outdoor)	6074.20	E	2	12148.40
22	UG Cable Route Marker HT	173.00	E	20	3460.00
23	Pipe HDPE 110 mm	366.00	m	12	4392.00
24	GI POLE 9M	20250.00	E	3	60750.00
25	Clamp for 2/4 line channel Cross Arm for PSC Poles 200kg	78.80	E	6	472.80

26	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	1.32	151.80
27	CROSS ARM GI CHANNEL 100X50 mm 2.4 M	2005.66	E	3	6016.98
(a)	**Cost of material**				1658233.40
(b)	Centage Charge(16%)				265317.34
	Expenditure on material				1923550.74
(c)	Cost of labour				833257.72
(d)	Cost of transportation				17828.00
(e)	**Cost of labour & transportation sub- total (c & d)**				851085.72
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				85108.57
(g)	Total (a+b+c+d+f)				2859745.03
	Expenditure to be recovered				**2859745.03**
	Expenditure to be recovered per metre				2859.75
	Rounded to				**2860.00**
(Rupees Two thousand eight hundred and sixty per metre only)					
Road cutting, Restoration, PTCC Clearance and other charges extra.					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Installation of 1 No. 11 KV/ 433 V , 100 KVA Transformer without stay (GI pole mounted)					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Distribution Transformer 3 Phase 100 kVA 11kV/433 V ONAN	250449.10	E	1	250449.10
2	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	35	3811.50
3	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	12	198.00
4	Crimping Socket Palm Type 95 Sq.mm -Al (Cable Lug)	12.10	E	3	36.30
5	GI post 9 METER	20250.00	E	2	40500.00
6	Strain set with disc insulator	454.38	E	3	1363.14
7	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
8	COMPOSITE PIN INSULATOR 11 kV with Pin	171.60	Set	3	514.80
9	G.I.WIRE. 9 SWG	73.70	kg	30	2211.00
10	Channel cross arm GI 75x40x6mm 1.8M	1191.93	E	2	2383.86
11	CROSS ARM GI CHANNEL 100X50 mm 3 M	2985.75	E	7	20900.25
12	V cross arm GI 11 kV with clamp	1542.62	E	2	3085.24
13	Pole Top SPL POLE CAP	169.40	E	1	169.40
14	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.600 mt (2 line Cross arm) with clamp	448.37	E	4	1793.48
15	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	2	230.00
16	FUSE DROP OUT 11 kV	1057.00	E	3	3171.00
17	Fuse Wire 200A	874.00	kg	0.1	87.40
18	BOLT & NUT GI 40mm x 16mm (1 1/2 x 5/8)	115.00	kg	0.12	13.80
19	BOLT & NUT GI HT 200mm x 19mm	115.00	kg	5.04	579.60
20	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	10.5	1207.50
21	Bolt& Nut GI FT M 16 x 75	115.00	kg	0.84	96.60
22	BOLT & NUT GI HT 300mm x 19mm	115.00	kg	5	575.00
23	Clamp GI For Transformer Side Belting Angle	198.95	No	2	397.90
24	Plate washer GI M16	115.00	kg	0.2	23.00
25	Distribution Box LT Outdoor 2 Way 200 A (1 incomer & 2 outgoing)	23666.00	E	1	23666.00

