



# WEST BENGAL STATE ELECTRICITY DIST. CO. LTD

(A Govt. of West Bengal Enterprise)

Office of the Chief Engineer, Distribution Project-II.

CIN: U40109WB2007SGCI113473

Block –B, 2<sup>nd</sup> Floor Vidyut Bhawan: Bidhannagar, Block – DJ, Sector – II Kolkata-700091  
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## NOTICE INVITING TENDER

**N.I.T No – WBSEDCL/Project II/ DDUGJY/Supply/2020-21/NIT/3886 DT.01.10.2020**

Bids are invited by the **Chief Engineer (Project-II)**, WBSEDCL, Vidyut Bhavan, (2<sup>nd</sup> Floor, 'B' Block), Salt Lake, Kolkata –700 091, for creation of **Rural Electricity Infrastructure for connecting un-connected households, Agricultural Feeder segregation work and metering in Darjeeling districts of West Bengal under DDUGJY scheme.**

The Project shall be executed departmentally for which, WBSEDCL invites sealed bids in two part (Part I: Techno-Commercial, Part II: Price) through electronic tendering (e-tendering) from genuine manufacturers only for manufacture, testing, supply and delivery of the following items as per schedule detailed below.

### Category: A

Sl.	Item & Description of Panel	Qty. (Nos.)	Estimated Value (Rs.)	Earnest Money
1	LT Dead End Assembly for 3x 50 sq.mm + 1x35 sq.mm(insulated) + 1x16 sq.mm AB Cable, with Eye hook	2500	663749.83	16594.00
2	LT Dead End Assembly for 3x 70 sq.mm + 1x50 sq.mm(insulated) + 1x16 sq.mm AB Cable, with Eye hook	6000	1592999.61	39825.00
3	LT Suspension Assembly 3x 50 sq.mm + 1x35 sq.mm(insulated)+ 1x16 sq.mm AB Cable, with Eye hook	1500	283200.00	7080.00
4	LT Suspension Assembly 3x 70 sq.mm + 1x50 sq.mm(insulated)+ 1x16 sq.mm AB Cable, with Eye hook	5500	1038400.00	25960.00
5	Bimetallic Crimping type water proof lug for 70 Sqmm Phase for LT AB Cable(3CX70+1CX50+1CX16)	18000	1950388.96	48760.00
6	LT AB Cable Tie	35000	103250.00	2581.00
TOTAL			5631988.40	140800.00

<b>Tender Fee : Rs. 9,000.00 plus GST @18% (i.e. total Rs. 10620.00)</b>
<b>Price: The Offered quantity shall not be less than the minimum quantity as specified above.</b>
<b><u>Earnest Money Deposit</u></b>
<p>(i) All the Bidders, except who are applying for Promotional Order needs to submit 2½% of the Pro-rata Estimated Value of the Minimum quantity to be offered as mentioned.</p> <p>(ii) If the offer is submitted with inadequate Earnest Money as mentioned above, the bid will not be opened.</p>
<b>Schedule of Dates for e-Tendering:</b>

Sl. No.	Activity	Date & Time
1	Publishing Date	09.10.2020 (11 AM)
2	Document Download start date	09.10.2020 (12 AM)
3	Bid submission start date	13.10.2020 (11 AM)
4	Bid submission end date	04.11.2020 (1 PM)
5	Last date of physical submission of Tender Fee and EMD	04.11.2020 (3 PM)
6	Technical Bid opening date	06.11.2020 (11 AM)
7	Financial Bid opening date	to be intimated later

Intending bidders desirous of participating in the tender are to log on to the website <https://wbtenders.gov.in> for the tender. The tender can be searched by typing WBSEDCL in the search engine provided in the website.

Bidders willing to take part in the process of e-tendering are required to obtain Digital Signature Certificate (DSC) in the name of person who will sign the tender, from any authorized Certifying Authority (CA) under CCA, Govt of India (viz. nCode Solution, Safescrypt, e-Mudhra). DSC is given as a USB e-Token. After obtaining the Class 2 or Class 3 Digital Signature Certificate (DSC) from the approved Certifying Authority they are required to register the fact of possessing the Digital Signature Certificates through the registration system available in the website.

Tenders are to be submitted online and intending bidders are to download the tender documents from the website stated above, directly with the help of the e-Token provided. This is the only mode of collection of tender documents. Details of submission procedure are given in “Instructions to Bidders”.

#### **Terms & conditions of the Tender Notice :**

1. Each Tenderer is to submit Tender Fee in the form of Demand Draft (DD) on any Scheduled Bank approved by Reserve Bank of India with validity of 3 (three) months drawn in favour of “**West Bengal State Electricity Distribution Company Limited**” payable at Kolkata.

2. As per policy of RBI, “CTS 2010, compliant Demand Draft (DD)/ CTS 2010, compliant Bankers’ Cheque (BC)”, will only be accepted.

3. The tenderer or their duly authorized representative should **attend the Pre-bid Meeting** at the stipulated date and time.
4. **Earnest Money Deposit** amounting to 2½% (Two & Half Percent) of the pro-rata estimated value of the Item wise offered quantity, as mentioned above, shall be submitted individually along with the offer. The Earnest Money Deposit shall be submitted by CTS 2010 compliant Demand Draft (DD) / Banker’s Cheque (BC)/ Bank Guarantee (BG) on any Scheduled Bank approved by Reserve Bank of India initially valid for 6 (six) months with claim period of another 3 (three) months, subject to further extension if required. Earnest Money Deposit in any other form or amount will not be accepted.
5. The bidder shall submit **along with the offer** necessary documents in support of their previous supply of the items of the tender to WBSEDCL/Other Power Utilities/Other Govt. Departments in earlier occasions and financial capabilities to the extent of the estimated financial amount of their offer.
6. No agent is allowed to participate in the Tender. Original Manufacturers will only be allowed in the tender.
7. WBSEDCL reserves its right to take decision keeping its financial interest. The Purchase Policy of WBSEDCL along with the provisions of Vendor Rating & Holiday Listing, as effective from 01.09.2012 and the subsequent amendment effective from 18.03.2013, will be applicable.
8. If the offer is submitted without or inadequate Earnest Money, the bid will not be opened. In case of incomplete offer, the tender will be liable for rejection and Earnest Money Deposit will be forfeited.
9. The offer shall remain valid for a minimum period of 120 days from the next day of opening of the tender.
10. At the time of placing purchase order, the quantity mentioned in the Tender Document may vary up to ± 25%.
11. Any evidence of unfair Trade Practices including over charging, price fixing, cartel etc. as defined in various statutes, will automatically disqualify the bidders.
12. WBSEDCL is not bound to accept the lowest tender and reserves the right to cancel any or all the tenders unilaterally.
13. Any bidder against whom FIR/Complaint is lodged with Police by WBSEDCL shall not be eligible to participate in the bidding process.
14. Other information as well as terms and conditions, which are not covered above, will be available in Instructions to Bidders, General Conditions of Contract of this tender and the Revised Purchase Policy of WBSEDCL.
15. Any further information along with WBSEDCL’s Revised Purchase Policy may be had from the website: **[www.wbsedcl.in](http://www.wbsedcl.in)** and the following office:

**Office of the Chief Engineer Distribution Project-II Department,  
West Bengal State Electricity Distribution Company Limited,  
Vidyut Bhavan, 2nd Floor, 'B' Block  
Bidhannagar, Kolkata - 700091.**

## **INSTRUCTIONS TO BIDDERS**

### **1. Eligibility for participation:**

- i) Original Manufacturers of the tendered items will only be eligible in the tender.
- ii) The bidders shall have credential for supply of the tendered items to WBSEDCL / other Power Utilities / other Govt. Departments in earlier occasions within last three financial years.
- iii) The bidder shall have adequate financial capability to the extent of the estimated value of their offer.

### **2. Minimum quantity for offer:**

- i) Tenderers are required to submit their offer for the quantity not less than the minimum quantity as specified in Notice Inviting Tender (NIT).

**Note: Tenders will be summarily rejected if the quantity offered by the bidder is less than the minimum quantity as specified in the NIT.**

- ii) At the time of placing purchase order, the quantity mentioned in the Tender Document may vary upto  $\pm 25\%$ .

### **3. General guidance for e-Tendering:**

Instructions/ Guidelines for electronic submission of the tenders have been mentioned below for assisting the bidders to participate in e-Tendering.

### **4. Registration of bidder:**

Any bidder willing to take part in the process of e-Tendering will have to be enrolled & registered with the e-Procurement system, through logging on to <https://wbtenders.gov.in>.

### **5. Digital Signature certificate (DSC) :**

Each bidder is required to obtain a Class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders.

- 6. The bidder can search and download NIT & Tender Documents electronically from the website mentioned in Clause 4 using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

### **7. Submission of Tenders:**

#### **7.1 General process of submission**

Tenders are to be submitted online through the website <https://wbtenders.gov.in>. All the documents uploaded by the Tender Inviting Authority form an integral part of the contract. Tenderers are required to upload all the tender documents along with the other documents, as asked for in the tender, through the above website within the stipulated date and time as given in the Tender. Tenders are to be submitted in two folders - one is Technical Proposal and the other is Financial Proposal. The tenderer shall carefully go through the documents and prepare the required documents and upload the scanned documents in Portable Document Format (PDF) to the portal in the designated locations of Technical Bid.

The bidder needs to download the Forms / Annexure, fill up the particulars in the designated Cell and upload the same in the designated location of Technical Bid. He needs to download the BOQ, fill up the rates of items in the BOQ in the designated Cell and upload the same in the designated location of Financial Bid.

The documents uploaded shall be virus scanned and digitally signed using the Digital Signature Certificate (DSC). Tenderers should take note of all the addendum/corrigendum related to the tender and upload the latest documents as part of the tender.

## **7.2 Technical Proposal**

The Technical Proposal shall contain scanned copies and/or declarations in the following standardized formats in two covers (folders).

### **A. Statutory Cover**

#### **a) To be submitted in “Drafts” folder**

##### **i. Tender Fee**

Scanned copy of Demand Draft (DD) / Banker's Cheque (BC) towards tender fee as prescribed in the NIT, in favour of “West Bengal State Electricity Distribution Company Limited” or “WBSEDCL” payable at Kolkata.

##### **ii. Earnest Money Deposit (EMD)**

Scanned copy of Demand Draft (DD) / Banker's Cheque (BC) / Bank Guarantee towards EMD as prescribed in the NIT, in favour of West Bengal State Electricity Distribution Company Limited payable at Kolkata.

#### **b) To be submitted in “Annexures” folder**

##### **i. Application for Tender (Vide Annexure -I)**

##### **ii. Price Schedule in unpriced condition (Vide Annexure -II)**

The bidder is to mention offered quantity and applicable percentage only in respect of SGST, CGST or IGST as applicable, in the space marked for in the Annexure -II.

#### **c) To be submitted in “NIT” folder**

##### **i. Notice Inviting Tender (NIT)**

##### **ii. Addenda/Corrigendum: if published.**

**Note:** Bidders are to keep track of all the Addendum/Corrigendum issued with a particular tender and upload all the above digitally signed along with the NIT. Tenders submitted without the Addendum/Corrigendum will be treated as informal and liable to be rejected.

#### **d) To be submitted in “Forms” folder**

##### **i. Schedule of Bids**

The bidder needs to download the form for “Schedule of Bids” (Vide Form-I), fill up the particulars in the designated Cell and upload the same in the designated location of Technical Bid. Submission of incomplete “Schedule of Bids” will render the tender liable to summary rejection.

- ii. Declaration Sheet (Vide Form-II), Deviation Sheet (Vide Form-III) and Check List (Vide Form-IV), Proforma for undertaking to be submitted by the Bidders (Vide Form-IX) and Format of Letter of Bid (Vide Form-X)

- iii. Guaranteed Technical Particulars

The bidder needs to download the form for “**Guaranteed Technical Particulars**” (Vide Form-V), fill up the particulars in the designated Cell and upload the same in the designated location of Technical Bid. Submission of incomplete “Guaranteed Technical Particulars” will render the tender liable to summary rejection.

- iv. Summary statement (Vide Form-VI) of average annual turnover for a period of the last three financial years, certified by the Auditor appointed under Companies Act, 2013. In case the bidder is not a company, certificate of Tax Auditor may be submitted.
- v. Statement of orders executed during last three financial years (Vide Form-VII).

