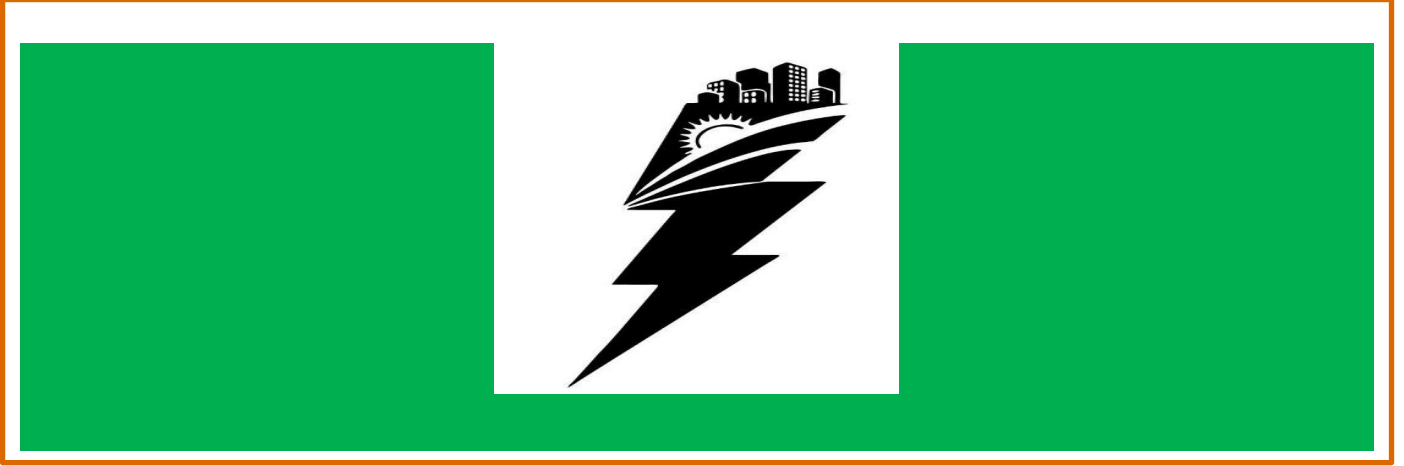


# KANPUR ELECTRICITY SUPPLY COMPANY LIMITED



## Kesco-e-Tender No. 30/24-25

Tender description (Brief details of supply): 11 & 33 KV Outdoor C.T.  
P.T. Metering Units.

*Issued By:  
Office of The  
Superintending Engineer  
Material Management, KESCO, Kanpur.*

*Website: - [www.kesco.co.in](http://www.kesco.co.in)*

*Date of Opening of part-1: 12.11.2024*

*Tender Cost (inclusive GST): 5900.00*

*Last date & Time of Submission: - 11.11.2024 & 17:00 PM*

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# NIT

## E-Tender Notice

RFP No. ....

Dated: .....

E-tenders are invited in two parts (Part-I Techno Commercial Bid and Part II Price Bid) for the work of (Project Description in brief) in KESCo Kanpur. Bid document (Tender Specification) is available online on <https://etender.up.nic.in> as per particulars indicated below. Any changes in the Bid Schedule, corrigendum etc. shall also be notified via same website. Prospective bidders are therefore requested to regularly check the website for any updates.

Sl. No.	Particulars	Details
1	e-Tendering Notice no.	Tender/Notice/24-25/30
2	e-Bid Portal (website)	<a href="https://etender.up.nic.in">https://etender.up.nic.in</a>
3	Name of Work/Supply	<b>Supply of 11 &amp; 33 KV Outdoor C.T. P.T. Metering Units.</b>
	Supply of material with quantity	<b>As per details enclosed</b>
4	e-Tender Cost	Rs. 5000 + GST (@ 18%)- Total Rs. <b>5900.00</b> (Non- Refundable)
7	Earnest money deposit	Rs <b>231870.00</b> (Rs. Two Lacs Thirty-One Thousand Eight Hundred Seventy Only)
8	Document downloading/sale date starts	05.11.2024 (10:00AM)
9	Document download/ sale date ends	11.11.2024 (17:00PM)
10	e-Bid submission start date	05.11.2024 (10:00AM)
11	e-Bid submission end date	11.11.2024 (17:00PM)
12	Opening date of e-bid part-I	12.11.2024 (17:00PM)
13	Opening date of e-bid part-II (Price Part)	Will be notified later.

**Note:** Bid shall be accepted thorough the e-tender portal. Tender issuing authority is not responsible for the delay/downloading of tender document by the recipient due to any problem in accessing the e-tender website. The tender issuing authority is also not responsible for delay in uploading bids due to any problem in the e-tender website. Cost of Bid Document (in the form of NEFT/RTGS) & Earnest Money Deposit (EMD (in the form of NEFT/RTGS) shall be in favor of KESCo payable at Kanpur. Further details are available at website: <https://etender.up.nic.in>.

KESCo reserves the right to reject any or all proposals or cancel the bid without assigning any reason thereof.

## **INSTRUCTION TO BIDDERS**

### **1. Definition(s)**

In this bid document (including all the appendices), unless the context otherwise requires, the terms given below shall have the following meanings assigned to them:

- 1.1 “Addendum” shall mean any other document issued to the bidders in addition to the bid document by the KESCO in the context of this bidding process.
- 1.2 “Agency / Service Provider/Contractor” shall mean the successful bidder who has received the Letter of Award and signed the agreement with the KESCO to execute the Contract.
- 1.3 “Award of Contract” shall mean the issue of the Letter of Award/Letter of Intent.
- 1.4 Bid/Tender” shall mean the proposal/document that the bidder submits in the requested and specified form as mentioned in bid documents.
- 1.5 “Bidder” shall mean the firm/party who quotes the offer against a tender or Expression of Interest.
- 1.6 “Bid documents” shall mean all the documents issued to the bidder to procure works/services/materials.
- 1.7 “BG” shall mean Bank Guarantee.
- 1.8 “Business” shall mean electricity distribution and Revenue collection activities
- 1.9 “Companies Act” shall mean The Companies Act, 1956 (as amended or replaced from time to time).
- 1.10 “Consumer” shall mean any person who is supplied with electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving electricity with the works of a licensee, the Government or such other person, as the case may be;
- 1.11 “Contract” means the Contract Agreement entered into between the KESCO and the Agency/servicer/Contractor, together with the Contract Documents referred to therein; all such documents shall constitute the Contract and the term Contract shall in all such documents be construed accordingly.
- 1.12 “Contract value” shall mean the original contract value, as adjusted after giving effect of (i) price escalation (as per the statutory provisions), and (ii) changes in statutory taxes which is to be compensated by KESCO as per the contractual provisions (if any).
- 1.13 “Circle office” shall mean offices which manage and control working of Divisions. Circle Office operates under Regional Office and has a number of divisions.
- 1.14 “Division office” shall mean offices which manage and control working of EDCs/ Zones. Division Office operates under Circle office and have a number of EDCs/ Zones.
- 1.15 “EMD” shall mean Earnest Money Deposit.