26	Cable Tray GI (Perforated) 300 x 30 x 1.6mm-2.5 mt	1633.00	E	2	3266.00
27	Cable Tray GI 300mmX1.6 mm	1167.00	m	1	1167.00
28	Bolt& Nut GI M 12 x 90 (3 1/2"x 1/2")	115.00	kg	0.98	112.24
29	Plate Washer SS M12	115.00	kg	0.16	18.40
30	Copper Flat Strip 40 x 3 mm length 115mm	125.00	E	4	500.00
31	GI Flat Strip 40 x 6 mm	80.00	kg	14	1120.00
32	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	15	99.00
33	SS strap for clamping earth wire	36.00	m	10	360.00
34	Conductor ACSR Rabbit	46.20	m	20	924.00
35	EARTH WIRE GI 7/9	73.00	kg	5	365.00
36	Bolt & Nut GI M 10 x 25 (1"x 3/8")	115.00	kg	0.08	9.20
37	Square Washer GI M10	16.67	No	1	16.67
38	Alkathene Pipe 50 mm	70.80	m	30	2124.00
39	Transformer Side Belting Angle	2873.00	No	2	5746.00
40	Clamp GI for Danger Board (HT)	93.00	No	1	93.00
41	Bolt & Nut GI M 6 x 25 (1"x 1/4")	115.00	kg	3	345.00
42	Danger Board 250 x 200 mm (11000 V)	101.20	E	1	101.20
43	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	3	108.00
44	GI Flat Strip 25 x 3 mm	98.00	m	2.4	235.20
45	LA Supporting Plate GI 500 x 300 x 3 mm	112.00	kg	3	336.00
46	Angle cross arm GI 35 x 35 x 6 mm 0.5 mt	685.00	E	6	4110.00
47	Lightning Arrester 9 kV,10 KA (Station class) Composite Polymer Housing	2028.00	E	3	6084.00
48	Stainless steel Buckles [20.5 mm x 1.5 mm; thickness 1.2 mm]	6.00	E	20	120.00
49	Clamp GI for Cable Tray in Transformer DP	472.00	E	6	2832.00
50	CT RESIN CAST 0.415KV 10VA Class 0.5 200/5A	0.00	E	4	0.00
51	EM 3X 230V CLASS 0.5S --/5A LCD(DTR /LT CT METER)	0.00	E	1	0.00
52	Meter Box For Distribution Transformer With Clamps (FRP)	3248.30	E	1	3248.30
53	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	5	5280.00

54	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	5	5045.00
55	Earth Connector 95 Sqmm	91.00	E	5	455.00
56	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.6	69.00
(a)	**Cost of material**				413730.08
(b)	Centage Charge(16%)				66196.81
	Expenditure on material				479926.90
(c)	Cost of labour				58513.02
(d)	Cost of transportation				4713.39
(e)	**Cost of labour & transportation sub- total (c & d)**				63226.41
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				6322.64
(g)	Total (a+b+c+d+f)				549475.95
	Rounded to				**549476.00**
(Rupees Five lakh forty nine thousand four hundred and seventy six only)					
Note 1: If transformer fencing as per standards is provided, an Amount (₹) of Rs.38153/- can be collected extra Note 2: If transformer yard is constructed as per standards, an Amount (₹) of Rs.23075/- can be collected extra					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Installation of 1 No. 11 KV/ 433 V , 160 KVA Transformer without stay (pole mounted) using GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Distribution Transformer 3 Phase 160 kVA 11kV/433 V ONAN (1 Star Rated)	376809.40	E	1	376809.40
2	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	35	3811.50
3	Crimping Socket Palm Type 120 Sq.mm -Al (Cable Lug)	16.50	E	12	198.00
4	Crimping Socket Palm Type 95 Sq.mm -Al (Cable Lug)	12.10	E	3	36.30
5	GI post 9 m	20250.00	E	2	40500.00
6	Strain set with disc insulator	454.38	E	3	1363.14
7	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
8	COMPOSITE PIN INSULATOR 11 kV with Pin	171.60	Set	3	514.80
9	G.I.WIRE. 9 SWG	73.70	kg	30	2211.00
10	Channel cross arm GI 75x40x6mm 1.8M	1191.93	E	2	2383.86
11	CROSS ARM GI CHANNEL 100X50 mm 3 M	2985.75	E	7	20900.25
12	V cross arm GI 11 kV with clamp	1542.62	E	2	3085.24
13	Special pole cap	169.40	E	1	169.40
14	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.600 mt (2 line Cross arm) with clamp	639.39	E	4	2557.54
15	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	2	230.00
16	FUSE DROP OUT 11 kV	1057.00	E	3	3171.00
17	Fuse Wire 200A	874.00	kg	0.1	87.40
18	BOLT & NUT GI 40mm x 16mm (1 1/2 x 5/8)	115.00	kg	0.12	13.80
19	BOLT & NUT GI HT 200mm x 19mm	115.00	kg	5.04	579.60
20	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	10.5	1207.50
21	Bolt& Nut GI FT M 16 x 75	115.00	kg	0.84	96.60
22	BOLT & NUT GI HT 300mm x 19mm	115.00	kg	5	575.00
23	Clamp GI For Transformer Side Belting Angle	198.95	No	2	397.90
24	Plate washer GI M16	115.00	kg	0.2	23.00
25	Distribution Box LT Outdoor 2 Way 200 A (1 incomer & 2 outgoing)	23666.00	E	1	23666.00