***(Only downloaded copies of the above documents are to be uploaded, virus scanned and digitally signed by the bidder)***

**Note: Tenders will be summarily rejected if any item in the statutory cover is missing.**

**B. Non-Statutory Cover (My Document)**

- i. Company Details:

Proof of Original Equipment Manufacturer.

- ii. Certificates:

- 1) PAN Card details.
- 2) Current Professional Tax (PT) submission Challan. Application for such addressed to the competent authority may also be considered.
- 3) GSTIN registration certificate.

- iii. Credential:

Documents in support of supply of the tendered items to WBSEDCL / other Power Utilities / other Govt. Departments in earlier occasions within last three financial years as mentioned below:

- 1) Purchase Orders, Inspection Offer letter, Despatch Instructions, Signed Challans etc. for completing supply of the item against a particular contract.
- 2) Others: Any other documents found necessary.

**7.3 Financial Proposal**

The financial proposal should contain the following documents in one cover (folder). Bill of Quantities (BOQ)

The bidder is to quote the rate online through computer in the space marked for quoting rate in the BOQ. *(Only downloaded copies of the above documents are to be uploaded, virus scanned and digitally signed by the bidder).*

**8. Submission of original copies of documents of Tender Fee and Earnest Money Deposit:**

- i. **Mode of Payment:** Tender Fee must be submitted in the form of Bank Draft (DD) / Bankers Cheque (BC) of any scheduled Bank of India. EMD must be submitted in the form of Bank Draft (DD) / Bankers Cheque (BC)/ Bank Guarantee of any scheduled Bank of India. Payment in any other form will not be accepted.

- ii. **Place of submission:** The original copies of the DD/BC, towards Tender Fee and Earnest Money Deposit shall be submitted in the following office:

**Office of the Chief Engineer, Distribution  
Project –II Department,  
West Bengal State Electricity Distribution Company Limited,  
Vidyut Bhavan, 2<sup>nd</sup> Floor, B-Block,  
Bidhannagar, Kolkata – 700091.**

- iii. **Time of submission:** The original copies of DD/BC towards Tender Fee and EMD shall be submitted in a sealed envelope in the office as stated above within the date and time as specified in the NIT. If the bidder fails to submit the original copies within the due date and time his tender will not be opened and his bid will stand rejected.

**9. Conditional and incomplete tender:**

Conditional and incomplete tenders are liable to summary rejection.

**10. Validity of Tender and Offer:**

The offer against tender should remain valid for a minimum period of 120 days from the next day of opening of the tender. However, WBSEDCL may, on the merit of case, request for extension of validity of the offer for a further suitable period without any change in terms & conditions of the offer.

**11. Earnest Money Deposit (EMD) :**

- (a) Amount of earnest money deposit shall be 2.5% (two and half percent) of the **pro-rata estimated value of the Item wise offered quantity specified in the NIT.**  
(b) Earnest Money shall be in the form of Bank Draft / Banker's Cheque of any scheduled Bank

approved by Reserve Bank of India drawn in favour of "WBSEDCL" or West Bengal State Electricity Distribution Company Limited payable at Kolkata, or by Bank Guarantee as per the proforma of Bank Guarantee for Earnest Money, given with this Tender Document vide Annexure-III, with validity upto 6 (six) months from the due date of submission of tender and with a claim period of another 3 (three) months. Tenderer shall not claim any interest on Earnest Money Deposit.

- (c) Earnest money will be refunded to the unsuccessful Tenderers after finalization of the tender and in case of successful Tenderers, EMD will be refunded only after submission of Security Deposit in two parts @ 2.5% each of the total value of the order placed on the tenderer.  
(d) Earnest Money submitted will be liable to forfeiture,  
(i) If the successful tenderers fail to accept Purchase Order / LOI issued within their offered validity period.  
(ii) For failure to submit specified Security Deposit within time limit indicated in the  
(iii) If any cartel is formed by the tenderer in their quotation.

**12. Opening and evaluation of tender:**

**12.1 Opening of Technical Proposal**

- i. Technical proposals will be opened by the Tender Inviting Authority or his authorised representative electronically from the website stated above, using their Digital Signature Certificate.

- ii. Technical proposals for those tenders whose original copies of DD/BC towards tender fee & EMD have been received will only be opened. Proposals corresponding to which original copy of DD/BC towards tender fee & EMD has not been received, will not be opened and will stand rejected.
- iii. Intending tenderers may remain present if they so desire.
- iv. Cover (Folder) for Statutory Documents (vide Clause 7.2.A) will be opened first and if found in order, Cover (Folder) for Non-statutory Documents (vide Clause 7.2.B) will be opened. If there is any deficiency in the Statutory Documents, the tender will summarily be rejected.
- v. Decrypted (transformed into readable formats) documents of the Statutory and Non-statutory Covers will be downloaded for the purpose of evaluation.

## **12.2 Techno-commercial Evaluation of Tender**

- i) While evaluation, the Tender Inviting Authority or his authorized representative may summon of the tenderers and seek clarification / information or additional documents or original hard copy of any of the documents already submitted and if these cannot be produced within the stipulated timeframe, their proposals will be liable for rejection.
- ii) The summary list of tenderers, whose bids will be found techno-commercially eligible, will be uploaded in the web portals. Date of opening of financial bid will be intimated to the techno-commercially qualified tenderers.

## **12.3 Opening and evaluation of Financial Proposal**

- i. Financial proposals of the tenderers declared techno-commercially eligible, will be opened electronically by the Tender Inviting Authority from the web portal stated above on the prescribed date.
  - ii. The encrypted copies will be decrypted and the rates will be read out to the bidders remaining present at that time.
  - iii. After opening of the financial proposal the preliminary summary result containing inter-alia, name of bidders and the rates quoted by them will be uploaded.
  - iv. The Tender Accepting Authority may ask any of the tenderers to submit analysis to justify the rate quoted by that tenderer.
- 13.** Revision/withdrawal of Financial Proposal by the bidder after opening of Technical Proposal of the tender will not be allowed if it is not sought by the Tender Inviting Authority.
- 14.** In case the tenderer becomes eligible for placement of purchase order on them for the first time, the tenderer will get order upto 30% of their offered quantity. If the tenderer is of National / International repute or if the tenderer had supplied the item of the tender in a single order to any Power Utility / Govt. Department in earlier occasion within last three financial years for a minimum quantity equivalent to 80% of the quantity of this tender, the bidder may get order upto maximum 50% of their offered quantity.

## **15. Acceptance of Tender**

Lowest valid rate should normally be accepted. However, the Tender Accepting Authority does not bind himself to do so and reserves the right to reject any or all the tenders, for valid reasons.



## 16. Purchase Order

WBSEDCL will communicate acceptance of tender to the successful bidder by a Purchase Order. The successful tenderer shall communicate the acceptance of the purchase order.

## 17. Concession

No price preference will be allowed to any tenderer based on the size of the industry or its geographic location. Co-operative Society will not be considered with separate status.

## 18. Holiday Listing and Vendor Rating

Holiday Listing & Vendor Rating will be applicable according to the “Holiday Listing & Vendor Rating” policies of the Revised Purchase Policy, which is posted in website of WBSEDCL ([www.wbsedcl.in](http://www.wbsedcl.in)).

Performance of the bidders, who supplied materials/equipment to WBSEDCL previously, will be evaluated for their Vendor Rating according to the said Vendor Rating policy and their Vendor Rating will be taken into consideration at the time of evaluation of Technical and Financial Proposals of the tender.

## 19. Return of Earnest Money of the unsuccessful tenderer(s)

For return of the Earnest Money of the unsuccessful tenderer(s), he/she/they is/are to apply for the same to the Chief Engineer, Distribution Project-II Department, WBSEDCL, giving the reference to the NIT No., date of tender, amount and mode of Earnest Money deposited – all in a complete form. The Earnest Money of all tenderers other than the successful tenderer(s) may be refunded, after issuance of Purchase Order to the successful tenderer(s).

### NOTE:-

1. **GSTIN no. of factory premises, from where goods will be dispatched and relevant HSN code of the material, are to be mentioned in a separate sheet and uploaded in the bid.**
2. **Evaluation of the price bids will take into account the Unit Landed Cost of the material/equipment at the final destination. For the purpose of evaluation, the Unit landed cost will be arrived at by adding the Ex-works, F&I charges and GST as applicable.**

## **GENERAL CONDITIONS OF CONTRACT FOR SUPPLY AND DELIVERY OF EQUIPMENT/ MATERIALS**

### **1) SECURITY DEPOSIT:**

- a) The security deposit in two parts of 2.5% each upon the Ordered value, should be furnished within a period of 30 days from the date of issue of the order to the paying officer under intimation to Chief Engineer, Distribution Project-II Department

Thereafter one part will remain valid upto 3(three) months from the date of completion of supply and other part will remain valid upto a period of 19 (nineteen) months in general, from the date of completion of supply.

It may be in the form of Bank Guarantee issued by any schedule Bank of India duly approved by Reserve Bank of India in this regard, in which event it would be open to WBSEDCL or its designated Officer to prefer the claim for invocation/encashment of the concerned Bank Guarantee within 6 months from the expiry of the period of such guarantee. Accordingly, there should be a claim period of 6 (six) months in each of the Bank Guarantees from the date of expiry of the validity. The B.Gs are to be extended/revalidated by the supplier to maintain the above time schedule of 3 (three) months & 19 (nineteen) months in general, for delay in physical delivery due to any reason whatsoever.

- b) 5% of ordered value may be deducted from the bill of the vendor. First part of 2.5% of ordered value will be released after 3 months of completion of supply. Balance 2.5% of ordered value will be released after 19 months from the date of completion of supply.
- c) **The Security Deposit is liable to be forfeited in case of non-compliance of order or failure to complete the order. Order is liable to be cancelled for non-submission of Security Deposit in time with forfeiture of earnest money. No claim shall be made against WBSEDCL in respect of interest on Security Deposit.**

**2) TERMS OF PAYMENT:**

90% payment, along with 100% taxes and duties will be made within 45 (forty five) days from the date of submission of bill alongwith

- a) Original receipted Challan/SRV signed by an officer in the rank of Superintending Engineer/Asstt. Manager/Jr. Manager (Stores) attached to the Siliguri RE Project stores.
- b) Report for in-house Sample Approving Committee, if done after delivery of the items at different site stores signed by the Engineers of Siliguri RE Project stores.
- c) Balance 10% payment will be made within 45 (forty five) days of submission of bills along with SRV.

**3) PAYING AUTHORITY:**

Addl. G. M. (F&A), Distribution Project-II Department, WBSEDCL, Vidyut Bhavan (2<sup>nd</sup> Floor), Kolkata- 700 091 will be the Paying Authority.

**4) CONSIGNEE:**

The Project Manager, Siliguri RE Project is the consignee of the order.

**5) GUARANTEE:**

In the event of any defect in the equipment/materials arising out of faulty design, materials, workmanship within a period of 12 (twelve) months of commissioning or 18 (eighteen) months from the date of last despatch of any integral part of the equipment/materials whichever is earlier the supplier shall guarantee to replace or repair the same to the satisfaction of the purchaser.

If the supplier fail to do so within a reasonable time, WBSEDCL reserves the right to effect repair or replacement by any other agency and recover charges for repair or replacement from the supplier.

**6) TESTING:**

**a) CALIBRATION:**

The instruments/equipment required for Inspection & Testing should have valid calibration as per following guideline:

- 1) Calibration Certificate issued by Laboratory accredited by NABL may be accepted unconditionally provided the certificate bears an Accreditation body Logo.
- 2) For testing equipments, where NABL Accreditation is not available, Calibration Certificate from Educational Institutions like IIT's, NIT's, J.U., C.U., BHU only can be accepted provided they can demonstrate traceability.

**Necessary confirmation regarding above is to be given along with inspection offer failing which the inspection offer will not be accepted.** If during inspection & testing, the suppliers fail to produce Calibration Certificate as indicated above the offered lot may be rejected.

**b) INSPECTION & TESTING:**

**1) Before finalization of Tender:**

After opening of Techno-Commercial part of the Tender, the tendering authority at its discretion may send their representative for inspection of the factory premises at any day within working hrs. to ensure participating tenderer's manufacturing capability & technical eligibility to combat with WBSEDCL's requirement.