- 1.16 “Engineer In charge” shall be the officer under whose office the work stipulated in contract is executed.
- 1.17 “Instruction” shall mean any drawings and/or instruction in writing, details, directions and explanations issued by the KESCO from time to time during the Contract Period.
- 1.18 “Month” shall mean calendar month.
- 1.19 “Notice in Writing” or “Written Notice” shall mean a notice, in written, typed or printed characters sent (unless delivered personally or otherwise proved to have been received) by registered post to the last known private or business address or registered office of the addresses or electronic media and shall be deemed to have been received when in ordinary course of post, it would have been delivered.
- 1.20 “DISCOM” or “Service Recipient” or “Discom” shall mean (Name of the Discom-KESCO)
- 1.21 “Services” shall mean all the services which the successful bidder is required to provide under the scope of work to the KESCO under the Contract.
- 1.22 “Successful bidder” shall mean the bidder who has received the letter of award/Loi from the KESCO to execute the work as per specification/contract.
- 1.23 “Work Order” means written order signed by the KESCO after the successful bidder has acknowledged the LOA/LoI. This along with LOA, Specifications (RfP) document and the bidder’s response to RfP shall constitute Part of the Contract.
- 1.24 “Work” shall mean services to be provided by the Agency under the „Work Order“ or “Contract”.
- 1.25 “Zone” means Distribution Zone operates Operation & Maintenance (O&M) activities for a defined area in city divisions. Zone is a smallest business unit in Kesco in city divisions. Zone works under city Division office.

## **2. Availability of Bid documents**

- 2.1 The bid document will be uploaded on E-portal of Government of Uttar Pradesh (GoUP) as mentioned in E-tender Notice, the same can be downloaded and submitted on E-portal along with desired EMD on due date as specified in E-tender notice or bid document. The tender fees shall have to be submitted along with submission of the bid.

## **3. Invitation of Bids**

- 3.1 The Kesco is hereby inviting unconditional bids for procuring works/services/material as specified in the bid document through domestic competitive bidding (open bidding mode) from bidders fulfilling the criteria specified “Eligibility criteria for bidders”.
- 3.2 The bidding process shall be undertaken through Single-Stage Two-Envelope method through e-tendering. The tender information has been provided in relevant section of Bid documents.

## **4. Consortium/Joint venture Bidding**

Consortium bidding/Joint venture bidding as mentioned in Pre-qualification requirement.

## **5. Eligible Bidders**

- 5.1 A Bidder may be an individual, private entity, government-owned entity - subject to clause 5.2 below, and shall furnish as part of their unconditional bid, documents establishing the bidder’s

qualifications to perform the works/services to the satisfaction of the KESCO/Service Recipient. The detailed eligibility criteria are listed out in Eligibility Criteria for Bidders.

- 5.2 Bidders shall provide such evidence of their continued eligibility satisfactory to the Kesco officials, as the Kesco shall reasonably request.

## **6. Responsibility of bidder(s)**

- 6.1 KESCO will not assume any responsibility regarding information gathered, interpretations or conclusions made by the bidder or regarding information, interpretations or deductions the bidder may derive from the data furnished by the Kesco or any other data.
- 6.2 Verbal agreement or conversation with any officer/employee of the KESCO either before or after the submission of bid shall not affect or modify any of the terms and conditions or obligations contained herein.
- 6.3 It shall be the sole responsibility of bidders to determine and to satisfy themselves by such means as they consider necessary or desirable as to all matters pertaining to this bidding process including in particular all factors that may affect the cost, duration and execution of the works/services.

## **7. Eligibility criteria**

- 7.1 The bidder(s) shall furnish, as part of their unconditional bid, documents establishing the bidder's qualifications to perform the works/services to the satisfaction of the Kesco. The detailed eligibility criteria are listed out in Pre-Qualification requirement of this bid document.
- 7.2 Notwithstanding anything stated therein, the Kesco reserves the right to inquire and review the bidder's capability and capacity to perform the work during the course of evaluation or after award.

## **8. Project site visit**

- 8.1 The bidder is advised to visit and examine the site where the works/services is to be executed and its surroundings; and obtain for himself on his own responsibility all information that may be necessary for preparing the bid, submission of offer and entering into a Contract for execution of works/services. The cost of visiting the site shall be borne by the bidder.
- 8.2 The bidder and any of its authorized personnel shall be granted permission by the Kesco to enter in its premise(s) and land(s) for the purpose of such inspection, but only upon the condition that the bidder and its personnel shall release and indemnify the Kesco and its personnel from and against all liability in respect thereof and shall be responsible for death or personal injury, loss of or damage to property.

## **9. Process to be Confidential**

- 9.1 This bid document and any other document(s) released, information provided, discussions held, etc., as part of the bidding process, is strictly confidential and must not be divulged to anyone who is not directly involved in preparation of the bid, and the bidder(s) shall keep all information within this proposal or gained during the bidding or other processes confidential. No information or publicity will be allowed to any third party unless specific written authorization is obtained from the Kesco.

## **10. Clarifications on bid documents**

- 10.1 The bidders are expected to be fully conversant with all the clauses of the bid document before responding to it. However, prospective bidder(s) requiring any clarification on bidding documents may notify the Kesco in writing through email/fax/post, to the address as mentioned in E-tender Notice of this bid document, two days prior to the Pre-bid conference, if any. The queries shall be accepted only from the accredited/authorized officers or executives of the bidder(s).
- 10.2 **Pre-bid Conference:** - The Kesco may invite a pre-bid conference in which all prospective bidders are requested to participate. The date, time and place of pre-bid conference is mentioned in the NIT/e-portal. The bidders are requested to send their authorized representatives to attend the Prebid meetings alongwith the queries regarding the bid documents, if any. The reply of queries will be uploaded on e-portal, only. However, attending the pre-bid conference is not a mandatory requirement for submitting the bid documents.
- 10.3 The Kesco will respond only to those queries or request(s) for clarification that it receives during pre-bid conference or prior to the scheduled/extended date of submission of bid documents as prescribed by the Kesco. Replies to the clarifications sought and corresponding amendment(s) to the bid, if any, will be intimated to all bidders through e-portal only. All such clarifications shall form part of the bid documents and shall be incorporated in the bidder's Proposal.
- 10.4 The Kesco reserves the right to defer/decline responding or addressing to such queries/clarification sought that it feels are inappropriate without assigning any reasons whatsoever.
- 10.5 The copies of all the replies/clarifications issued by the Kesco shall also be a part of the tender specification.

## **11. Preparation of Bids**

- 11.1 The bidder shall submit only one (1) unconditional bid in response to this tender/bid document.
- 11.2 The transfer of bid document(s) purchased by one bidder to another is not permissible in any case. Such bids shall be summarily rejected by the Kesco.
- 11.3 The price bid should be duly filled and signed in accordance with the terms and conditions specified in bid documents thereto for online submission.
- 11.4 All pages of the bid document(s) including conditions of Contract, specification, etc., shall bear the full signatures with official rubber stamp (at the bottom right-hand corner of the page) by the bidder. Necessary documents in support thereof must be enclosed with bid documents at the time of submission, failing which bid will be treated as non-responsive and will not be considered. Any bid not bearing signatures on all the documents will stand liable for rejection.
- 11.5 General information, which is not specifically requested for in the bid documents, must be attached separately to the techno-commercial proposal and clearly labelled as "Supporting Material".

## **12. Deviations from terms and conditions of the bid**

- 12.1 The bidder must furnish Annex. G, H & I. Proforma for "No Deviations" from Terms and Conditions of Bid Document given as Annexure duly filled and signed by the authorized signatory of bidder.

## **13. Bid Forms**

13.1 Wherever a specific form or schedule is prescribed in the bid document, the bidder shall use the same to provide relevant information. If the form or schedule does not provide space for any required information, space at the end of the form or additional sheets shall be used to convey the required information.

13.2 For all other cases, the bidder shall design a form to get the required information from the bidder.

13.3 Kesco shall in no case be bound by any printed conditions or provisions in the bidder's bid forms whatsoever.

#### **14. Conditional Bid**

14.1 The bidders shall offer only unconditional bid as conditional bid are liable to be rejected.

14.2 Bidder's printed terms and conditions enclosed with the proposal/offer will not be considered as a part of the Bid under any circumstances whatsoever it may be. These types of bids shall be deemed as conditional bids and shall stand liable for rejection.