26	Cable Tray GI (Perforated) 300 x 30 x 1.6mm-2.5 mt	1633.00	E	2	3266.00
27	Cable Tray GI 300mmX1.6 mm	1167.00	m	1	1167.00
28	Bolt& Nut GI M 12 x 90 (3 1/2"x 1/2")	115.00	kg	0.98	112.24
29	Plate Washer SS M12	115.00	kg	0.16	18.40
30	Copper Flat Strip 40 x 3 mm length 115mm	125.00	E	4	500.00
31	GI Flat Strip 40 x 6 mm	80.00	kg	14	1120.00
32	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	15	99.00
33	SS strap for clamping earth wire	36.00	m	10	360.00
34	Conductor ACSR Rabbit	46.20	m	20	924.00
35	EARTH WIRE GI 7/9	73.00	kg	5	365.00
36	Bolt & Nut GI M 10 x 25 (1"x 3/8")	115.00	kg	0.08	9.20
37	Square Washer GI M10	16.67	No	1	16.67
38	Alkathene Pipe 50 mm	70.80	m	30	2124.00
39	Transformer Side Belting Angle	2873.00	No	2	5746.00
40	Clamp GI for Danger Board (HT)	93.00	No	1	93.00
41	Bolt & Nut GI M 6 x 25 (1"x 1/4")	115.00	kg	3	345.00
42	Danger Board 250 x 200 mm (11000 V)	101.20	E	1	101.20
43	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	3	108.00
44	GI Flat Strip 25 x 3 mm	98.00	E	2.4	235.20
45	LA Supporting Plate GI 500 x 300 x 3 mm	112.00	kg	3	336.00
46	Angle cross arm GI 35 x 35 x 6 mm 0.5 mt	685.00	E	6	4110.00
47	Lightning Arrester 9 kV,10 KA (Station class) Composite Polymer Housing	2028.00	E	3	6084.00
48	Stainless steel Buckles [20.5 mm x 1.5 mm; thickness 1.2 mm]	6.00	E	20	120.00
49	Clamp GI for Cable Tray in Transformer DP	472.00	E	6	2832.00
50	CT RESIN CAST 0.415KV 15VA Class 0.5 300/5A	0.00	E	4	0.00
51	EM 3X 230V CLASS 0.5S --/5A LCD(DTR /LT CT METER)	0.00	E	1	0.00
52	Meter Box For Distribution Transformer With Clamps (FRP)	3248.30	E	1	3248.30
53	Pipe GI 40 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	5	5280.00

54	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	5	5045.00
55	Earth Connector 95 Sqmm	91.00	E	5	455.00
56	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.6	69.00
(a)	**Cost of material**				540854.44
(b)	Centage Charge(16%)				86536.71
	Expenditure on material				627391.16
(c)	Cost of labour				58751.72
(d)	Cost of transportation				4713.39
(e)	**Cost of labour & transportation sub- total (c & d)**				63465.11
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				6346.51
(g)	Total (a+b+c+d+f)				697202.78
	Rounded to				**697203.00**
(Rupees Six lakh ninety seven thousand two hundred and three only)					
Note 1: If transformer fencing as per standards is provided, an Amount (₹) of Rs.38153/- can be collected extra Note 2: If transformer yard is constructed as per standards, an Amount (₹) of Rs.23075/- can be collected extra					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Installation of 11KV/433V 250 KVA Transformer using GI pole					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Distribution Transformer 3 Phase 250 kVA 11kV/433 V ONAN	498951.20	E	1	498951.20
2	Cable 1.1kV XLPE AL 1c X 120 sq mm (Un Armoured)	108.90	m	35	3811.50
3	Crimping Socket Palm Type 300 Sq.mm -Al (Cable Lug)	16.50	E	12	198.00
4	Crimping Socket Palm Type 95 Sq.mm -Al (Cable Lug)	12.10	E	3	36.30
5	GI post 9 METER	20250.00	E	2	40500.00
6	Strain set with disc insulator	454.38	E	3	1363.14
7	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977.00	E	1	11977.00
8	COMPOSITE PIN INSULATOR 11 kV with Pin	171.60	Set	3	514.80
9	G.I.WIRE. 9 SWG	73.70	kg	30	2211.00
10	Channel cross arm GI 75x40x6mm 1.8M	1191.93	E	2	2383.86
11	CROSS ARM GI CHANNEL 100X50 mm 3 M	2985.75	E	7	20900.25
12	V cross arm GI 11 kV with clamp	1542.62	E	2	3085.24
13	Pole Top Bracket -F Type GI -11 kV	165.00	E	1	165.00
14	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.600 mt (2 line Cross arm) with clamp	448.37	E	4	1793.48
15	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115.00	kg	2	230.00
16	FUSE DROP OUT 11 kV	1057.00	E	3	3171.00
17	Fuse Wire 200 A	874.00	kg	0.1	87.40
18	BOLT & NUT GI 40mm x 16mm (1 1/2 x 5/8)	115.00	kg	0.12	13.80
19	BOLT & NUT GI HT 200mm x 19mm	115.00	kg	5.04	579.60
20	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115.00	kg	10.5	1207.50
21	Bolt& Nut GI FT M 16 x 75	115.00	kg	0.84	96.60
22	BOLT & NUT GI HT 300mm x 19mm	115.00	kg	5	575.00
23	Clamp GI For Transformer Side Belting Angle	198.95	No	2	397.90
24	Plate washer GI M16	115.00	kg	0.2	23.00
25	Distribution Box LT Outdoor 2 Way 200 A (1 incomer & 2 outgoing)	23666.00	E	1	23666.00