**2) After finalization of Tender:**

The materials/equipment shall be subjected to tests as per relevant Indian Standards and as per our technical specification. If the Indian Standard has the provision of routine tests, each material/equipment shall be subjected to those routine tests. In all such cases, while offering, test reports indicating the test results should be submitted in six copies to the inspecting authority of the Company as will be indicated in the Purchase Order. Delivery of the material/ equipment shall be done after having the despatch clearance with approval of the supplier's test reports and the supplier should send intimation to this office regarding despatch of materials to stores immediately after despatch. No extra cost shall be charged for the above tests.

However, WBSEDCL reserves the right to depute its Engineers for carrying out inspection and testing on the offered lot as per relevant Indian Standards and our Technical Specification and also reserves the right to reject either raw materials or finished products found to be not complying with the requirement of the specifications and standards. The supplier shall give at least 15 (fifteen) days prior intimation about the readiness of the materials/equipment at the works for testing and inspection. The supplier shall extend all facilities for such inspection and testing for which no extra cost shall be charged and the inspection report shall have to be signed jointly otherwise the offered lot(s) shall be treated as cancelled.

WBSEDCL reserves the right to carry out in-house testing of the supplied materials at destination stores, in presence of authorized representative of the Manufacturer. In case they do not be present, company shall Test unilaterally and their result will be binding on them. **In case the test results deviates from the inspection result carried out at**

**Manufacturers' Works (more than 2% tolerance as per IS where ever applicable), the Company reserves the right to cancel the specific lot and in that event materials are to be replaced by the Manufacturer free of cost** including the transportation from the site to their works and back.

**c) RE-TESTING CHARGE:**

In case of failure to present the offered equipment/materials during inspection (fake offer) or failure in two consecutive inspections of any particular lot of offered materials/equipment, re-testing fee will be charged **@ Rs. 5,000/= (within the State of W.B) & @ Rs.10,000/= (outside State) for carrying out each subsequent inspection** of that particular lot, after the re-offer. The date of re-offer will be the date of submission of re-offer along with W.T.C. & copy of Duplicate Carbon Receipt ( D.C.R).

**d) In case of outstation inspection, arrangement for to and fro journey/stay at that place will be made by WBSEDCL and the expenditure for the journey/ stay will be made by WBSEDCL.**

**7) DESPATCH:**

- (a) The supplier after receiving despatch clearance from the respective inspection Authority/Purchaser shall deliver the equipment/materials suitably packed to the RE Stores located in Siliguri West Bengal as instructed. The materials are to be booked by Road only and the same should be suitably packed and fully insured against all risks and deliver the consignment as per despatch instruction to be communicated in due course. Immediately after despatch of materials/equipment by Road, the supplier shall notify the purchaser and

consignee officer about value of consignment, weight and dimension of consignment by FAX and post copy by Registered Post the relevant documents on the strength of which the consignment can be taken delivery at destination.

- (b) Materials/equipment as per despatch clearance shall have to be despatched within the stipulated period of the order and inspection of further lots against the said order will be arranged by the inspection authority.
- (c) **In case the inspected materials/equipment are not delivered within one month after the stipulated period of order, without any valid reasons, the despatch clearance already issued against the said lot shall be considered to be withdrawn and materials/equipment shall have to be re-offered for inspection and testing and re-testing charges as per Clause-8(c) will be levied for such cases also.**

8) **PACKING:**

The materials/equipment shall have to be securely packed in transportable lots as indicated in the technical specifications. If the materials/equipment are found acceptable after inspection and testing, the same shall be suitably sealed by our Inspecting Officer. Due care shall have to be ensured during transportation to keep the packing and seal intact for acceptance by consignee stores.

9) **DELIVERY:**

- a) All the materials should be delivered to the store of the Project Manger, Siliguri RE Project.
- b) All the materials with firm quantity should be delivered at one sort as per the delivery schedule shall have to be mentioned within WBSEDCL delivery Period that should be specifically mentioned in the "Schedule of Bids".

In the event of failure to supply the ordered quantity by the selected Vender as specified in the delivery schedule, the delegated authority of the Company will be empowered to reduce the ordered quantity of the selected Vendor after the expiry of the delivery date as specified in the schedule of delivery which corresponds to  $\frac{1}{3}^{\text{rd}}$  of the total ordered quantity. The total ordered quantity will be reduced in proportion to the quantity undelivered assessed up to the period mentioned above. The quantity so reduced will be allotted proportionately to the other selected Vendors to whom the orders have been placed in the same tender and who have adhered to the delivery schedule. Allotment so made shall under no circumstances exceed the offered quantity of the respective selected bidder and the limit as per the Vendor rating policy. In the event, the allotment is not possible for reasons due to above limitation, the said allotment may be considered to the non-selected bidders to the extent of limit as per Vendor rating policy and who had matched L<sub>1</sub> evaluated rate and will consent to adhere the allotment.

- c) The date of receipt of offer for inspection of the materials/ equipment along with works test certificate will be treated as the date of delivery of that particular lot provided the materials pass in inspection and testing. Delay in offer beyond the delivery schedule to be incorporated in the order shall attract imposition of L.D. as per L.D. Clause. The materials should reach the destination store within.
  - i) 21 working days from the date of issue of the Despatch Instruction for the manufacturer located outside state.
  - ii) 10 working days from the date of issue of the Despatch Instruction for the manufacturer located within West Bengal. Otherwise L.D. will be levied as per L.D. Clause.

Delay beyond the date of delivery as per schedule of Purchase order shall attract imposition of L.D. as per L.D. Clause.

d) **CHECKING OF MATERIALS/EQUIPMENT AFTER DELIVERY:**

The materials delivered to consignee stores will be subjected to re-inspection / re-testing in presence of authorized representative of suppliers for which due notice in advance will be

furnished by the CE. Dist. Project –II Department If any discrepancy/ dispute in quality arises in any sample selected from a lot , the supplier shall have to replace that specific lot at the Supplier's cost and WBSEDCL reserves the right to take any penal action whatsoever without any further reference.

**10) LIQUIDATED DAMAGE FOR DELAY IN DELIVERY :**

The time of delivery (successful offer for inspection) of the equipment/materials are to be treated as an essence of the contract and the WBSEDCL reserves the right to repudiate the contract, if the equipment / materials are not offered for inspection within scheduled delivery period and physically delivered within stipulated period as per physical delivery clause. But The Chief Engineer, Dist. Project-II Deptt. may at his discretion waive this condition and accept the material with imposition of liquidated damage @ 1/2% of the value of the materials of the particular lot offered and/or delivered beyond the schedule delivery period for each week of delay or part thereof upto 10(ten) weeks and @ 1% of the value per week beyond 10 weeks subject to **maximum of 10% of the particular lot and accept the goods beyond the stipulated period**. Liquidated damage, if any involved, shall be recovered from the outstanding bills/ Bank Guarantee.

**11) ADDITIONAL LIABILITIES:**

The WBSEDCL shall not take any additional liability towards enhanced taxes, duties beyond the scheduled delivery period as incorporated in the purchase order, if the delay is due to any failure on the part of the supplier.

**12) REPEAT ORDER:**

With due consent of the supplier the WBSEDCL may place repeat order within a period of six (6) months from the date of completion of delivery as per the order to cover approximately 50% of the ordered quantity on successful performance of the contract and on the need of the WBSEDCL, on the basis of existing rates, terms and conditions.

The repeat order may also be placed within one year from the date of issuance of original order subject to successful completion of delivery as per the order to the extent of at least 75% of the quantity ordered.

**13) RISK PURCHASE:**

The time of delivery (offer for inspection) or physical despatch stipulated in the purchase order shall be deemed to be of the essence of the contract and if the supplier fails to deliver or despatch any consignment within the period prescribed for such delivery or despatch in the said purchase order/contract/letter of intent, the purchaser shall be entitled to purchase such consignment or if not available, the best and nearest available substitute elsewhere on the account and at the risk of the supplier or to cancel the contract and the supplier shall be liable to compensate for any loss or damage which the purchaser may sustain by reason of such failure on the part of the supplier. The Company at its discretion may not issue subsequent tender if earlier Purchase Order against earlier tender is not executed fully.

If there is a failure to execute the contract fully, WBSEDCL reserves the right to forfeit Earnest Money deposit/cash security to the extent of loss so suffered by the WBSEDCL on risk purchase or otherwise, and may deduct the additional amount, if any, so incurred by the Company from other claim / bill lying with the WBSEDCL.

**14) LEGAL JURISDICTION:**

If any dispute or difference arises with respect to quality/quantity of the equipment/materials pertaining to this order or any other terms and conditions of the order including its execution, such dispute/difference shall be subject to settlement under the jurisdiction of Courts in Kolkata only.

**15) FORCE MAJEURE:**

The supplier shall be under no liability if he is prevented from carrying out any of his obligations by reason of war, invasion, act of foreign country, hostilities (whether war declared or not), riots, civil commotion, mutiny, insurrection, rebellion, revolution, accident, earthquake, fires, floods Govt. order and/or restrictions (except power supply restriction) delay or inability to obtain materials due to import or other statutory restriction and other cause beyond the reasonable control of the supplier. However, such force majeure circumstances are to be intimated immediately and to be established subsequently with proper documents/proofs to the entire satisfaction of the purchaser.

**16) TAX:**

GST will be paid extra to the vendor at applicable rate as per prevail up norms.

**17) ISSUE & SUBMISSION OF WAY BILL:**

Way bill shall be generated by the supplier for the movement of materials from the location of the vendor to the store of WBSEDCL. GST IN of WBSEDCL is 19AAACW6953H1ZX.

**18) CANCELLATION / TERMINATION OF ORDER (if placed):**

The time period for effecting complete supply and delivery of the above materials/equipment as indicated through the delivery schedule enclosed shall have to be treated as the essence of the contract. The Company reserves the right to repudiate the contract if the above period is not strictly adhered to. In the event of failure in effecting the desired supply and delivery of the above equipment/materials within above stipulated due date as incorporated through the schedule enclosed, the above order may be cancelled on submission of necessary notice in this regard and fresh order may be placed on the next higher bidder or on any other bidder, as a result of which the extra cost thus liable to be incurred shall be realised from the original supplier's pending bills which may be lying with the WBSEDCL.

**APPLICATION FOR TENDER**

To  
The Chief Engineer,  
Distribution Project –II Deptt.  
West Bengal State Electricity Distribution Company Limited,  
Vidyut Bhaban (2<sup>nd</sup> Floor), Block B  
Bidhannagar, Block - DJ, Sector - II,  
Kolkata-700 091.

**Tender No:- WBSEDCL/Project II/ DDUGJY/Supply/2020-21/NIT/3886 Dt. 01.10.2020**

**Amount put to tender (Tender Fee): .....**

Dear Sir,

Having examined the Statutory, Non-statutory & NIT documents, I/we hereby like to state that I/we willfully accept all your conditions and offer to supply the item(s) as per Tender No. stated above. I/We also agree to guarantee to replace or repair any defect, whenever it is detected, in the equipment/materials to the satisfaction of the purchaser in conformity with the conditions of contract, specifications, drawings, bill of quantities and addenda.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 201\_\_\_\_

Full name of applicant: \_\_\_\_\_

Signature: \_\_\_\_\_

In the capacity of: \_\_\_\_\_

Duly authorized to sign bids

For & on behalf of (Name of Firm): \_\_\_\_\_

(In block capitals or typed)

Office address:

Telephone no(s) (office): \_\_\_\_\_

Mobile No: \_\_\_\_\_

Fax No: \_\_\_\_\_

E mail ID: \_\_\_\_\_

.....

**SIGNATURE OF THE TENDERER WITH OFFICE SEAL.**

## PRICE SCHEDULE (UNPRICED)

To be submitted online by the tenderer in statutory cover (Technical file)

Tender No. WBSEDCL/Project II/ DDUGJY/Supply/2020-21/NIT/3886 Dt. 01.10.2020

Sl. No.	Description of materials	Tender Quantity (M.T.)	State Based		Outside State	Other Taxes, if any, (with explanatory notes)	Remarks
			CGST	SGST	IGST		
			In %	In %	In %	In %	
1	LT Dead End Assembly for 3x 70 sq.mm + 1x50 sq.mm(insulated) + 1x16 sq.mm AB Cable, with Eye hook						
2	LT Suspension Assembly 3x 70 sq.mm + 1x50 sq.mm(insulated)+ 1x16 sq.mm AB Cable, with Eye hook						
3	LT Dead End Assembly for 3x 50 sq.mm + 1x35 sq.mm(insulated) + 1x16 sq.mm AB Cable, with Eye hook						
4	LT Suspension Assembly 3x 50 sq.mm + 1x35 sq.mm(insulated)+ 1x16 sq.mm AB Cable, with Eye hook						
5	Bimetallic Crimping type water proof lug for 70 Sqmm Phase for LT AB Cable(3CX70+1CX50+1CX16)						
6	LT AB Cable Tie						

**Offered quantity:** Offered quantity shall not be less than the minimum quantity of the item as specified in NIT. Tenders will be summarily rejected if the quantity offered by the bidder is less than the minimum quantity as specified in the NIT. The bidders applying for Promotional order needs to mention the offered quantity of the item following Clause no. 20 of Instruction to Bidder of NIT.