#### **15. Deadline for submission of bids**

15.1 Bids must be submitted on in e-portal only but no later than the time and date as specified in E-tender Notice of Tender Document. In the event of the specified date for submission of bids being declared a holiday for the Kesco, the bids will be received up to the appointed time on the next working day. Such postponement of date will not have any impact on the other dates specified in the bidding documents (i.e. bid validity and validity of bid security).

15.2 The Kesco may, at its discretion, under intimation to the bidders who have purchased the bidding documents, extend the deadline for the submission of bids/opening of bids by issuing an addendum, in which case all rights and obligations of the KESCO and bidders previously subject to the original deadline shall thereafter subject to the deadline as extended.

#### **16. Late Bid**

16.1 Bid(s) received by the Kesco after the bid submission/opening deadline as prescribed in the bid documents will be summarily rejected and shall not be opened to the bidder(s).

#### **17. Withdrawal of Bids**

17.1 The bidder shall not be permitted to withdraw their bid during the interval between bid submission deadline (as mentioned in e-tender) and the period of bid validity as per e-tender. If any withdrawal of bid is made by the bidder during the above period, it shall result in the forfeiture of the EMD.

#### **18. Associated cost of bid preparation and submission**

18.1 The bidder shall bear all the cost and expenses associated with preparation and submission of its bid including post bid discussions, technical and other presentations, etc.

18.2 The Kesco shall in no case be responsible for or liable to the costs or in evaluation of bids, regardless of the conduct or outcome of the bidding process.

#### **19. Request for Modifications/Amendments in Bid Specification: -**

19.1 The bidders may request for clarification or changes in the bid documents by submitting the issues prior to the pre-bid conference date as specified in E-notice tender.



19.2 The Kesco at their sole discretion may modify the bid documents if deemed appropriate by issuing addendum as a result of a request or clarification discussed during the pre-bid conference.

## **20. Language of the bid**

20.1 The bid prepared by the bidder and all documents relating to the bid, exchanged between the bidder and the Kesco shall be written in the English language, provided that any printed literature furnished by the bidder may be written in another language so long as the bid is accompanied by duly certified English translation of its pertinent passages. Failure to comply with this may disqualify a bid. For purposes of interpretation of the bid, the English translation shall prevail

## **21. Amendment(s) to bid documents**

21.1 At any time prior to the deadline for submission of the bid or extended date, if deemed necessary, KESCO reserves the right to add/modify/delete any portion of bid document by issue of an amendment/addendum, which will be sent to all such bidders, who have indicated their intention to bid. KESCO will bear no responsibility or liability arising out of non-receipt of the same in time or otherwise by the bidder. KESCO shall assume that the information contained therein will have been taken into account by the bidder in its bid.

21.2 The amendment(s) to bid documents shall be binding on all bidders.

21.3 In a scenario where the interested bidder has already submitted its bid post which the KESCO issues an addendum/amendment to this bid document then such bidders shall be allowed to submit addendum to the already submitted bid but not after opening of Bid envelope-I.

## **22. Earnest Money Deposit**

22.1 The EMD amounting Rs. 231870.00 (1% of cost estimate) shall be submitted online through NEFT/RTGS receipts to be uploaded on the E-tendering portal. The bidders are required to deposit EMD online through NEFT/RTGS in Bank Account Number 7723508014, IFSC Code- IDIB000K587, in the name of Kesco EMD and other Deposit A/c, Kanpur in Indian Bank. Proof of on-line deposit viz. Unique Transaction Reference (UTR) number or copy of original pay in slip of the bank, shall be uploaded in e-Procurement portal of GoUP.

22.2 The bid proposal/offer shall necessarily contain EMD of requisite amount and should be furnished through appropriate mode as specified in Section- "Essential tender information on e-portal" of the bid document. In case EMD is to be deposited through a NEFT/RTGS from a scheduled nationalized bank and in prescribed format, the same shall be uploaded while filling the e-tender. The bidder shall to submit the NEFT/RTGS (in original) in Kesco office within 5 days of opening of bid part-1, failing which their bid shall not be considered for opening of their bid part-2 (Price Part).

22.3 Any bid proposal/offer not accompanied by the  
22.4 shall be rejected and returned to the bidder unopened.

22.5 If on opening of bid any discrepancy in EMD is found (relating to amount, etc.), the bid shall be summarily rejected.

22.6 In case of unsuccessful bidders, the EMD shall be refunded after successful submission of Contract performance guarantee by the successful bidder. No interest whatsoever shall be payable on such deposits lying with the KESCO.

22.7 If the successful bidder fails to furnish the contract performance guarantee within thirty (30) days after the issue of Letter of Award (LoA), their EMD shall be liable to be forfeited.

22.8 In case the bidder is likely to be awarded the Contract or if the case has not been finalized, the EMD shall be retained for the period equal to the bid validity period. The EMD of successful bidder shall become part of the initial contract performance guarantee. No interest shall be payable on such deposits lying with the KESCO.

22.9 The KESCO reserves the right to forfeit EMD or part thereof in circumstances and initiate actions as deemed appropriate, which according to it indicates that the bidders are not earnest in accepting/executing orders placed under given specifications.

22.10 The bank charges (if any) shall be attributable to the bidder, only.

22.11 EMD shall be forfeited in case of withdrawal or modification of a bid/offer after opening of the bids within the validity period as specified in E- tender Notice.

### **23. Documents comprising the bid and sealing of bid**

23.1 Part-I (A)-Envelope- (to be submitted online as well as payment receipt physically super scribing “Earnest Money Deposit” along with tender/bid specification number; name of work/service; name, address and contact of the bidder; and due date/time of bid opening): It shall contain EMD details. However, scanned copy of document in support of proof of online submission of EMD must be uploaded and submitted physically also in Envelope-I (A), within 3 days of opening of bid part-1.

23.2 Part-I(B)-Envelope- (to be submitted online only): It shall contain all the documents as notified in Section- “Eligibility criteria of bidders” of the bid document in scanned format. Other documents/Proforma (if any) provided in Annexure or elsewhere in the bid document and are pertinent to techno-commercial evaluation shall necessarily be furnished (duly filled and signed) in scanned copies.

23.3 Part-II- Price Bid- Price Bid shall be submitted online only in the Proforma as per BoQ While preparing the Price Bid, bidders are expected to take into account the requirements and conditions outlined in the bid documents.

Part I(A) and Part I (B) shall be referred as Enevelope-1.

### **24. Submission of bid**

24.1 **Both the Part-1 and Part-2 shall be submitted online only** and physically in separate sealed envelopes (At address given below) and these envelopes shall be properly super scribed as Part-I: “Earnest Money Deposit”. Each envelope shall also be super scribed with tender/bid specification number; name of work/service; name, address and contact of the bidder; and due date/time of bid opening.

- The bidders are requested to ensure that they furnish the envelope–I and II appropriately online which should be DIGITALLY signed. Any correction / overwriting should be signed by the bidder. An offer with correction / overwriting without signature of the bidder is likely to be rejected.
- The Bidders are requested to ensure that all required schedules duly filled-in, are submitted. The bidders should also note that in absence of any of the schedules except price bid, their offer is likely to be rejected.
- Transfer of the documents purchased online by one bidder to any other bidder is not permissible.
- The submission of a tender by the bidder implies that he has read and accepted the instructions, conditions of the Contract and made himself aware of the scope and specifications of the work to be done/ supplies to be made. The KESCO will not, after acceptance of Contract rate, pay extra charges for any reason whatsoever, in case the bidder is found later to have misjudged any condition(s).

- It is necessary to purchase the Bid documents online from e-portal of GoUP.