26	Cable Tray GI (Perforated) 300 x 30 x 1.6mm-2.5 mt	1633.00	E	2	3266.00
27	Cable Tray GI 300mmX1.6 mm	1167.00	m	1	1167.00
28	Bolt& Nut GI M 12 x 90 (3 1/2"x 1/2")	115.00	kg	0.98	112.24
29	Plate Washer SS M12	115.00	kg	0.16	18.40
30	Copper Flat Strip 40 x 3 mm length 115mm	125.00	E	4	500.00
31	GI Flat Strip 40 x 6 mm	80.00	kg	14	1120.00
32	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	15	99.00
33	SS strap for clamping earth wire	36.00	m	10	360.00
34	Conductor ACSR Rabbit	46.20	m	20	924.00
35	EARTH WIRE GI 7/9	73.00	kg	5	365.00
36	Bolt & Nut GI M 10 x 25 (1"x 3/8")	115.00	kg	0.08	9.20
37	Square Washer GI M10	16.67	No	1	16.67
38	Alkathene Pipe 50 mm	70.80	m	30	2124.00
39	Transformer Side Belting Angle	2873.00	No	2	5746.00
40	Clamp GI for Danger Board (HT)	93.00	No	1	93.00
41	Bolt & Nut GI M 6 x 25 (1"x 1/4")	115.00	kg	3	345.00
42	Danger Board 250 x 200 mm (11000 V)	101.20	E	1	101.20
43	Helically Formed Fitting -Distribution Top Tie for ACSR Raccoon	36.00	E	3	108.00
44	GI Flat Strip 25 x 3 mm	98.00	m	2.4	235.20
45	LA Supporting Plate GI 500 x 300 x 3 mm	112.00	kg	3	336.00
46	Angle cross arm GI 35 x 35 x 6 mm 0.5 mt	685.00	E	6	4110.00
47	Lightning Arrester 9 kV,10 KA (Station class) Composite Polymer Housing	2028.00	E	3	6084.00
48	Stainless steel Buckles [20.5 mm x 1.5 mm; thickness 1.2 mm]	6.00	E	20	120.00
49	Clamp GI for Cable Tray in Transformer DP	472.00	E	6	2832.00
50	Stay Insulator Porcelain 11k V	40.00	E	4	160.00
51	stay set complete(Anchor plate,stay rod & tightner)	1283.25	E	2	2566.50
52	Stay Wire 7/8 GI (HT stay wire)	88.00	kg	14	1232.00
53	Helically formed Guy-Grip HT	91.00	E	16	1456.00