**Price:** The price to be quoted by the tenderer, shall be FIRM.

**Note :** In case the tenderer does not agree to all the terms & conditions as per tender specification and **if bid documents** are not filled up properly as desired, the purchaser may accept the deviations or may reject the particular offer without further intimation to the tenderer. It may also be noted that if any difference in statement from this schedule of bids is found in any other parts of the offer, the offer may be rejected or the statement given in the schedule of bids will be considered for the purpose of processing the tender and the statement given in other part of the offer will be neglected without any further reference to the tenderer.

.....  
SIGNATURE OF THE TENDERER WITH OFFICE SEAL



**PROFORMA OF BANK GUARANTEE FOR BID GUARANTEE/EARNEST MONEY**

Ref. No.

Date :

To

The West Bengal State Electricity Distribution Company Limited,  
Vidyut Bhavan, 2<sup>nd</sup> Floor, Block B  
DJ Block, Sector - II,  
Salt Lake, Kolkata-700091.

Dear Sirs,

In accordance with your Notice Inviting Tender (NIT) under your Tender & Specification No. .... due on..... M/s. .... having its Registered Head Office at .....(Hereinafter called the Bidder) wish to participate in the said Tender for ..... As an irrevocable Bank Guarantee against Bid Guarantee for an amount of Rs. .... is required to be submitted by the Bidder as a condition precedent for participation in the said Tender, which amount is liable to be forfeited on the happening of any contingencies mentioned in the Tender Documents.

We, the ..... Bank at ..... having our Head Office at ..... (Address of Bank) guarantee and undertake to pay immediately on demand by West Bengal State Electricity Distribution Company Limited (WBSEDCL) the amount of Rs. .... (in words and figures) without any reservation, protest, demur and recourse. Any such demand made by said Purchaser shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder. This Guarantee shall be irrevocable and shall remain valid upto @ ..... If any further extension of this guarantee is required, the same shall be extended to such required period on receiving instructions from M/s. .... on whose behalf this Guarantee is issued.

All rights of West Bengal State Electricity Distribution Company Limited under this Guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities there under unless WBSEDCL brings any suit for section to enforce claim under this Guarantee against the Bank within three months from the above mentioned expiry date of validity or, from that of the extended date.

In witness whereof the Bank, through its authorized Officer, has set its hand and stamp on this ..... day of 20.... at ..... .

WITNESS

<i>Signature</i>	<i>Signature</i>
(Name)	( Name)
(Official address )	(Designation with Bank Stamp )

Attorney as per Power of Attorney No.

Date :

.....

@ This date should be initially for six months and may be extended from time to time.

**Note : i) The Bank Guarantee should be executed in line with above proforma and on Non-Judicial Stamp Paper of Rs. 100.**

**ii) In case the Bank Guarantee is given by any Bank situated outside West Bengal, arrangement shall be made by the Bank for invoking the Bank Guarantee from any Bank situated in Kolkata, whenever it is necessary.**

**Form - I****SCHEDULE OF BIDS****Tender No. WBSEDCL/Project II/ DDUJY/Supply/2020-21/NIT/3886 Dt. 01.10.2020**

1.	Name of the tenderer with office & factory address. Tel. no./Fax no./E.mail address	
2.	Address of Kolkata office and Tel no/Fax no/E.mail address with the name of contact person	
3.	Address of factory from where the material will be despatched.	
4.	GSTIN No. of factory from where the material will be dispatched	
5.	Testing facilities available.	
6.	Category of organization	
7.	SSI registration No. & valid upto ( a copy should be enclosed)	
8.	Earnest Money (Amount and in the form of BG/DD/BC) submitted	
9.	Details of Earnest Money in BG/DD/BC, as submitted	
10.	CGST rate, if applicable	
11.	SGST rate, if applicable	
12.	IGST rate, if applicable	
13.	HSN code of the material to be supplied.	
14.	Whether agreed to :	
	a) Terms of payment	
	b) Guarantee clause	
	c) Security deposit clause	
	d) Liquidated damage clause	
	e) Risk purchase clause	
	f) Inspection clause	
	g) Packing clause	
	h) Retesting clause	
15.	Whether agreed to deliver materials at WBSEDCL's stores any where in WB by road, including unloading?	
16.	Offer valid up to	120 days from the next date of opening of Tender.
17.	The price should be Firm/Variable. If variable, the formula with Base Date etc. (Xerox copy should be enclosed)	The Price shall be <b>FIRM</b> .
18.	Desired Delivery schedule of WBSEDCL	

<b>Commencement :</b> Within 30 days from the next date of issuance of Purchase Order with item-wise quantity in following manner:-		
Name of Item		Single Lot (within 1 month from the next date of P.O )
LT Dead End Assembly for 3x 70 sq.mm + 1x50 sq.mm(insulated) + 1x16 sq.mm AB Cable, with Eye hook		
LT Suspension Assembly 3x 70 sq.mm + 1x50 sq.mm(insulated)+ 1x16 sq.mm AB Cable, with Eye hook		
LT Dead End Assembly for 3x 50 sq.mm + 1x35 sq.mm(insulated) + 1x16 sq.mm AB Cable, with Eye hook		
LT Suspension Assembly 3x 50 sq.mm + 1x35 sq.mm(insulated)+ 1x16 sq.mm AB Cable, with Eye hook		
Bimetallic Crimping type water proof lug for 70 Sqmm Phase for LT AB Cable(3CX70+1CX50+1CX16)		
Cable Tie		
<b>N.B.: Offered delivery schedule in any mode other than the above delivery schedule will not be entertained.</b>		
19.	Delivery Schedule of the bidder (mentioning the offered quantity within the desired delivery schedule of WBS&EDCL)	
	a) Commencement	
	b)Rate of delivery per month & completion time	
20.	If any deviation, please mention in deviation sheet enclosed (deviations mentioned elsewhere will not be considered)	YES/NO
21.	Technical literature/catalogue of the materials offered enclosed.	YES/NO

.....  
**SIGNATURE OF THE TENDERER WITH OFFICE SEAL**

**DECLARATION SHEET**

I ..... certify  
that all the information pertaining to this offer are correct and are true representation of the  
materials covered by our Formal proposal number.....dated..... I  
hereby certify that I am duly authorized representative of the supplier whose name appears  
above my signature.

Supplier's Name: .....

Authorised Representative's Signature.....

**Manufacturer's Intent:.....**

**The manufacturer hereby agrees to fully  
comply with the requirements and intent  
of this specification for the Price Indicated.**

.....

.....

Authorised Representative's Signature

Specific exception to specifications  
General & supplementary conditions  
If any, tabulate & sign below

**DEVIATION SHEET**

1. If the proposal has got any deviation from the Technical Specification, the tenderer shall tabulate those deviations here clause by clause.

Sl. No.	Clause No.	Description	Deviation offered	Remarks

2. If the proposal has got any deviation from the requirement of the commercial terms specified, tenderer shall tabulate those deviations here clause by clause.

Sl. No.	Clause No.	Description	Deviation offered	Remarks

**Designation****Signature with Seal**

NOTE: When there is no deviation this sheet is to be submitted with the offer duly signed with an endorsement indicating “No Deviation”.  
Deviations not indicated here will not be taken into consideration.

## CHECK LIST

## Form – IV

Tenderers are required to upload the scan copy of all the documents, required as per tender specification and NIT and verify before submission of Tender and also upload the Check list in the following format, duly digitally signed.

Sl. No.	Scanned Copy of Documents to be uploaded	Name of folder	To be submitted in cover	Submitted (Y/N)
1	Tender Fee (Scanned copy)	<b>Drafts</b>	Statutory cover (Technical proposal)	
2	Earnest Money Deposit (Scanned copy)	<b>Drafts</b>	Statutory cover (Technical proposal)	
3	Application for Tender ( <b>Annexure-I</b> )	<b>Annexure</b>	Statutory cover (Technical proposal)	
4	Price schedule in un-priced condition ( <b>Annexure-II</b> ). (Unpriced Price Schedule should contain offered quantity, applicable percentage only in respect of SGST, CGST, IGST)	<b>Annexure</b>	Statutory cover (Technical proposal)	
5.	Notice Inviting Tender	<b>NIT</b>	Statutory cover (Technical proposal)	
6.	Addenda / corrigenda, if published	<b>NIT</b>	Statutory cover (Technical proposal)	
7	Schedule of bids duly filled in ( <b>Form-I</b> )	<b>Forms</b>	Statutory cover (Technical proposal)	
8	Declaration Sheet ( <b>Form-II</b> )	<b>Forms</b>	Statutory cover (Technical proposal)	
9	Deviation Sheet ( <b>Form-III</b> )	<b>Forms</b>	Statutory cover (Technical proposal)	
10	Check List ( <b>Form-IV</b> )	<b>Forms</b>	Statutory cover (Technical proposal)	
11	Guaranteed Technical Particulars ( <b>Form-V</b> )	<b>Forms</b>	Statutory cover (Technical proposal)	
12	Summary statement of average annual turnover ( <b>Form-VI</b> )	<b>Forms</b>	Statutory cover (Technical proposal)	
13	Statement of orders executed ( <b>Form-VII</b> )	<b>Forms</b>	Statutory cover (Technical proposal)	
14	List of Type Test Reports ( <b>Form-VIII</b> )	<b>Forms</b>	Statutory cover (Technical proposal)	
15	Proforma for undertaking to be submitted by the Bidders ( <b>Form-IX</b> )	<b>Forms</b>	Statutory cover (Technical proposal)	
16	Format of Letter of Bid ( <b>Form-X</b> )	<b>Forms</b>	Statutory cover (Technical proposal)	
17	Proof of Original Equipment Manufacturer	Company details	Non-statutory cover (Technical proposal)	
18	PAN card	Certificates	Non-statutory cover (Technical proposal)	
19	Current Professional Tax clearance certificate and GST registration certificate	Certificates	Non-statutory cover (Technical proposal)	
20	If there is no Professional Tax in any state, a declaration should be given.	Certificates	Non-statutory cover (Technical proposal)	
21	Banker's certificate regarding financial capability issued within last one year from the date of opening of Tender.	Certificates	Non-statutory cover (Technical proposal)	
22	Annual turnover for last three financial years.	Financial Info	Non-statutory cover (Technical proposal)	
23	Purchase Orders, Inspection Offer letter, Despatch Instructions, Signed Challans etc. in support of completion of supply of the item against a particular contract.	Credential	Non-statutory cover (Technical proposal)	
24	Detailed Type Test Report carried out within last five years.	Credential	Non-statutory cover (Technical proposal)	
25	List of Orders in hand, along with Order values to be executed within one year of bid submission.	Declaration	Non-statutory cover (Technical proposal)	
26	Bill of Quantities.	<b>BOQ</b>	Financial cover (Financial proposal)	

<b>Guaranteed Technical Particulars for Eye Hook for LT/HT AB Cable</b>			
<b>S. No.</b>	<b>PARTICULARS</b>	<b>Description</b>	
1	Aplicable Standard		
2	Type Of Hook		
3	Type of Design		
4	Type & Grade-Metallic / Non Metallic Material		
5	Type of Hot Dip Galvanizeing & Thikness of Zink Coating		
6	Marking		
7	Color of Non-Metallic Parts		
8	Dimensions		
9	Ultimate Tensile Strength (KN)		
<b>Guaranteed Technical Particulars for HT Dead End Clamp for HT AB Cable</b>			
<b>S. No.</b>	<b>PARTICULARS</b>	<b>Unit</b>	<b>Description</b>
1	Type of Clamp		
2	Name of the Manufacturer		
3	Place of Manufacture		
4	Range of Conductor Size		
5	Type of Design of Clamp		
6	Applicable Standard		
7	Loop Anchor Attachment (Open/Close)		
8	Installation (With/Without Cutting Messenger Wire)		
9	Type & Grade-Metallic / Non Metallic Material		
10	Dimensions		
11	Net Weight (Approx.) of Clamp		
12	Ultimate Tensile Strength		
<b>Guaranteed Technical Particulars for HT Suspension Clamp for HT AB Cable</b>			
<b>S. No.</b>	<b>PARTICULARS</b>	<b>Unit</b>	<b>Description</b>
1	Type of Clamp		
2	Name of the Manufacturer		
3	Place of Manufacture		
4	Range of Conductor Size		
5	Type of Design of Clamp		
6	Applicable Standard		
7	Loop Anchor Attachment (Open/Close)		
8	Installation (With/Without Cutting Messenger Wire)		
9	Type & Grade-Metallic / Non Metallic Material		
10	Dimensions		
11	Net Weight (Approx.) of Clamp		
12	Ultimate Tensile Strength		