**Superintending Engineer (MM),**

Kanpur Electricity Supply Company Limited

Kesa House, 14/71 Civil Lines,

Kanpur-208001

E-mail: [exn.storepurchase@kesco.org.in](mailto:exn.storepurchase@kesco.org.in)

Website: [www.kesco.co.in](http://www.kesco.co.in) or <https://etender.up.nic.in>

24.2 PERIOD OF VALIDITY: - The period of validity shall not be less than that specified in the Bid documents.

24.3 Nobody is authorized to receive or issue receipt of bid delivered by hand.

24.4 All required copies of the Techno-commercial Proposals are to be made from the original.

24.5 An authorized representative of the bidder shall initial all pages of the original proposal/offer. The authorization shall be in the form of a written power of attorney in the name of the Bidder purchasing the proposal. The signed proposal shall be marked as "ORIGINAL".

24.6 Bid shall be submitted in the forms attached herein and all blanks in the bid shall be duly filled in the original copy. The complete forms shall form part of Contract documents in case of successful bid.

24.7 The bidder should quote the prices strictly online in the manner indicated herein failing which the bid is liable for rejection. The rate/prices shall be in figures.

24.8 No post bid development shall be allowed regarding any change in terms of prices or techno-commercial specifications. Notwithstanding anything contained to the contrary in the specifications of the bid or in subsequent exchange of correspondence, these conditions of Contract shall be binding on the bidder and any change or variation expressed or implied, however, made in the said condition shall not be entertained whatsoever.

24.9 The bid documents include certain statements, description, projections etc. with respect to the KESCO and their businesses. They reflect various assumptions made by the management and/or their consultants. No representation, promise or warranty is given to their reasonableness, completeness or otherwise. The bidders are expected to make their own judgments of the same. Upon receipt of their bids, it shall be construed that they have based it on their own independent analysis and judgment.

## **25. Opening of bids**

25.1 The KESCO shall open online bids at the date and time for opening of bids as specified in Section-I "Essential tender information" of this bid document or on the date and time as intimated to the bidder on successful completion of evaluation of techno-commercial bids in case of Single-Stage Two-Envelope bidding. In the event of the specified date for the opening of bids being declared a holiday for the KESCO, the bids will be opened at the appointed time on the next working day.

25.2 Bids that are not opened and read out at bid opening will not be considered for further evaluation, regardless of the circumstances.

25.3 The bidders' names, bid prices, and the presence or absence of the requisite EMD and such other details as KESCO at its discretion may consider appropriate, will be recorded at the time of bid opening.

25.4 In the case of Single-Stage Two-Envelope bids, on the bid opening date only the techno-commercial bid shall be opened. The date for opening of the Price bid shall be as per Key date. In case of extension of due date, the same shall be uploaded in KESCO's website & e-portal and accordingly Key date shall be amended. No separate intimation shall be given to the bidders.

- Opening of Envelope-I (A) (containing Earnest Money Deposit) and Envelope- I (B) (containing Techno-commercial bid): The first envelope with EMD shall be opened on the due date and time of bid opening as specified in Section-I Essential tender information of this bid document. The requirement for EMD shall be verified and thereafter the second envelope, i.e. the Techno-commercial bid, shall be opened on the same date in respect of eligible bidders (whose EMD is found to be as per the requirements).
- Opening of Envelope-II - Price bid: Price Part of only those Bidders shall be opened on-line who are determined as having submitted substantially responsive bids and are ascertained to be qualified to satisfactorily perform the Contract. A negative determination of the bids, shall be notified by the KESCO to such Bidders and the price bid uploaded by them shall not be opened

25.5 In the event, the KESCO, in its discretion, decides not to open the bid for want of adequate response to the bidding, the KESCO may either extend the bid pursuant to Clause no. 15.2 and 26.1 of Section-III: Instructions to Bidders or cancel the bidding process.

25.6 It is to be noted that the bid evaluation will be executed strictly as per procedure mentioned in Bid evaluation section.

## **26. Change in date and time of opening of bids**

26.1 It may be noted that the due date/time of opening of bid can be altered/extended if desired by the KESCO, without assigning any reason thereof. However, due intimation shall be available at KESCO's website. The bidder shall be responsible for keeping itself updated on the changes in date and time of opening of bid.

## **27. Canvassing of bids**

27.1 Bid shall be deemed to be under consideration, after opening of bid, till placement of order to the successful bidder. During this period, the bidders or their authorized representative(s) or other interested parties are advised strongly in their own interest, to refrain from contacting or influencing by any means any of the KESCO's personnel or representative on matters relating to bid under process. As any such effort or activity may result in rejection of that bidder's proposal/offer.

## **28. KESCO's right to accept any bid, and to reject any or all bids**

28.1 KESCO reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected bidder(s) or any obligation to inform the affected bidders) of the grounds for such decision. No correspondence, in any form, and at any time, shall be entertained by the KESCO in this regard.

## **29. Currency of Price Bid**

29.1 For the works/services required in the bid, all prices or rates shall be quoted in Indian National Rupees (INR) only as the payment for such works/services shall be made in Indian currency only (i.e. Indian National Rupees).

### **30. Interpretation of conditions of bid(s)**

30.1 KESCO shall be the final authority to interpret any or all condition(s)/clause(s) specified in the bid documents at any point of time. In case any ambiguous or contradictory term(s)/condition(s) arise in the bid, interpretation as deemed appropriate by the KESCO shall be final and binding on all the bidders.

### **31. Validity of bids**

31.1 The bidder's proposal must remain valid for acceptance for a period of 180 days from the date of opening of bid (Envelope-1) or any other extended date for their receipt or any other extended period consented upon by the bidders. KESCO may ask the bidder to extend the validity period of their bid) and during this period no bidder shall be allowed to withdraw their bid. Any such withdrawal during the said period will entail forfeiture of EMD deposited by the bidder with their bid. The bidders who agree to such extension shall confirm that they maintain the availability of the professional staff nominated in the proposal or in their confirmation of extension of validity of the proposal.

31.2 The bid along with the rates and condition thereby shall be open for acceptance of the KESCO for a period of 180 days from the date of opening of the bids and no request for any variation in quoted rates and/withdrawal of tender on any ground by successful bidder be entertained within validity period. In case the KESCO requests for extension of the validity period, the bidder may extend the validity without changing the terms and conditions of their bid (except change in wages or any other statutory compliance as per Government norms). In case Bidder does not extend the validity, he/she must respond his/her unwillingness within 7 working days from the date of receipt of letter to this intent so that his EMD/bid security can be returned.

### **32. Issue of Letter of Award, Contract Signing and Issue of Work Order**

32.1 KESCO shall award the Contract to the bidder whose bid has been adjudged successful after techno-commercial and financial evaluation.

32.2 KESCO shall issue a detailed Letter of Award (LoA) to the successful bidder

32.3 Post issue of Letter of Award to the successful bidder, Contract Agreement shall be signed between the two parties at respective Circle Offices.

32.4 After signing of the Contract Agreement, work order shall be issued by respective Circles.

### **33. Bid evaluation**

Preliminary examination

33.1 KESCO will examine the bids to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids documents are generally in order.