54	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	8	240.00
55	CT RESIN CAST 0.415kV 15VA Class 0.5 400/5A	0.00	E	4	0.00
56	EM 3X 230V CLASS 0.5S --/5A LCD(DTR /LT CT METER)	0.00	E	1	0.00
57	Meter Box For Distribution Transformer With Clamps (FRP)	2953.00	E	1	2953.00
58	Pipe GI 63 mm dia -2.5 m Length(Earth Pipe)	1056.00	E	5	5280.00
59	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	5	5045.00
60	Earth Connector 95 Sqmm	91.00	E	5	455.00
61	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.6	69.00
(a)	**Cost of material**				667586.98
(b)	Centage Charge(16%)				106813.92
	Expenditure on material				774400.90
(c)	Cost of labour				106086.24
(d)	Cost of transportation				3142.26
(e)	**Cost of labour & transportation sub- total (c & d)**				109228.50
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				10922.85
(g)	Total (a+b+c+d+f)				894552.25
	Rounded to				**894552.00**
(Rupees Eight lakh ninety four thousand five hundred and fifty two only)					
Note 1:If transformer fencing as per standards is provided, an Amount (₹) of Rs.38153/- can be collected extra Note 2:If transformer yard is constructed as per standards, an Amount (₹) of Rs.23075/- can be collected extra					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for drawing 1Km of LT ABC of size 3x70 + 1x50 +1x16 on 8 mts GI Pole supports					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	End Cap for ABC 50 Sq mm	7.00	E	2	14.00
2	End Cap for ABC 16 Sq mm	5.00	E	2	10.00
3	Anchoring /Dead end Clamp Assembly for LT AB Cables up to 70 sq.mm	281.00	E	18	5058.00
4	End Cap for ABC 70 Sq mm	5.00	E	6	30.00
5	Stainless Steel Buckle Slot width 20.5 mm x 1.5 mm,Thickness 1.2 mm	9.00	E	68	612.00
6	Stainless Steel Strap 20 mm x 0.7 mm	31.00	m	26	806.00
7	Cable Tie UV Plastic Heavy Duty 500 mm Length	4.00	E	20	80.00
8	Suspension Clamp for LT AB Cables up to 70 sq.mm	222.00	E	24	5328.00
9	GI POLE 8 M	18000.00	E	37	666000.00
10	Stay Insulator Porcelain 415/240 V	15.00	E	35	525.00
11	Clamp GI for LT Stay	224.00	E	34	7616.00
12	Stay set complete(Anchor plate,stay rod& tightner)	839.30	kg	2	1678.60
13	Stay Wire 7/8 GI (HT Stay Wire)	88.00	E	88	7744.00
14	Helically formed Guy-Grip HT	91.00	E	6	546.00
15	Helically formed Guy-Grip LT	88.00	E	204	17952.00
16	Clamp GI for 8 mt Strut Pole (For Pole)	113.58	E	6	681.45
17	Bolt& Nut GI M 12 x 65 (2 1/2"x 1/2")	115.00	kg	0.99	113.85
18	Clamp GI for 8 mt Strut Pole Top	113.58	No	6	681.45
19	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30.00	E	136	4080.00
20	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208.00	E	8	1664.00
21	Ferrules 5 Sq.mm(GI)	12.00	kg	8	96.00
22	G.I.wire 4 mm(8 SWG)	81.00	E	12	972.00
23	Stainless Steel Buckle Slot width 10.5 mm x 1.5 mm,Thickness 1.2 mm	10.00	m	64	640.00
24	SS strap for clamping earth wire	36.00	m	32	1152.00
25	Aerial Bunched Cable LT 3x70 + 1x50 + 1x16 sq.mm (Insulated Messenger)	280.00	E	1100	308000.00