**Guaranteed Technical Particulars for IPC for DB Charging for LT AB Cable**

S. No.	PARTICULARS	Description
1	Manufacture Name	
2	Address of Manufacture	
3	Standard	
4	Size of main	
5	Number and size of tap	
6	Number of tightening bolts	
7	Rated bolt tightening torque	
8	Torque required for breaking shear head	
9	Type of end cap for branch cable	
10	Max. Torque withstand of connec. body	
11	Type and grade materials of the body	
12	Type & grade of contact plate materials	
13	Material of bolts, shear head	
14	Torque for establishing connection between Main & Branch (Nm)	
15	Max. Tensile Load for no Break down of main conductor (Kg)	
16	Max. Tensile Load on branch conductor for no slippage/break (Kg)	
17	Voltage Withstand under water immersion	
18	Electric ageing test report enclosed?	
19	No. Of cycles	
20	Max. Temp. In each cycle (Deg.)	
21	Marking on clamp	

**Guaranteed Technical Particulars for IPC for Street Light for LT AB Cable**

S. No.	PARTICULARS	Description
1	Manufacture Name	
2	Address of Manufacture	
3	Standard	
4	Size of main	
5	Number and size of tap	
6	Number of tightening bolts	
7	Rated bolt tightening torque	
8	Torque required for breaking shear head	
9	Type of end cap for branch cable	
10	Max. Torque withstand of connec. body	
11	Type and grade materials of the body	
12	Type & grade of contact plate materials	
13	Material of bolts, shear head	
14	Torque for establishing connection between Main & Branch (Nm)	
15	Max. Tensile Load for no Break down of main conductor (Kg)	
16	Max. Tensile Load on branch conductor for no slippage/break (Kg)	



17	Voltage Withstand under water immersion	
18	Electric ageing test report enclosed?	
19	No. Of cycles	
20	Max. Temp. In each cycle (Deg.)	
21	Marking on clamp	
<b>Guaranteed Technical Particulars for IPC for TEE Connection for LT AB Cable</b>		
<b>S. No.</b>	<b>PARTICULARS</b>	<b>Description</b>
1	Manufacture Name	
2	Address of Manufacture	
3	Standard	
4	Size of main	
5	Number and size of tap	
6	Number of tightening bolts	
7	Rated bolt tightening torque	
8	Torque required for breaking shear head	
9	Type of end cap for branch cable	
10	Max. Torque withstand of connec. body	
11	Type and grade materials of the body	
12	Type & grade of contact plate materials	
13	Material of bolts, shear head	
14	Torque for establishing connection between Main & Branch (Nm)	
15	Max. Tensile Load for no Break down of main conductor (Kg)	
16	Max. Tensile Load on branch conductor for no slippage/break (Kg)	
17	Voltage Withstand under water immersion	
18	Electric ageing test report enclosed?	
19	No. Of cycles	
20	Max. Temp. In each cycle (Deg.)	
21	Marking on clamp	
<b>Guaranteed Technical Particulars for LT Dead End Clamp with Eye Hook for LT AB Cable</b>		
<b>S. No.</b>	<b>PARTICULARS</b>	<b>Description</b>
1	Manufacture Name	
2	Address of Manufacture	
3	Drawing No	
4	Range of Bare Messenger Wire	
5	Range of Bare Messenger Conductor Diameter	
6	Type of Design	
7	Installation (with/without disassembly)	
8	Type & Grade Metallic/Nonmetallic Material	
9	Marking (Parmanent)	
10	Colour of Nonmetallic Parts	
11	Max. Allowable Load (KN)	
12	Acceptance tests	

Guaranteed Technical Particulars for LT Suspension Clamp with Eye Hook for LT AB Cable		
S. No.	PARTICULARS	Description
1	Manufacture Name	
2	Address of Manufacture	
3	Drawing No	
4	Range of Bare Messenger Wire	
5	Range of Bare Messenger Conductor Diameter	
6	Installation (with/without disassembly)	
7	Type & Grade Metallic/Nonmetallic Material	
8	Marking (Parmanent)	
9	Colour of Nonmetallic Parts	
10	Max. Allowable Load (KN)	
11	Acceptance tests	

(Signature of the Tenderer)

**Certificate regarding Summary Statement of Yearly Turnover**

This is to certify that the following statement is the summary of the audited Balance Sheet arrived in favour of ..... for the three consecutive years or for such period since inception of the Firm, if it was set in less than such three year's period.

Sl. No.	Financial		Remarks
	Year	Turnover rounded up to ` in lakh (two digit after decimal)	
1.			
2.			
3.			
Total			

Average Turnover: In

**Note:**

1. Year proceeding the current financial year is to be considered as Year-1.
2. Average turnover is to be expressed in lakh of rupees, rounded up to two digits after decimal.
3. Average turnover for 3 years is to be obtained by dividing the total turnover by 3.0. If the Firm was set up in less than 3 year's period, consider the turnover for the period from inception to the Year-1. It may be either 1.0 or 2.0. Average turnover is to be obtained by dividing the total turnover by 1.0 or 2.0, as the case may be.
4. In case, the firm was set up in less than 3 year's period, mention the year of inception in the 'Remarks' column.

**STATEMENT OF ORDERS EXECUTED DURING LAST THREE FINANCIAL YEARS**

Sl. No.	Name of the Items supplied	Financial year	Order No. and date	Name of Purchaser / order issuing authority	Quantity ordered	Quantity supplied /delivered	Performance report of supplied items(scanned copy of certificate to be submitted)	Challan/SRV Nos as proof of delivery (scanned copy of documents to be submitted)

.....  
**SIGNATURE OF THE TENDERER WITH OFFICE SEAL**

**Form -VIII**

**LIST OF TYPE TEST REPORTS CARRIED OUT WITHIN FIVE YEARS AS ON DATE OF BID SUBMISSION.**

Sl. No.	Description of equipment/item offered/component used	Type Test as per relevant IS/IEC	Date of test	Name of Lab.	Accredited to	Remarks

.....  
**SIGNATURE OF THE TENDERER WITH OFFICE SEAL**

**PROFORMA FOR UNDERTAKING TO BE SUBMITTED BY THE BIDDER**

(For genuineness of the information furnished on-line and authenticity of the documents produced before Tender Committee for verification in support of his eligibility)

I -----, Partner/Legal Attorney/ Accredited Representative of  
M/s -----, solemnly declare that:

1. We are submitting Tender for the Work -----  
against Tender Notice No. ----- dt. -----
2. None of the Partners of our firm is relative of employee of -----  
(Name of the Company).
3. All information furnished by us in respect of fulfilment of eligibility criteria and  
qualification information of this Tender is complete, correct and true.
4. All documents/ credentials submitted along with this Tender are genuine, authentic, true and  
valid.
5. If any information and document submitted is found to be false/ incorrect any time,  
department may cancel my Tender and action as deemed fit may be taken against us,  
including termination of the contract, forfeiture of all dues including Earnest Money and  
banning / delisting of our firm and all partners of the firm etc.

Signature of the Tenderer with Seal

Dated-----

**FORMAT OF LETTER OF BID**

**LETTER HEAD OF BIDDER (AS ENROLLED ONLINE ON e-Tendering PORTAL OF NIC)**

To,  
The Chief Engineer,  
Distribution Project- II Department  
Vidyut Bhavan, 2nd Floor, Block B  
DJ Block, Sector - II,  
Salt Lake, Kolkata-700091.

Sub: Letter of Bid for the work

-----  
-----  
-----  
-----  
-----

Ref: 1. NIT No ----- dated -----  
2. Tender Id No. -----

Dear Sir,

We offer to execute the work as per our offered bill of quantity in accordance with the conditions of the NIT document as available in the website. The details of the EMD being submitted by us has been furnished on-line.

This Bid and your subsequent Letter of Acceptance / Work Order shall constitute a binding contract between us.

We hereby confirm our acceptance of all terms and conditions of the NIT document unconditionally.

Signature of the Tenderer with Seal

Dated-----

5.1.9.4 Current density during over current shall be 100 A/sq.mm for Aluminium and 95 A/sq.mm for Aluminium – Alloy Conductor.

5.1.9.5 Variation in time of over current is permissible between 0.85 sec & 1.15 sec., provided it maintains the relationship  $I^2t = K$

$$t = K / I^2 \text{ where,}$$

$I$  = rms value of over current in Amps.  
 $t$  = time in seconds  
 $K$  = Constant

5.1.9.6 After the over current test the electrical ageing test of clause 5.1.8 shall be resumed.

#### **Type Test of IPC**

Type Test Reports should be submitted from an Independent Laboratory of Repute or the Works Laboratory in case of a foreign manufacturer covering the following (on any convenient size of fitting of same design made from the same materials).

The installation of the connectors shall be done by the laboratory following instructions provided by the manufacturer.

The Test report shall record the embossing and marking on the connector.

The following shall constitute Type Tests for IPC :

- Electrical Ageing Test
- Dielectric and Water Tightness Test.
- Mechanical Tightening Test
- Effect of Tightening on main Core
- Effect of Tightening on Branch core
- Over-current Test (if applicable)

The following shall be Type Test for Suspension Assemblies (SA)

- Mechanical Test
- Voltage Test
- Climatic Aging Test
- Corrosion Test
- Endurance Test under Thermal & Mechanical Stresses

The following shall be Type Tests for Anchoring Assemblies (AA)

- Mechanical Test
- Voltage Test
- Dynamic Test
- Climatic Aging Test
- Corrosion Test
- Endurance Test under Thermal & Mechanical Stresses

**Anchoring Clamp for Insulated Messenger:**

The clamps should be designed to Anchor LT-AB cable with insulated messenger. The clamp should consist of an Aluminium alloy corrosion resistant castled body, bail of stainless steel and self adjusting plastic wedges which shall anchor/hold the neutral messenger without damaging the insulation.



- No losable part in the process of clamping arrangement
- The clamp should conform to the standard NFC 33041 and 33042 or equivalent I.S. if any.
- The clamp body should be made of corrosion resistant Aluminium alloy, bail should be of stainless steel and wedges should be weather and UV resistant polymer.
- Ultimate tensile strength of the clamp should not be less than 15 kN for 50/70 sq.mm insulated messenger wire / 10 kN for 25/35 sq.mm insulated messenger wire.
- Slip load of the clamp should not be less than 3 kN for 50/70 sq.mm. messenger wire / 2 kN for 25/35 sq.mm. messenger wire.

Anchoring assemblies are used to firmly attach the messenger of ABC to a support and transmit the mechanical tension.

- at the end of a run or to the supporting structures
- at a major change in direction.

Each Anchoring Assembly shall include.

- One number tension bracket.
- One number wedge type tension clamp
- Flexible Rope for fixing tension clamp to bracket.

Anchoring assemblies shall be supplied in sets to ensure compatibility of the materials against corrosion or wear of moving parts.

#### 5.2.1 Tension Bracket of AA

The tension bracket shall be made out of a single piece of Aluminium alloy suitable for attachment to a pole either by

- 16mm galvanized steel bolt (s) or
- two stainless Steel straps of 20 x 0.7 mm.

The tension bracket should be designed to ensure the Flexible rope cannot slip out at any angle.

The tension bracket should be rated and tested for the loads specified in Table-5. The load shall be applied at an angle of 45° from the normal to the surface of mounting of the bracket.

<b>Table - 5</b>			
<b>Conductor Size (Sq.mm.)</b>	<b>Rating</b>	<b>Load for deformation &lt;10mm (Newtons)</b>	<b>Load for deformation &lt;30mm &amp; no-break (Newtons)</b>
25-35	1500 Kg.	12,000	15,000
50-95	2000Kg	15,600	19,500

#### Flexible Rope of AA

The Anchoring assembly shall be supplied with a stainless steel flexible Rope to connect the Tension Clamp to the Tension Bracket.