33.2 KESCO may waive any minor informality, nonconformity or irregularity in a bid that does not constitute a material deviation, whether or not identified by the Bidder in its bid, and that does not prejudice or affect the relative ranking of any Bidder as a result of the technical and commercial evaluation,

## **Examination of Substantive responsiveness and Qualification requirement**

- 33.3 Prior to the detailed evaluation, KESCO will determine whether each bid is of acceptable quality, is complete and is substantially responsive to the Bidding Documents. Any deviations, conditionality or reservation introduced will be reviewed to conduct a determination of the substantial responsiveness of the bidder's bid. For purposes of this determination, a substantially responsive bid is one that conforms to all the terms, conditions and specifications of the Bidding Documents without any material deviations, objections, conditionalities or reservations and complies with all the statutory laws in force as amended from time to time. A material deviation, objection, conditionality or reservation is one (i) that affects in any substantial way the scope, quality or performance of the Contract; (ii) that limits in any substantial way, inconsistent with the Bidding Documents, the KESCO's rights or the successful Bidder's obligations under the Contract; or (iii) whose rectification would unfairly affect the competitive position of other bidders who are presenting substantially responsive bids.
- 33.4 During bid evaluation, the KESCO may, at its discretion, ask the Bidder for a clarification of its bid. In case of erroneous/non-submission of documents required to be submitted by the Bidder as per the provisions of the Bidding Documents, the KESCO may give the Bidder not more than 7 working days' notice to rectify/furnish such documents, failing which the bid shall be rejected.
- The request for clarification and the response shall be in writing, and no change in the price or substance of the bid shall be sought, offered or permitted.
- 33.5 Bids containing deviations from critical provisions will be considered as non-responsive.
- 33.6 If a bid is not substantially responsive, it will be rejected by the KESCO, and may not subsequently be made responsive by the Bidder by correction of the nonconformity. The KESCO's determination of a bid's responsiveness shall be based on the contents of the bid itself without recourse to extrinsic evidence.
- 33.7 KESCO will ascertain to its satisfaction whether Bidders determined having submitted substantially responsive bids are qualified, as per the Qualification Requirement mentioned in the bid documents. The KESCO shall be the sole judge in this regard and the KESCO's interpretation of the Qualification Requirement shall be final and binding.
- 33.8 The determination will take into account the Bidder's financial, technical capabilities, in particular the Bidder's Contract work in hand, future commitments and past performance during execution of contracts that have been awarded by the KESCO on the Bidder. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, as well as such other information as the KESCO deems necessary and appropriate. This shall, however, be subject to assessment that may be carried out, if required, by the KESCO.
- 33.9 The KESCO may waive any minor informality, nonconformity or irregularity in a bid that does not constitute a material deviation, affecting the capability of the Bidder to perform the Contract.
- 33.10 An affirmative determination will be a prerequisite for the KESCO to evaluate the Techno - Commercial Part and to intimate successful bidders to be present on new date, time & location to open the online price schedule of the Bidder. A negative determination will result in rejection of the Bidder's bid.
- 33.11 The bid from those bidders shall not be accepted who failed to submit Performance Security on issue of Letter of Award (LoA) for any other Contract of KESCO in past 3 years.

33.12 To assist in the analysis, evaluation and computation of the bids, the KESCO may ask bidders individually for clarification of their submitted bids. The request for clarification and the response shall be in writing but no change (whatsoever) in the price or substance of the bid offered shall be permitted.

33.13 After successful evaluation and compliance to techno- commercial condition (satisfying the qualification requirement), financial bid shall be opened.

#### **34. Period of Contract**

The period of Contract under the scope of work shall be up to 05 months from the date of placement of LOI/LOA. Further, the Kesco may terminate the contract by giving 30 days' notice without assigning any reason.

#### **35. Contract Performance Guarantee**

A Contract Performance Security, the successful Bidder, to whom the work is awarded, shall be required to furnish a Performance security from a Public Sector Indian Bank, in the specified format (NEFT/RTGS/Bank Guarantee) in favour of the Owner. The guarantee amount shall be equal to **Ten percent (10%) for Supply/work/services contract**, of the total Contract price and it shall guarantee the faithful performance of the Contract in accordance with the terms and conditions specified in these documents and specifications. Proforma annexed as **Annexure "A"**.

The guarantee shall be valid till the end of Warranty Period (66/60 Months) from the date of commissioning) and handing of the work/completion of all the ordered quantity (for supply contract only). The bank guarantee should also have a further claim period of 90 days from the date of completion of the contract.

In any case, the successful bidder shall not be allowed to deduct CPG amount from their running bills and they are required to submit valid & requisite Contract Performance Guarantee.

#### **36. Terms of Payment:** -

##### **A. For Supply of Material:** -

- (1) Subject to any deduction, which the purchaser may be authorized to make under the contract or subject to any additions or deductions provided for under "Variation in Quantity Clause", the contractor shall, on the certificate of Engineer, be entitled to payment after producing valid tax invoice and successful inspection/Testing of materials at our Lab and production of following documents: -
  - (i) Unconditional acceptance of the Letter of Award/Letter of Intent and signing of contract agreement by the Contractor.
  - (ii) An unconditional & irrevocable Bank Guarantee for **Ten Percent (10%)** of the total Contract price towards Contract Performance Guarantee (CPG) in accordance with proforma attached. The said bank guarantee shall be valid up to ninety (180) days after expiry of the Warranty Period and shall be extended from time to time till ninety (90) days beyond successful completion of warranty period, as may be required under the Contract.
  - (iii) Evidence of dispatch (R/R or receipted L/R)
  - (iv) Contractor's **GST** invoice, **claim** & packing list identifying contents of each shipment.
  - (v) Copy of Certificate to the effect of payments of State/ Central taxes, duties, levies etc. have been made against supply of materials through sub-vendors under the contract.

- (vi) Certified copy of Insurance policy/Insurance Certificate.
  - (vii) Manufacturer's/Contractor's guarantee certificate of Quality.
  - (viii) Material Dispatch Clearance Certificate (MDCC) / Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorized officer of Employer
  - (ix) Manufacturer's copy of challan.
  - (x) submission of the certificate by the Employer's representative that the item(s) have been received,
  - (xi) Any other documents required in this regard.
- (2) If at the time at which the last installment becomes payable there are minor defects in the plant which are two of such Importance as to affect the full commercial use of the plant, then the Purchaser shall be entitled to retain such part of the installments as represents the cost of making good such minor defects, and any sum so retained shall, subject to the provisions of maintenance of Form 'B', become due upon such minor defects being made good.

### **General Conditions of the Specification**

#### **1. Kesco's representative**



- 1.1 The Kesco shall appoint an officer/employee designated as the Controlling Officer/Officer-in charge who shall carry out the functions and obligations of the Kesco under the Contract.
- 1.2 The Kesco may from time to time appoints any other person as the Controlling Officer/ Officer in-charge in place of the person previously so appointed, and shall give a notice of the name of such other person to the Contractor without delay. The Kesco shall take reasonable care to see that no such appointment is made at such a time or in such a manner as to impede the progress of works/services. The Controlling Officer/ Officer-in-charge shall represent and act for the Kesco at all times during the currency/validity of the Contract.
- 1.3 Any decision, instruction or approval given by the Controlling Officer /Officer-in-charge of the Kesco to shall be binding on the Contractor.
- 1.4 All notices, instructions, orders, consents, certificates, approvals and all other communications under the Contract shall be given by the Controlling Officer/ Officer-in-charge.
- 1.5 The Controlling Officer/ Officer-in-charge may authorize his representative(s) as site-in-charge for the works/services.

## **2. Contractor's Representative**

- 2.1 The Contractor shall employ at least one competent representative (name, address, telephone number, identity proof of the representative shall be communicated in writing to the Controlling Officer/officer-in-charge by the Contractor) to supervise the works/services at each Circle. The said representative, (or if more than one shall be employed, then one of such representatives), shall be present whenever required and should be approachable in person or on phone at time and location as specified by the Kesco/ Service Recipient. Any written order or instruction which the Controlling Officer/officer-in-charge or his duly Authorized representative may give to the said representative of the Contractor shall be deemed to have been given to the Contractor.
- 2.2 The Controlling Officer/officer-in-charge shall be at liberty to object to the presence of any representative or person employed by the Contractor for execution of the Contract or otherwise at the site, who in his/her opinion is found to have misconduct him-self/her-self or be incompetent or negligent and the Contractor shall remove the person so objected to, upon receipt from the Controlling Officer/ officer-in-charge a notice in writing requiring him to do so and shall provide in his place a competent representative at the Contractor's risk and expense.