26	Pre-Insulated Midspan Joints and Terminal Lugs 16 Sq.mm	93.00	E	3	279.00
27	Pre-Insulated Midspan Joints and Terminal Lugs 50 Sq.mm	91.00	E	3	273.00
28	Pre-Insulated Midspan Joints and Terminal Lugs 70 Sq.mm	77.00	E	12	924.00
29	Pipe GI 40 mm dia -2.5 mLength(Earth Pipe)	1056.00	E	2	2112.00
30	Earth Chamber (PVC) With RCC Covering Slab	1009.00	E	2	2018.00
31	Earth Connector 95 Sqmm	91.00	E	2	182.00
32	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115.00	kg	0.24	27.60
33	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.60	E	2	13.20
34	Insulation Piercing Connector (IPC Connector) Main 16 sq mm to 95 sq mm; Tap 4 sq.mm to 50 sq.mm	64.00	E	4	256.00
(a)	**Cost of material**				1038165.15
(b)	Centage Charge(16%)				166106.42
	Expenditure on material				1204271.57
(c)	Cost of labour				189391.29
(d)	Cost of transportation				5784.62
(e)	**Cost of labour & transportation sub- total (c & d)**				195175.91
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				19517.59
(g)	Total (a+b+c+d+f)				1418965.08
	Expenditure to be recovered				**1418965.08**
	Expenditure to be recovered per metre				1418.97
	Rounded to				**1419.00**
(Rupees One thousand four hundred and nineteen per metre only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for drawing 1Km of HT ABC of size 3x150 + 1x120 sqmm on GI Pole supports					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977	E	1	11977
2	GI WIRE 6MM DIA 4 SWG	93	kg	12	1116
3	Channel cross arm GI 75 x 40 x 6 mm 3 mt	1748.29	E	9	15734.57
4	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.600 mt (2 line Cross arm) with clamp	448.37	E	3	1345.11
5	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115	kg	1.5	172.5
6	BOLT & NUT GI HT 200mm x 19mm	115	kg	7.56	869.4
7	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115	kg	10.5	1207.5
8	GI POLE 9 M	20250	E	38	769500
9	Stay Insulator Porcelain 11k V	40	E	29	1160
10	Stay Wire 7/8 GI (HT stay wire)	88	kg	142	12496
11	stay set complete(Anchor plate,stay rod & tightner)	1283.25	E	28	35931
12	Helically formed Guy-Grip HT	91	E	168	15288
13	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30	E	112	3360
14	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208	E	33	6864
15	Ferrules 5 Sq.mm(GI)	12	E	33	396
16	G.I.WIRE. 9 SWG	81	kg	41	3321
17	Stainless Steel Buckle Slot width 10.5 mm x 1.5 mm,Thickness 1.2 mm.	10	E	264	2640
18	SS strap for clamping earth wire	36	m	132	4752
19	Termination Kit(3 Nos) for HT ABC 150 Sq.mm	1878	Set	6	11268
20	Pipe GI 63 mm dia -2.5 m Length(Earth Pipe)	1703.75	E	4	6815
21	Earth Chamber (PVC) With RCC Covering Slab	1009	E	4	4036
22	Earth Connector 95 Sqmm	91	E	4	364
23	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115	kg	0.48	55.2
24	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	7	E	4	28
25	Aerial Bunched Cable HT 3x150 + 1x120 sq.mm (Insulated Messenger)	1117.77	m	1106	1236253.62

26	Lightning Arrester 9 kV,10 KA (Station class) Composite Polymer Housing	2028	E	6	12168
27	Cable Tie UV Plastic Heavy Duty 500 mm Length	4	No	20	80
28	Stainless Steel Strap [20 mm x 0.7 mm]	36	m	43	1548
29	Stainless steel Buckles [20.5 mm x 1.5 mm; thickness 1.2 mm]	6	E	86	516
30	Suspension Clamp Assembly for HT AB Cables up to 150 sq.mm	416	E	27	11232
31	Anchoring /Dead end Clamp Assembly for HT AB Cables up to 150 sq.mm	571	E	16	9136
(a)	**Cost of material**				2181629.9
(b)	Centage Charge(16%)				349060.78
	Expenditure on material				2530690.68
(c)	Cost of labour				313302.53
(d)	Cost of transportation				27494.78
(e)	**Cost of labour & transportation sub- total (c & d)**				340797.31
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				34079.73
(g)	Total (a+b+c+d+f)				2905567.72
	Expenditure to be recovered				**2905567.72**
	Expenditure to be recovered per metre				2905.57
	Rounded to				**2906.00**
(Rupees Two thousand nine hundred and six per metre only)					

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Cost Data of Distribution works for TCED