The rope should have sufficient flexibility to ease the torsional movement of the ABC System.

The Rope should be pre-fitted with compression type end fittings to secure the tension clamp.

5.2.5.4 A wear resistant moveable saddle should be un-loosably fitted on the Rope to prevent abrasion at the point of fitting into the tension bracket.

5.2.5.5. The Rope should have sufficient mechanical strength to withstand the mechanical test for the complete assembly tests in this specification.

#### Wedge Type Tension Clamp of AA

Wedge type clamps shall be used for clamping the messenger without damaging the insulation.

The clamp shall be capable of clamping an uncut messenger so that it can continue without break to the connecting point or next span.

The clamp shall be fully insulating type of mechanical and weather resisting thermoplastic.

No bolts or loose parts are allowed as part of the Clamping system.

No tools shall be needed for fitting the messenger into the clamp.

The clamp shall be self tightening and capable of holding without slippage the load specified in the Table-6.

<b>Table - 6</b>				
Conductor Size		Rating (Kg.)	T start (I minute) (Newtons)	T final (I minute) (Newtons)
Sq. mm.	Dia. (mm)			
25-35	8-11	1000 Kg.	8,000	10,000
50-54	8-11	1500 Kg.	12,000	15,000
70-95	13.5-16	2000 Kg.	12,000	15,000

After fitting the insulated messenger in the clamp, load T start will be held for 1 minute & then load increased to T final at rate between 5000 – 7,500 N/mtr. In each case there shall be no breakdown of any part of clamp and slippage of messenger in relation to the clamp.

#### Voltage Test on Clamp of AA

Voltage test is carried out on anchor clamps to ensure no damage is caused to the insulated messenger.

A conductive rod of dia. corresponding to the average dia. that can be accommodated in the clamp is fitted into the clamp, protruding by approx. 50mm at each end of the tightening piece.

The rod and clamp is subjected to tensile load as stated in Table 7 below when fixed to a support in its normal manner.

<b>Table - 7</b>			
Conductor Size		Normal rating (kg)	Load Applied (N)
Sq. mm.	Dia. (mm)		
25-35	8-11	1000	2000
50-54	8-11	1500	4000
70-95	13.5-16	2000	4000

A power frequency voltage of 6 kV is applied for 1 minute between the rod and conductive part of the clamp, or fixation point in absence of conductive part.

5.2.7.5 No breakdown or flashover shall occur. There shall be no tripping due to leakage with a setting of 10 + 0.5 mA.

#### Endurance under Mechanical & Thermal Stress of AA

This test is done on clamp rated 1500Kg. or 2000 Kg. using insulated messenger 50 to 70sq. mm.

A neutral messenger is fitted between two anchor clamps, with clamp spacing approx. 5 mtr. & 1 mtr. Of messenger protruding from the end. Marks are made to enable measurement of slippage.

The sample is subjected to 500 cycles of 90 minutes each as described below:

Messenger temperature is raised by passing an AC current to 60 +30 C within 15 minutes. This temperature is maintained for at least 30 minutes to give a total heating period of 45 mts. per cycle.

Messenger is allowed to cool naturally to ambient for further 45 minutes to complete 90 mts. Cycle time.

Mechanical load is applied during the cycle as per table 8 below. Load F1 is applied throughout the cycle, except for a short period of 5 sec. to 60 sec. when it is gradually increased from F1 to F2 at any time during the last 15 minutes of the 90 minute cycle.

Table - 8				
Conductor Size		Rating (Kg.)	F1 (Newtons)	F2 (Newtons)
Sq. mm.	Dia. (mm)			
25-35	8-11	1000 Kg.	2,200	5,000
50-54	8-11	1500 Kg.	4,000	7,500
70-95	13.5-16	2000 Kg.	4,500	10,000

There should be no slippage greater than 4 mm after 2 cycles or greater than 8 mm after 500 cycles.

Voltage test is done at the end of the 500 cycles by immersing the test specimen of neutral messenger and clamps in water of resistivity not less than 200 Ohm mtr. For 30 minutes.

A voltage of 10 kV ac is applied for 1 minute between messenger and water bath using a trip setting of 10 + 0.5 am. There should be no breakdown or tripping.

Suspension clamp for insulated neutral messenger:

The clamp should be designed to hang L.T – AB cable with insulated neutral messengers. The neutral messengers should be fixed by an adjustable grip device. A movable link should allow longitudinal and transversal movement of the clamp body.

- No losable part in the process of clamping arrangement.
- The clamp should conform to the standard NFC 33040 or equivalent I.S, if any.
- The clamp and the link made of Polymer should provide an additional insulation between the cable and the pole.
- The clamps and movable links should be made of weather and UV resistant glass fibre reinforced polymer.
- Clamps should be fixed with pole by eye hook / bracket. Bracket should be made of corrosion resistant aluminium alloy.
- Ultimate tensile strength of the clamp should not be less than 15 KN for 50/70 sq.mm. Insulated messenger wire. 4.3 KN for 25/35 sq.mm. Insulated messenger wire.
- Maximum allowable load of the clamp should not be less than 20 KN for 50/70 sq.mm. insulated messenger wire. 15 KN for 25/30 sq.mm insulated messenger wire.

Suspension Assembly is used for supporting an ABC by installation on the messenger at an intermediate point of support such as a pole. It can accommodate small angles of deviation upto 30°.

Each Suspension Assembly shall consist of:

- One number Suspension Bracket.
- One number moveable (articulated) connecting link.
- One number Suspension Clamp.

Suspension Assemblies shall be supplied in sets to ensure compatibility of the materials against corrosion or wear of rotating/moving parts.

#### Suspension Bracket of SA

The Suspension Bracket shall be made from single piece aluminium alloy suitable for attachment to a pole by either.

- a) 16 mm galvanized steel bolt or
- b) Two stainless steel straps.

The Suspension Bracket shall be provided with an upper bulge to prevent the clamp from turning over on the Bracket for more than 45° from the horizontal or to within less than 60 mm from the pole / fixing structure.

The Suspension Bracket should be so designed to ensure that the articulated link cannot slip out of it.

Suspension Brackets shall be designed to withstand a load applied at the anchoring point of the movable link as per Table – 9 below without deformation of more than 10mm or breakdown at 330° below horizontal (there should be no longitudinal component of load parallel to the plane of fixing).

<b>Table - 9</b>			
Conductor Size		Normal rating (kg)	Load (N)
Sq. mm.	Dia. (mm)		
25-35	8-11	1500Kg.	12500
70-95	13-17	2000Kg.	14000

#### Movable (Articulated) Link of SA

Movable Links are used between the Suspension Bracket and Suspension Clamp to allow a degree of movement and flexibility between the two.

Movable Links should be made fully of insulating type of mechanical and weather resistant thermoplastic. A metallic wear resistant ring should however be fitted at point of contact between the Suspension Bracket and the movable link.

The Movable link should be unloosably fitted to the Bracket and the Clamp.

#### Suspension Clamp of SA

Suspension Clamps are used for locking the messenger of the ABC bundle without damaging the insulation or allowing the messenger to become dismounted from the fitting.

The Suspension Clamp shall accommodate messenger wires from 25 to 95 sq.m.

The Suspension Clamp shall be made fully plastic of insulating type of mechanically strong and weather resistant

Bolts should not be used for clamping / locking the messenger in the Clamp.

There shall be no losable parts in the Suspension clamp.

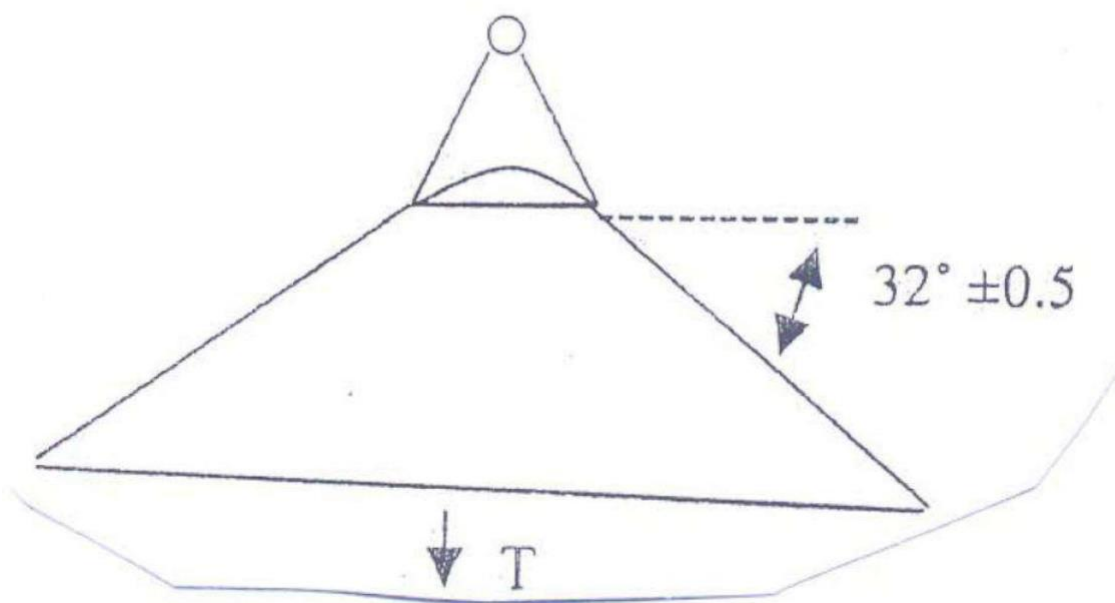
The Suspension Clamp should be unloosably fitted to the rest of the Suspension Assembly.

Mechanical Test on Clamp of SA

The Sub Assembly shall be subjected to a vertical load applied as per drawing in accordance with Table-10. There shall be no breakdown or permanent deformation at load T initial for 1 minute or when the load is increased to T final and released.

Table - 10				
Conductor Size		Rating (Kg.)	T start (I minute) (Newtons)	T final (I minute) (Newtons)
Sq. mm.	Dia. (mm)			
25-54	8-15	1500 Kg.	9,600	12,000
70-95	13-17	2000 Kg.	12,800	16,000

Fig. : A



A sample messenger shall be fitted into a fixed suspension clamp and subjected to a gradually applied longitudinal load of 300 N. There shall be no permanent slippage.

#### Voltage Test of SA

A copper foil is wrapped at the clamping point around the maximum size of messenger allowed in that clamp. An ac voltage of 6 KV is applied between the copper foil and nearest conductive point of the clamp or into its absence to the point of fixation. The voltage should be withstood for 1 minute without breakdown or flashover.

#### Test Under Mechanical & Thermal Stress

The test specimen is made up of approx. 10mts. Of messenger wire strung between two anchor clamps with a Suspension Clamp fixed in the middle. Masses of 40 Kg. are suspended at a distance of 1-2mtr. On either side of the Suspension Clamp with a fixing mechanism of mass 2 + 1 Kg.

The specimen is subjected to 500 cycles of 90 minutes each. Each cycle consists of the following:

- a) For first 75 minutes a constant longitudinal tension of 4000 N is applied to the messenger for rating of 1500 Kg. and of 4500 N rating of 2000 Kg. while 64 cycles right and left oscillation are produced on the clamp 32° on either side of the vertical.
- b) During the first 45 minutes an intermittent current of 4-5 A/sq.mm is applied to maintain the conductor temp at  $60 \pm 3^\circ \text{C}$ .
- c) During the next 45 minutes of the cycle the conductor is allowed to cool down naturally to the ambient.
- d) At the 75th minute, after having completed 64 oscillations, the oscillations are stopped and the longitudinal tension is increased to 7500 N for 1500 kg. Rating and 10000 N for 2000 Kg. Rating.

3.9.3 No messenger slippage should occur within the Suspension Clamp during the 500 cycles.

5.3.9.4 At the end of the 500 cycles, the messenger is immersed in water for 30 minutes. It is then tested to withstand 10 kV ac for 1 minute with a trip setting of  $10 \pm 0.5 \text{ mA}$ . There should be no breakdown or flashover.