## **3. Bankruptcy/Insolvency of the Contractor**

- 3.1 If the contractor is imprisoned, becomes insolvent, compound with his creditors, has a receiving order made against him or carries on business under a receiver for the benefit of the creditor or any of them or being a partnership firm, become dissolved or being a corporation, goes into liquidation or is being wound up, not being a voluntary winding up for the purpose only of amalgamation or reconstruction, the Kesco shall be at liberty:

To give such liquidated contractor or other person in whom, the Contract may become vested, the option thereof to award the Contract or a portion to any other contractor, thereof to be determined by the Kesco subject to his/her providing an appropriate guarantee for the performance of such Contract.

## **4. Duty and Behavior of Contractor's Personnel**

- 4.1 The personnel deployed by the Contractor must always carry their Photo-ID card issued by Discom.
- 4.2 The personnel deployed by the Contractor shall maintain the decorum and obey the instructions of the officer-in-charge of the Kesco for that particular work and place of duty. They must follow the procedures of duty, performance and stipulated time guideline for working hours as set by the officer-in-charge of the Kesco from time to time.
- 4.3 It shall be accepted as an inseparable part of the Contract that in matters regarding competency, efficiency, conduct and behavior, the decision of the Officer-in-charge of the Kesco shall be final and binding on the Contractor in all such matters.

## **5. Safety Provisions**

- 5.1 The Contractor shall arrange for the safety in its operation as prescribed by the Kesco and all safety protective equipment's and tools are to be provided by the contractor. It is the responsibility of the Contractor to deal with any liability arising due to any injuries occurring to the Contractor's staff during performance of duty. The Kesco would not be liable to pay any compensation to the injured employees of the Contractor under any circumstances.
- 5.2 In case the Contractor fails to make such arrangement, the authorized officer/staff of the Kesco shall be entitled to recover the costs thereof from the Contractor. The failure to comply with the provisions of the Safety Rules and Regulations, if any, the Contractor shall without prejudice to any other liability pay to the Kesco a penalty amount, as determined by the competitive authority of the Kesco.

## **6. Checks and Supervision by the Contractor**

- 6.1 The Contractor shall ensure that its personnel perform their duties efficiently by exercising frequent surprise checks and by appointing sufficient supervisory staff as felt necessary by the Kesco. In case it is found that any damage has occurred due to negligence, ignorance or not performing the duty by the personnel of the Contractor, all the losses so occurred to the Kesco shall be recovered from the amounts payable to the Contractor and its security deposits or Contract Performance Guarantee.

## **7. Notices and Instructions**

- 7.1 The Contractor shall furnish the complete address of its permanent office and local office along with telephonic numbers, fax numbers, emails, etc. to the Kesco. Any notice or instructions to be given to Contractor under the terms of the Contract shall be deemed to have been served on him if it has been sent at local office or to the address of the Contractor last notified by them or delivered to authorized signatory.

## **8. Health of the Personnel deployed**

- 8.1 All persons deployed by the Contractor shall be of sound physical and mental health and should not be under the influence of any drug or liquor during duty and have full knowledge and experience to competently complete the job assigned to them. In case it is found that any loss has occurred to the Kesco's property/interest due to deployment of such personnel, the same shall have to be replaced by the Contractor without any extra cost to the Kesco.

## **9. Subletting**

- 9.1 The Contractor shall not sublet any activity or any part thereof under the Contract.

## **10. Force Majeure**

- 10.1 Force Majeure means any event or circumstance or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays an affected party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the affected party and could not have been avoided if the affected party had taken reasonable care or complied with prudent utility practices.
- 10.2 Act of God, including, but not limited to lightning, drought, fire and explosion (to the extent originating from a source external to the site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tempest, tornado, mutiny, civil commutation, riot, terrorist attack, strike (subject to certification by Labour Commissioner), lock-out (subject to certification by Labour Commissioner), exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred (100) years, any act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, direct or indirect political events; or any event or circumstance of a nature analogous to any of the above.
- 10.3 A notification to this effect duly certified by statutory authorities shall be provided by the Contractor to the Kesco. The authority as decided by the Kesco (including committee, etc.) shall decide upon Force Majeure cases and the decision of such authority shall be final and binding on Contractor/Contractor.

## **11. Damage to Property and injury to personnel**

- 11.1 The Contractor shall indemnify and keep indemnified the Kesco against all losses and claims for injuries or damage to any person or any property whatsoever which may arise out of or in consequence of the execution of the Contract and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto.
- 11.2 The Kesco shall not be liable for damage or compensation payable as per provision of law/act in respect or consequence of any accident or injury to any workmen or other person in the employment of the Contractor. The Contractor shall have to pay all claims, demands, proceedings costs, charges and expenses whatsoever in respect there of or in relation there to.
- 11.3 In the event of any accident and/or injury, in respect of which compensation may become payable under the Workman's Compensation Act-VIII of 1923 including all amendments thereof, Authorized officer of Kesco shall have full powers to retain out of any sums payable/becoming payable to the Contractor, any sum as may be deemed sufficient to meet such liability on receipt of award of compensation from the competent authority under the said act, and the same shall be adjusted from this amount. Any shortfall shall be recovered and any excesses shall be refunded. The opinion of the Authorized officer of Kesco shall be final in regard to all matters arising under this clause.
- 11.4 In case it is found that any theft or damage has occurred to the property or premises of the Kesco due to negligence of personnel in performing their duty and/or absence from the place of duty and/or not providing substitute by the Contractor or any other reason, the cost of all such losses or damages as assessed by the Kesco shall be recovered from the Contractor's monthly bill or from their Security Deposit/Contract Performance Guarantee or in any other manner as may deemed fit.

- 11.5 In case any personnel of the Contractor is implicated in any law suit or is injured by any person or group of persons, agitating mob, etc. during the course of performing his/her duty/their duties for the Kesco, it shall be the sole responsibility of the Contractor to defend its personnel in the court of law or to extend all medical and financial help, etc. without charging any cost to the Kesco.
- 11.6 The Kesco shall be deemed to be indemnified by the Contractor for lapses or other mischief's etc. by its personnel
- 11.7 Claims arising due to "any activity" shall be liable for adjustment from contract performance guarantee furnished by Contractor.

## **12. Arbitration**

- 12.1 If any dispute, difference or controversy shall at any time arise between the Contractor on the one hand and the UPPCL and the Engineer of the Contract on the other hand Contract, or as the true construction, meaning and intent of any part or condition of the same or as to manner of execution or as to the quality or description of or the payment for the same, or as to the true intent, meaning, interpretation construction or effect of the clause of the contract specification or drawing or any of them or as to anything to be, done committed or suffered in pursuance of the contract or specification, or as in the mode of carrying the contract into effect or as to the breach or alleged breach or as to obviating or compensation for the commission any of such breach or as to any other matter or thing whatsoever connected with or arising out of the contract, and whether before or during the progress or after the completion of the contract such question, difference or dispute shall be referred for adjudication to the UPPCL or any other person nominated by him on this behalf and his decision on writing shall be final binding and conclusive. This submission shall be deemed to be a submission to arbitration modification thereof. The arbitrator may from time to time with consent of the parties, enlarge the time for making and publishing the award.
- 12.2 Upon every or any such reference, the costs of an incidental to the reference and award respectively shall be at the discretion of the arbitrator, who shall be competent to determine the amount thereof or direct the same to be taxed as between solicitor and client or as between party and party and to direct by whom in what manner the same shall be borne and paid.
- 12.3 Work under the contractor shall, if reasonable, continue during the arbitration proceedings and no payment due or payable by the corporation shall be withheld on account of such proceeding. In case of refusal/neglect by such nominee UPPCL may nominate another person in his place.