Estimate for drawing 1Km of HT ABC of size 3x120 + 1x95 on GI post supports					
SNo	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	Air Break Switch (AB Switch) 11kV 400 A , Composite Polymer Housing	11977	E	1	11977
2	GI WIRE 6MM DIA 4 SWG	93	kg	12	1116
3	Channel cross arm GI 75 x 40 x 6 mm 3 mt	1748.29	E	9	15734.57
4	Channel Cross arm for LT 2 Pin -GI 75 x 40 x 6 mm-0.600 mt (2 line Cross arm) with clamp	448.37	E	3	1345.11
5	Bolt & Nut GI FT M 12 x 150 (6"x 1/2")	115	kg	1.5	172.5
6	BOLT & NUT GI HT 200mm x 19mm	115	kg	7.56	869.4
7	Bolt& Nut GI M 20 x 250 (9 3/4"x3/4")	115	kg	10.5	1207.5
8	GI POLE 9 M	20250	E	38	769500
9	Stay Insulator Porcelain 11k V	40	E	29	1160
10	stay set complete(Anchor plate,stay rod & tightner)	839.3	E	28	23500.4
11	Stay Wire 7/8 GI (HT stay wire)	88	kg	142	12496
12	Helically formed Guy-Grip HT	91	E	168	15288
13	Thimble GI 75 mm x 22 mm x 40 mm ,1.5 mm Thickness (For HT and LT)	30	E	112	3360
14	Aerial Bunched Cable HT 3x120 + 1x95 sq.mm (Insulated Messenger)	1000.21	m	1105	1105232.05
15	Earthing Coil GI 115 Turns 50 mm internal Dia dia	208	E	33	6864
16	Ferrules 5 Sq.mm(GI)	12	E	33	396
17	G.I.WIRE. 9 SWG	73.7	kg	41	3021.7
18	Stainless Steel Buckle Slot width 10.5 mm x 1.5 mm,Thickness 1.2 mm.	10	E	264	2640
19	SS strap for clamping earth wire	36	m	132	4752
20	MVT Kit For HT ABC	3852	E	1	3852
21	Heat Shrinkable Termination Kit (3 Nos) for 120 Sq.mm Three phase Aerial Bunched Cable	1009	Set	9	9081
22	Stainless Steel Strap [20 mm x 0.7 mm]	36	m	43	1548
23	Stainless steel Buckles [20.5 mm x 1.5 mm; thickness 1.2 mm]	6	E	86	516
24	Anchoring /Dead end Clamp Assembly for HT AB Cables up to 120 sq.mm	468	E	16	7488
25	Pipe GI 63 mm dia -2.5 m Length(Earth Pipe)	1056	E	4	4224

26	Earth Chamber (PVC) With RCC Covering Slab	1009	E	4	4036
27	Earth Connector 95 Sqmm	91	E	4	364
28	Bolt & Nut GI M 16 x 40 (1 1/2"x 5/8")	115	kg	0.48	55.2
29	Crimping Socket Palm Type 50 Sq.mm -Al(Cable Lug)	6.6	E	4	26.4
30	Cable Tie UV Plastic Heavy Duty 500 mm Length	4	No	20	80
31	Suspension Clamp Assembly for HT AB Cables up to 120 sq.mm	316	E	27	8532
(a)	**Cost of material**				2020434.83
(b)	Centage Charge(16%)				323269.57
	Expenditure on material				2343704.4
(c)	Cost of labour				306420.97
(d)	Cost of transportation				27494.78
(e)	**Cost of labour & transportation sub- total (c & d)**				333915.75
(f)	Overhead Charge(10%) on (c) & (d) above @ 10%				33391.57
(g)	Total (a+b+c+d+f)				2711011.72
	Expenditure to be recovered				**2711011.72**
	Expenditure to be recovered per metre				2711.01
	Rounded to				**2711.00**
(Rupees Two thousand seven hundred and eleven per metre only)					

Specification and estimate for fencing and construction of yard for Transformers and RMUs					
Sl No	**Description**	**Rate**	**UoM**	**Quantity**	**Amount (₹)**
1	**Fencing for transformers and RMUs** Providing Transformer/RMU fencing to a height of 1.8 m above ground level using MS Angle frames of size ISA 50x50x6mm for outer frame, 2 runs of 40x6 MS flat for horizontal bracing and grills with MS rods 8 mm Dia @ 10cm c/c for verticals, providing gate with locking arrangements, providing danger board & name board, embeding the legs in cement concrete 1:2:4, footing of size 30cmx30cmx50cm, painting with synthetic enamel paint two coats over one coat of iron primer etc complete, incl cost of transportation	1589.72	sq.m	24	38153
2	**Construction of yard for transformers** Cleaning and levelling of transformer yard, spreading 40 mm broken stone in yard for a thickness of 10 cm above bed of 10 cm thick 6 mm broken stone, after constructing a curb wall of height 20cm above ground and 10cm below level including cost of all materials and charges for conveying, spreading, consolidating etc.	769.18	sq.m	30	23075
3	**Construction of yard for RMUs** Cleaning and levelling of RMU yard, spreading 40 mm broken stone in yard for a thickness of 10 cm above bed of 10 cm thick 6 mm broken stone, after constructing a curb wall of height 20cm above ground and 10cm below level including cost of all materials and charges for conveying, spreading, consolidating etc.	769.18	sq.m	15	11538