#### Acceptance Tests

The following shall constitute Acceptance Tests for Insulation Piercing Connectors (IPC):

- Visual \*
- Dimensional (as per SCD and overall dimensions submitted with Tender Offer)\*
- Electrical Ageing Test \*\*\*
- Dielectric and Water Tightness Test. \*\*
- Mechanical Tightening Test \*\*
- Effect of Tightening on Main Core \*\*
- Effect of Tightening on Branch Core \*\*

The above tests are to be carried out as per sampling plan below. However electrical ageing test on IPC (market \*\*\*) is to be done on only one connector of each type and size.

In case of random failure/defect, double the sample lot is to be drawn and there should be no failure/defect exceeding half the permissible defects (rounded down) shown in the chart.

Lot Size	For tests Marked*		For tests Marked**	
	Sample Size	Max. permissible Defects	Sample Size	Max. permissible Defects
Upto 100	2	nil	2	nil
101 to 1000	6	nil	4	nil
>1001	0.01% subject to min. 6 pieces	0.1% of pieces checked	4	nil

The following shall constitute acceptance tests for Anchor Assemblies:

- Visual \*
- Dimensional (as per SCD and overall dimensions submitted with Tender Offer)\*
- Mechanical Test on Bracket\*\*
- Mechanical Test on Clamp \*\*
- Voltage Test \*

The following shall constitute acceptance tests for Suspension Assemblies:

- Visual \*
- Dimensional (as per SCD and overall dimensions submitted with Tender Offer)\*
- Mechanical Test on Bracket\*\*
- Mechanical Test on Clamp \*\*
- Voltage Test \*

The above tests (for AA & SA) are to be carried out as per sampling plan below. In case of random failure/defect, double the sample lot is to be drawn and there should be no failure/defect exceeding half the permissible defects (rounded down) shown in the chart.

Lot Size	For tests Marked*		For tests Marked**	
	Sample Size	Max. permissible Defects	Sample Size	Max. permissible Defects
Upto 100	2	nil	1	nil
101 - 500	5	1	2	nil
501 - 2500	10	2	2	nil
2501 & above	10 + 0.2 %	2 + 10% pf addl. Sample quantity	4	1

#### **SERVICE CLAMP**

The clamps should be designed to anchor insulated service lines (armoured or unarmoured) with 2/4 conductors.

- The clamps should be made of weather and UV resistant polymer.
- No losable part in the process of clamping arrangement
- The clamp should conform to the standard NFC 33042 or equivalent I.S., if any. No losable
- Breaking Load of the clamp should not be less than 3 KN.

## **TRANSFORMER CONNECTION**

- The connection to the transformer should be made with Pre-Insulated lugs for phase and street lighting conductors and with an Aluminum Lug for neutral Messenger. If the Bus-bars are of copper, the Lugs should be preferably Bi-metallic type.
- The Barrel of the lug normally insulated with an Anti-UV black Thermoplastic tube sealed with a flexible ring. Die reference, size and strip length are to be indicated on the plastic.
- Sizes covered 16-70 & upto 150 mm<sup>2</sup> Aluminium XLPE insulated cable.
- Reference standard NFC 33021 or equivalent I.S. if any.

## **JUNCTION SLEEVES**

- The sleeves should be Pre-Insulated for phases, neutral messengers and street lighting conductors.
- Sleeve should be made of Aluminum, insulated with an Anti-UV black thermoplastic tube hermetically sealed two ends with 2 flexible rings.
- Die reference, size and strip length are indicated on the sleeve itself.
- Sizes needed : 16-70 & upto 150 mm<sup>2</sup> for Aluminum XLPE insulated cable.
- Reference standard : NFC 33021 or equivalent I.S. if any.
- Design as per furnished drawing.

## **EYE HOOKS**

- Eye hooks should be designed as to hold suspension clamps and Dead end clamps and to be installed with the pole clamp.
- Eye-hooks should be made of forged Galvanized steel.
- The clamps corrosion resistance should conform to the standards I.S. 2629 & I.S. 2633.
- Bolts and nuts should be made of hot dip Galvanized steel according to VDE 0210 and VDE 0212.
- Ultimate Tensile strength (UTs) of the clamp should be 20 KN.
- Design as per furnished drawing.

## **SERVICE MAIN DISTRIBUTION BOXES**

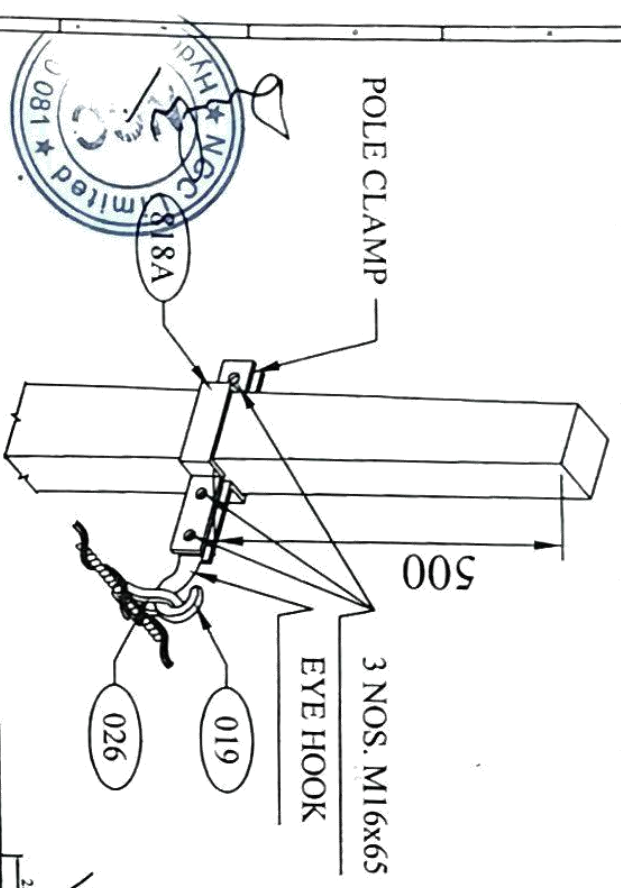
### **Scope**

This Distribution Box should be Weather & Moisture Proof with Spring loaded/Bolt & Nut type Bus Bar system & should be able to carry a current according to specified capacity. It can have 1/3-phase input & provision of 4 to 6 nos. of 3-phase or 1-phase outputs. The box should have the provision for special key for locking & Proper arrangement of sealing. The boxes should be assembled on the pole using Metal Tapes & Buckles or Bolts. No. of Boxes per pole may vary with supporting arrangement for more no. of service connections. The Spring used should be of stainless steel having required capacity to provide suitable pressure in the connector.

### **Construction**

Distribution Boxes should be designed with Bus Bars with spring action contact, or screw-bolt technique. For spring action contact only insertion of the conductor into the specified groove of the Busbar is sufficient for proper connection whereas for Nut Bolt type proper washers & other accessories are to be provided for connections. It should be used for multiple connections (3-phase or 1-phase) in low voltage Distribution Network. The boxes should be suitable for 1/3-phase (4 cores) inputs & provision for 4 to 6 nos. of 3-phase or 1-phase outputs. Bus bars should be with a continuous pair of contact bars with colour code to facilitate the identification of the correct energy phase.

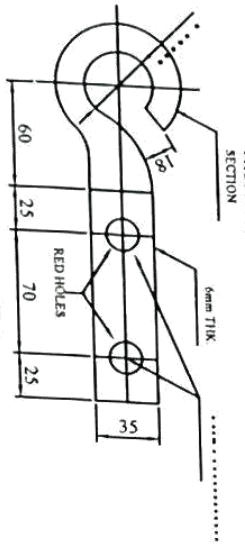




POLE CLAMP  
3 NOS. M16x65  
EYE HOOK

CLAMP FOR EYE HOOK (818A)  
EYE HOOK (019)  
026

SUSPENSION CLAMP (026)  
FOR DETAILS OF SUSPENSION CLAMP  
PLEASE REFER MANUFACTURERS DRAWING  
SUBMITTED SEPARATELY



SECTION  
EYE HOOK (019)

CONSTRUCTION STANDARD  
E-35

GENERAL NOTES:

- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED
- 2) MANUFACTURING TOLERANCE
- 3) ALL M.S PARTS SHALL CONFORM TO IS 2062
- 4) ALL M.S FABRICATED ITEMS SHALL BE HOT DIP GALVANISED AS PER IS 2629 & 4159
- 5) ALL THE ITEMS SHALL BE MARKED WITH ERECTION CODE
- 6) WEIGHT MENTIONED IS FOR PACKING & FOR WARDING PURPOSE ONLY
- 7) ALL CLAMPS AND ANGLES SHALL CONFORM TO IS SP6 PART-1

**REC**

Rural Electrification Corporation Ltd.

PROJECT: Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

TITLE: GA OF LT LINE FORMATION ON SINGLE 8M/200 KG PSC POLE (IN LINE ARRANGEMENT) WITH LT AB CABLE

SIZE/SCALE: DRG. NO. REC/DDUGJY/LT-OH/04

SHT. NO. 1 OF 1

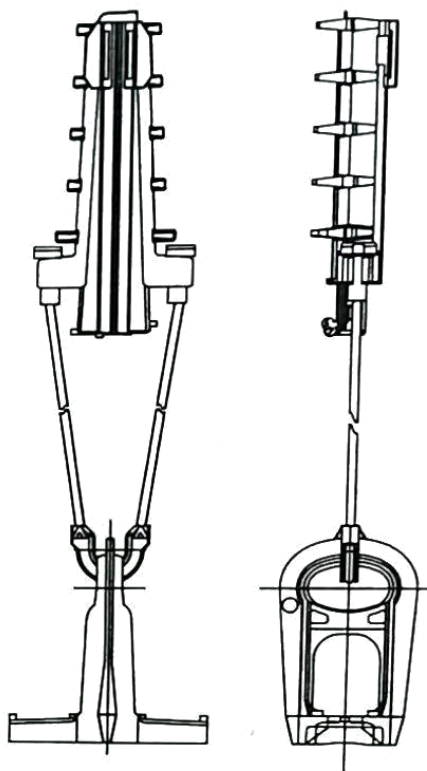
REV. 0

BILL OF MATERIAL			
ERE CODE	DESCRIPTION	QTY.	REF. DRG. NO.
1	8m/200kg PSC POLE	1 NO	REC-XII Plan-08/401A
2	BARBED WIRE	3.3 MTR	
3	43Y DANGER BOARD	1 NO	
4	SPRKE PARTING	1 SET	REC-XII Plan-08/401
818A	CLAMP FOR DANGER BOARD	1 NO	REC-XII Plan-LT-401
816	TOP CLAMP FOR ANTI CLIMBING DEVICE	1 SET	REC-XII Plan-LT-401
817	BOTTOM CLAMP FOR ANTI CLIMBING DEVICE	1 SET	REC-XII Plan-LT-401
818A	CLAMP FOR EYE HOOK	1 SET	REC-XII Plan-LT-401
019	EYE HOOK	1 NO	REC-XII Plan-LT-401
026	SUSPENSION CLAMP	1 NO	REC-XII Plan-LT-401
	NUTS & BOLTS	AS REQD	

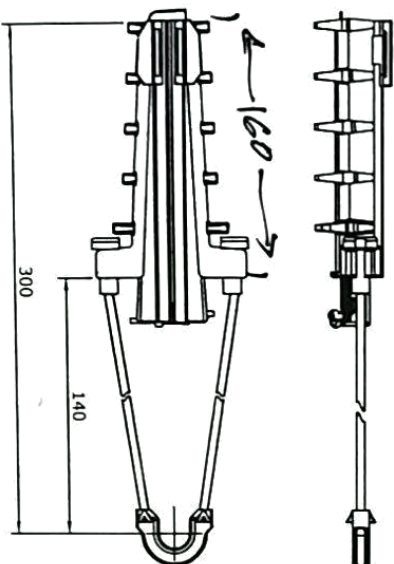
BILL OF MATERIAL					
ERE CODE	DESCRIPTION	SECTION	MATERIAL	LENGTH MM	KG/mtr
818A	CLAMP FOR DANGER BOARD	30x3	M.S	610	0.701
816	TOP CLAMP FOR ANTI CLAMP DEVICE	40x5	M.S	395	1.60
817	BOTTOM CLAMP FOR ANTI CLAMP DEVICE	40x5	M.S	413	1.60
	SPRKE	6mm ROD	M.S	125	0.22
818A	CLAMP FOR EYE HOOK	50x8	M.S	430	1.14
019	EYE HOOK				
026	SUSPENSION CLAMP				
	NUTS & BOLTS	M16		65	0.166KG/MNO
	NUTS & BOLTS	M10		40	0.055KG/MNO
	NUTS & BOLTS	M8		60	0.055KG/MNO
	SPRING WASHERS	M16		3.5 TIRK	0.096KG/MNO
	SPRING WASHERS	M10		3.5 TIRK	0.070KG/MNO
	SPRING WASHERS	M8		3.5 TIRK	0.062KG/MNO
	PLAIN WASHER	M16		3 TIRK	0.015KG/MNO
	PLAIN WASHER	M10		3 TIRK	0.009KG/MNO
	PLAIN WASHER	M8		3 TIRK	0.004KG/MNO
	TOTAL				8.254