## **13. Arbitration and Conciliation: -**

- 13.1 In place of Arbitration Clause 33 of Form-B as per Arbitration and Conciliation Act. -1996, dispute resolution mechanism shall be applicable as per UPPCL office order No.-1957-Works-14/PCL/2024-15-K-2024 Date: 22/10/2024 & 1542-Works-14/PCL/2024-15-K-2024 Dated: 09 August.2024.

## **14. Blacklisting**

- 14.1 In case(s) of severe default(s) by the Contractor (including but not limited to relevant clause of this section), the process of blacklisting or debarring of Contractor and recoveries (if any) thereof may be undertaken by the Kesco if deemed necessary.
- 14.2 **Circumstances of Blacklisting: -**
- (a) If, found to be involved in any sort of tender fixing/cartel formation/bid rigging/collusive bidding.
  - (b) If contractor has submitted documents found to be false/fabricated/forged.
  - (c) If Contractor has defrauded Employer in terms of quality of the equipment supplied and erection.
  - (d) If Employer has suffered huge financial loss due to the act of Contractor,
  - (e) If there is security consideration including questions of loyalty to State warrants per recommendations of Ministry of Home Affairs.

## **15. Taxes Circumstances of Debarring of Contractor.**

- 15.1 Present and intentional violation of important terms of the contract.
- 15.2 Failure to execute the work satisfactorily/unfaithful execution of the contract.
- 15.3 Delay in progress of execution of Work in spite of issue of two notice and reminders.
- 15.4 Mis-behavior/ill treatments to department officials or,
- 15.5 Dis-regarding safety measures and causing any loss of life or property.

## **16.**

- 16.1 The Contractor shall be responsible for payment of all taxes duties statutory/local levies arising as a result of commercial transactions under this Contract such GST etc. Kesco shall not be responsible for any tax related liability in any manner whatsoever.
- 16.2 During the Contract period, the Contractor shall deposit GST and other applicable taxes at prevailing rates as per Government of India guidelines including during extended period if any.
- 16.3 If any tax exemptions, reductions, allowances, or privileges may be available to the Contractor, the Kesco shall use its best endeavors to enable the Contractor to benefit from any such tax savings to the maximum allowable extent.
- 16.4 The statutory deduction of taxes and duties at source, related to these works and services, shall be done by the Kesco and tax deduction certificate shall be issued to the Contractor wherever applicable as per law.
- 16.5 For the purpose of the Contract, it is agreed that the Contract value shall include all taxes (including but not limited to GST or any other similar tax/duty/Cess/surcharge/levy by whatever name called under applicable tax laws as on the last date of bid submission) for supplies to be made or services to be performed under the contracts in their quoted bid price. The Kesco shall not be bear any separate liability over and above the contract price for payment of taxes.
- 16.6 If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of Contract, which directly impacts tax liability of Contractor in performance of this Contract, an equitable adjustment of the Contract value shall be made to take into account any such change by addition to the Contract value or deduction there from, as the case may be.
- 16.7 The contractor shall declare its GST registration number. Any liability arising out of GST implication shall be borne and responsibility of the Kesco.

## **17. Termination of Contract**

### **17.1 Events of default**

Any of the following events shall constitute an “Event of Default”. The occurrence of any “Event of Default” shall lead to consequences as brought out in Clause: -

- i. If the Contractor fails to deliver services as per time schedule in the Scope of Work.
- ii. If the Contractor unlawfully repudiates the Contract or has otherwise expressed an intention not to be bound by the contract.
- iii. If the Contractor does not make timely payment of salaries to the deployed labour.
- iv. If the Contractor does not make the mandatory payments like EPF, ESIC and others liabilities if any.
- v. If it comes to the Kesco’s notice that the Contractor is indulged in forging documents and submitting forged documents of EPF Challan sheet, ESIC receipt of personnel deployed by it

- vi. If the Contractor becomes bankrupt or insolvent, goes into liquidation.
- vii. If the Contractor fails to make payment of any amount payable to the Kesco, as and when the same becomes due.
- viii. If the Contractor fails to provide, renew or replenish the payment security and / or contract performance guarantee.
- ix. If the Contractor fails to fulfil any of the directions or orders of the Kesco or comply with the requirement of the electricity laws or other laws in relation to bid area.
- x. If the Contractor has made any false or misleading representation or warranty.
- xi. If the Contractor transfers, otherwise then pursuant to contract, any material or property of the Kesco.
- xii. If the Contractor indulges in any malpractice or corrupt practice.

If at any stage during the period of the Contract any case involving moral turpitude is instituted in a court of law against the Contractor or his employees.

#### **17.2 Termination for Convenience**

The Kesco shall be entitled to terminate the Contract without assigning any reason thereof at any time of the Kesco's convenience, by issuing an "Order for Termination" to the Contractor. The termination shall take effect on 30<sup>th</sup> day of issuance of "Order of Termination", or such extended period (over and above 30 days) as may be decided by the Kesco.

#### **17.3 Termination due to Change in Government / Management Policy**

The Kesco shall be entitled to terminate the Contract due to change any Government / Management Policy, by issuing an "Order for Termination" to the Contractor. The termination shall take effect on 30<sup>th</sup> day of issuance of "Order of Termination", or such extended period (over and above 30 days) as may be decided by the Kesco.

#### **17.4 Effect of Termination (Either upon default or for convenience or Change in Management / Government Policy)**

- Upon serving the "Order for Termination", the Kesco shall have rights to step-in and takeover the operations. The Contractor shall be obliged to co-operate with Kesco and provide all necessary support, data, documents, information, etc. which may be required by the Purchase for successful takeover of the operations and continuum of the services. However, during transition period the Contractor shall continue to provide such services, as may be required by the Kesco for smooth take-over of operations.
- If the contract has been terminated on occurrence of "Event of Default" as defined in Clause 20.1. The Contract Performance Guarantee submitted by the Contractor shall be invoked on or after the effective date of "Termination of the Contract" and amount so realized shall be forfeited by the Kesco, as a reasonable pre-estimate of the losses which have occurred to the Kesco due to non-performance of the Contractor.
- If the contract has been terminated on convenience as per Clause 20.3, the Kesco shall have rights to recover any amount payable by Contractor to the Kesco from the Contract Performance Guarantee.
- The Kesco unconditionally reserve the rights to claim from the Contractor, any cost, expenses or loss that may be incurred by reasons of breach of terms and conditions of the contract.
- The Kesco shall not be liable for payment of any compensation, whether in contract or tort or otherwise, towards the Contractor or any third party, upon termination of the contract.
- Upon termination of the contract, the Contractor shall immediately: -
  - a) Remove its manpower deployed on performance of services pertaining to the Contract;
  - b) cease all further work, except for such work as the Kesco may specify in the "Order for Termination" for the sole purpose of protecting that part of the facilities already executed, or any work required to leave the site in a clean and safe condition;

- c) remove all Contractor's equipment from the site, repatriate the Contractor's and its subcontractors' personnel from the site, remove from the site any wreckage, rubbish and debris of any kind, and leave the whole of the Site in a clean and safe condition; and
- d) deliver to the Kesco the parts of the facilities executed by the Contractor up to the date of termination
- e) to the extent legally possible, assign to the Kesco all right, title and benefit of the Contractor to the facilities as of the date of termination, and, as may be required by the Kesco, in any subcontracts concluded between the Contractor and its Subcontractors; and
- f) Deliver to the Kesco all non-proprietary drawings, specifications and other documents prepared by the Contractor or its Subcontractors as at the date of termination in connection with the facilities.
- g) . The Kesco shall have the rights to recover from the Contractor any loss or damage occurred to the property/ items/ materials/ equipment etc. of the Kesco, due to any act of Contractor or its personnel.