FOR TENDER PURPOSE ONLY

# ANCHORING ASSEMBLY :-

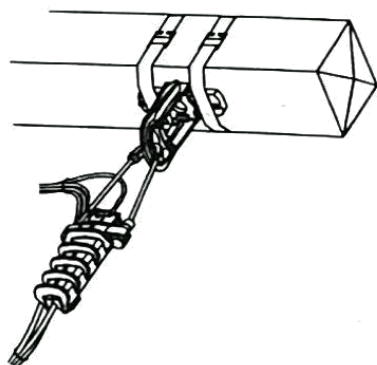


## ANCHORING (DEAD-END) CLAMP :-



## SPECIFICATION :- AS PER NF C33-041

Messenger Type	Cable Range (mm)	Minimum Breaking Load (kN)
INSULATED/BARE	25	50
		10



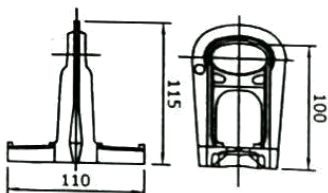
## BRACKET :-

### NOTE :-

MATERIAL: ALUMINIUM ALLOY

## SPECIFICATION :- AS PER NF C33-041

Minimum Breaking Load (kN)
15



## FOR TENDER PURPOSE ONLY

Rural Electrification Corporation Ltd.

Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

ANCHORING ASSEMBLY (Cable Range-25-50 sq. mm)

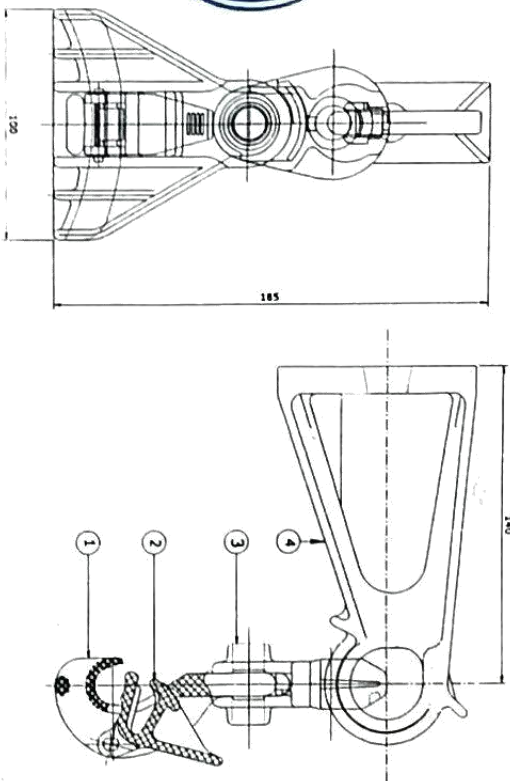
SIZE	SCALE	DRG NO	SHT NO	REV NO
A4	1:100	REC/DDUGJY/LT-ACC-ABC/03A	1 OF 1	0

REV NO	PREPARED	CHECKED	APPROVED	DATE	PROJECT
R0					



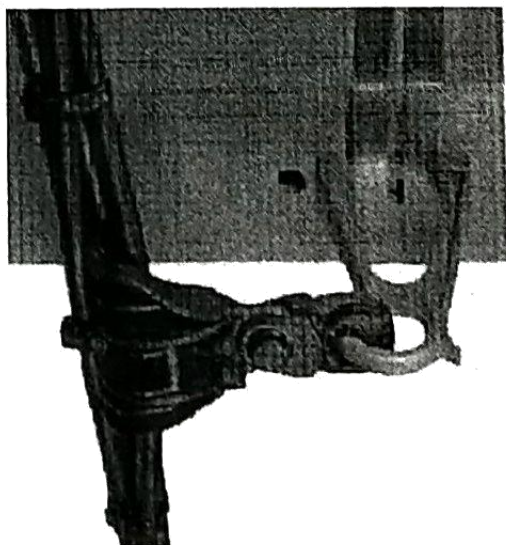
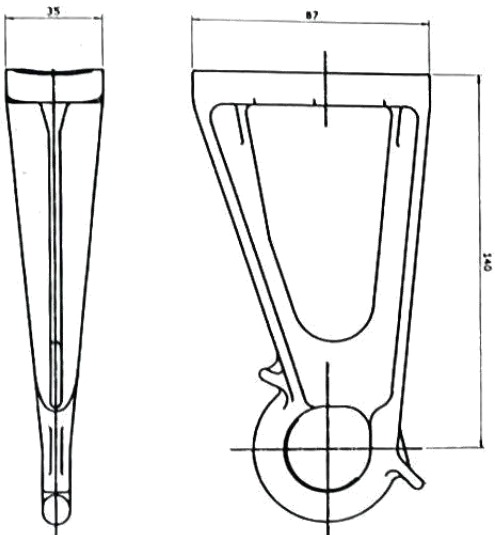
SUSPENSION ASSEMBLY :-

NOTE :-  
MATERIAL: SEE TABLE



BRACKET :-

NOTE :-  
MATERIAL: HEAT TREATED ALUMINIUM ALLOY  
SPECIFICATION :- AS PER NFC33040



SUSPENSION ASSEMBLY :-

SPECIFICATION :- AS PER NF C33-040

Messenger Type	Cable Range (mm)		Load KN
	Min	Max	
INSULATED/BARE	25	50	12

REP	QTY	DESCRIPTION	MATERIAL	COLOUR
1	1	JOINTING BRACKET	HEAT TREATED ALUMINIUM ALLOY	NA
2	1	MOVABLE LINK	THERMO PLASTIC	BLACK
3	1	LEVER	THERMO PLASTIC	BLACK
4	1	BODY	THERMO PLASTIC	BLACK

FOR TENDER PURPOSE ONLY

Rural Electrification Corporation Ltd.

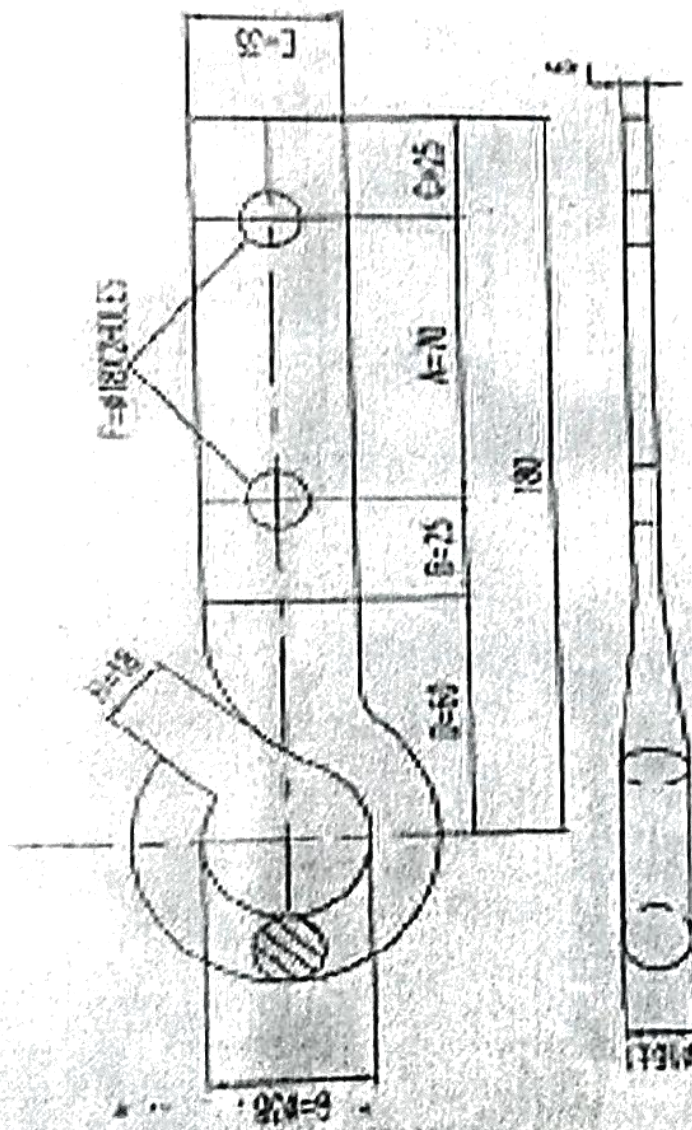
Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

SUSPENSION ASSEMBLY

(Cable Range 25-50 sq. mm)

REV. NO.	PREPARED BY	CHECKED BY	APPROVED BY	DATE	PROJECT
R0					

SIZE		SCALE		Dwg No		SHT NO		REV NO	
A4		1:100		DDUGJY/LT-ACC-ABC/07B		1 OF 1		0	



- NOTES**
1. GENERAL TOLERANCE ESR.
  2. DTC HOOK AS PER REC CONSTRUCTION STANDARD I-10.
  3. FLANGES PART NOT BE CALLED AS PER IS 7072.

1	THE HOOK	CALCULATED	1	NO	NO
Rural Electrification Corporation Ltd					
DATE 01/01/2018					
BY 01/01/2018					
CHECKED BY 01/01/2018					
DRAWN BY 01/01/2018					

ALL DIMENSIONS ARE IN MM

IS NOT SCALE

**Cable Tie:** for neutral connections. All technical parameters of the offered copper cable shall be as per IS: 694 and the tenderer shall mention in tender, all these technical parameters, including those not specified in the ISS. Each wire shall have pin lugs at meter end. Lugs should have compression joint with cable to establish a good electrical and mechanical contact. Lugs should be suitable for cable of 10mm<sup>2</sup> and should be made of Copper and coated with tin. Other end of each wire shall be fixed to Insulated bus bars with 2 Nos. M6 bolt / stud duly zinc plated. Length of each wire shall be such that the Pin lug end of wire should be suitable for smallest and biggest meter. All the wires shall be properly dressed & tied together with cable nylon tie. The ends of cable should be provided with suitable cover to avoid short circuit in case of spare cables.

#### **4.0 TESTING FACILITIES:**

The tenderer must have the following minimum testing facilities in house: -

- i) High Voltage Tester.
- ii) High Current Source.
- iii) Megger
- iv) Powder Coating thickness Measuring instrument.
- v) Measuring instruments like Vernier, Micrometer, Measuring Tapes / Scales.
- vi) Facility for carrying out acceptance tests on copper cable as per IS: 694. In case a firm do not have this facility, the said tests on the copper cable shall be got carried out from Govt. / Independent test house/ works of the cable manufacturer, (subject to availability of the complete acceptance tests facilities) if a firm so desires.

#### **5.0 SAMPLING PLAN:**

One no sample per 100 nos pillar boxes of the offered lot shall be taken for carrying out pre-dispatch inspection by the inspecting officers.

#### **6.0 MARKING:**

Utility Name or Logo as shown in the drawing shall be embossed on the outer door and on the side opposite to the door on which door handle is fixed. Also manufacturers name should be embossed on the outer door with handle. Danger Notice as per Drawing should be printed in Red on outer door.

P.O. NO. & date and Sr. No. of MPB shall also be indelibly marked or embossed at a suitable place on the left door of MPBs, which should be of minimum 5mm height and clearly visible.

#### **7.0 INSPECTION:**

Each lot offered shall be inspected at the works of manufacturer by the inspecting officers of purchaser. The manufacturer shall give minimum 14 days' notice about readiness of material at his works for pre-dispatch inspection by the purchaser. The material shall be inspected for conformity with the specification before the same is accepted.

#### **8.0 TESTS:**

Following acceptance tests shall be carried out while inspecting lot of material offered.

##### **a) Visual Examination:**

The Meter Pillar box will be inspected visually, externally and internally for proper Powder Coating layer, fitting of all the components in accordance with technical Specification.

##### **b) Verification of dimensions:**

Verification of dimensions, external / internal clearances will be carried out as per technical specifications.

##### **c) Verification of fittings:**