**18. Corrupt or Fraudulent Practice(s)**

- 18.1 The Kesco requires that the bidders observe the highest standard of ethics during the procurement and execution of the Contract(s).
- 18.2 In pursuance of this policy, the Kesco defines, for the purposes of this provision the terms set forth below as follows:

- Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of an official/employee involved in the procurement process or in execution of the Contract.
- Fraudulent practice” means misinterpretation of facts or information in order to influence the procurement process or the execution of Contract to the detriment of the Kesco, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Kesco of the benefits of free and open competition.
- The Kesco will reject a bid or cancel the Contract if already placed, if it determines that the bidder recommended for Award or on whom the Contract/Award has already been placed has engaged in corrupt or fraudulent practices in competing for the Contract/Award in question.
- The Kesco may declare a bidder ineligible for issue of Contract/Award, either indefinitely or for a stated period of time, if it any time determines that the bidder has engaged in corrupt or fraudulent practices in competing for or in executing an earlier Contract of the Kesco

**19. Miscellaneous**

In case, any penalty is imposed by the regulator/ government/ any other judiciary or compensation thereof, as decided by the concerned authority, on the Kesco related to services/ scope of work as per this Bid document, then the same shall be passed on to the Contractor.

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# Annexure-A

## PERFORMA OF GUARANTEE BOND FOR SECURITY DEPOSIT

(To be used by approved Scheduled Banks)

1. In consideration of the Kanpur Electricity Supply Co, Ltd. (hereinafter called KESCO) having agreed to exempt ----- (hereinafter called "The Contractors") from the demand the terms and condition of Agreement dated ..... made between ----- and ----- for ----- (hereinafter called the said Agreement) of security deposit for the due fulfillment by the said Contractors of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs. ----- (Rupees-----only) We ----- Bank Ltd. (hereinafter referred as the Bank) do hereby undertake to pay to the Board an Amount not exceeding Rs. ----- against any loss of or damage caused to or suffered or would be caused to or suffered by the Board by reasons of any breach by the said Contractors of any of the terms of conditions contained in the said Agreement.
2. We ----- Bank Ltd. do hereby under take to pay the amount due and payable under this guarantee without any demur merely on demand from the Board stating the amount claims is due by way of use or damage caused to or would be caused to or suffered by the Board by reason of any breach by the said contractor of any of the terms or conditions contained in the said Agreement or by reason of the Contractors failure to perform the said Agreement. Any such, demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. -----
3. We ----- Bank Ltd. further agree that the guarantee herein contained shall remain in full force, and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of Board under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till the Board or their only authorized officer certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractors and accordingly discharges the guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before ----- we shall be discharged from all liability under this guarantee thereafter.
4. We-----Bank Ltd further agree with the Board that the Board shall have the fullest liberty without affecting in any manner or obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractors from time to time or to postpone for any time or from time to time any of the powers exercisable by the Board against the said Contractors and to for enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation extension or extensions being granted to the said Contractors or for any forbearance act or commission on the part of the Board or any indulgence by the Board to the said Contractors or by any such matter or thing whatsoever which under the law would but for this provision have effect.
5. We ----- Bank Ltd. lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.
6. Notwithstanding anything contained above the liability of the guarantor hereunder is restricted to the said sum of Rs.----- and this guarantee shall expire on the -----day----- of----- 110 ----- Unless a claim under the guarantee is filled with the guarantor within six months of such date, all claim shall lapse and the guarantor shall be discharged from the guarantee.

Dated the -----day of -----110

For ----- Bank Ltd.



**PERFORMA FOR PERFORMANCE BANK GUARANTEE**  
**Kanpur Electricity Supply Co, Ltd.**

THIS DEED OF GUARANTEE made on the -----day of ----- 110. by the -----  
----- (hereinafter called the Guarantor) of one part IN FAVOUR of the Kanpur Electricity Supply Co. Ltd.  
(hereinafter called the Purchaser) of the other part.

WHEREAS in accordance with the contract agreement dated the -----day of -----  
--110 (hereinafter called the said Contract) entered into between the Purchaser & Messer's -----  
-- a company within the meaning of the Companies Act and having its registered office at -----  
(hereinafter called the Contractor) the Contractor agreed to supply to the Purchaser the -----  
as provided in the said Contract.

AND WHEREAS the payment terms under the said Contractor provide that in order to take 100% payment of  
the Contract value the Contractor shall furnish to the Purchaser a Bank Guarantee in the sum of 10% value of  
each consignment dispatched valid for -----

AND WHEREAS instead of furnishing separate guarantee as after said the Contractor wishes to furnish one  
guarantee in the sum of 10% value of the Contract valid for ----- and reckoned from the date --  
-----

**NOW THIS DEED WITNESSES AS FOLLOWS**

1. In consideration of the premises the Guarantor hereby undertake that the Contractor shall duly supply the aforesaid material of the correct quantity and strictly in accordance with the said Contract failing which the Guarantor shall pay to the Purchaser on demand such amount or amounts as the Guarantor may be called upon to pay to the maximum aggregate of Rs. ----- being 10% of the Contract value.
2. The Guarantor shall pay to the Purchaser on demand the sum under clause 1 above without demur and without requiring the Purchaser to invoke any legal remedy that may be available to it compel the Guarantor to pay the same or to compel such performance by the Contractor, provided that where the Guarantor considers the demand of the Purchaser unjustified shall never the less pay the same though under protest to the Purchaser and shall not withhold payment on that account.
3. This guarantee shall come into force from the date hereof and shall remain valid for -----  
--- calendar months from the date of the -----of the last consignment of goods  
dispatched which date of dispatch according to contract is the ----- day of -----  
----- . If, however, the period of the contracts for any reason extended thereby extending the valid  
date, and upon such extension, it the contractor fails to furnish a fresh or renewed Bank Guarantee  
for the extended period Guarantor shall pay to the Purchaser the said sum of Rs. -----  
or such lesser sum as the Purchaser may demand.
4. The guarantee herein contained shall not be affected by any change in the Constitution of the Guarantor or of the Contractors.
5. Any account settled between the Contractor and the Purchaser shall be conclusive evidence against the Guarantor of the amount due and shall not be questioned by the Guarantor.
6. The neglect or forbearance of the Purchaser in enforcement of payment of any moneys the payment whereof is intended to be hereby secured or the giving of time by the Purchaser for the payment thereof shall in no way relieve the Guarantor of its liability under this deed.
7. The Purchaser and the Contractor will be at liberty to carry out any modifications in the said Contract during the terms of the said Contract and any extension thereof, notice of which modification to the Guarantor is hereby waved.
8. The expression The Purchaser and The Guarantor and The Contractor shall unless there be anything repugnant to the subject or context include their respective successors and assigns.
9. Notwithstanding anything contained above the liability of the Guarantor hereunder is restricted to the said sum of Rs.----- and this guarantee shall expire on the ----- day of -  
----- unless claim under the guarantee is filed within six months of such date, all claims shall lapse and the Guarantor shall be discharged from the Guarantee.

**IN WITNESS HEREOF**

For and on behalf of the Guarantor has signed this deed on the day and year first above written.

Witness:

1.

Signed by

2.

For and on behalf of the

Guarantor

**FORM OF BANK GUARANTEE**

**(For depositing earnest money in case, the amount for deposit exceeds Rs. 5,000)**

To,

Kesco  
Kanpur

Sir,

WHEREAS, Messer ----- a company incorporated under the Indian Companies Act its registered office at -----son of ----- resident of -----carrying on business under the firm's name and style of Messer ----- at -----son of ----- resident of -----at partners carrying on business under the firm's name and style of Messer -----at-----which is an unregistered partnership (hereinafter called The Tender) has/have in response to your Tender Notice against specification number----- for -----offered to supply and/or execute the works as contained in the Tender's letter no-----

AND WHEREAS the Tender is required to furnish you a bank guarantee for the sum of Rs. ----- --as earnest money against the tender's offer as aforesaid.

AND WHEREAS we ----- name of the Bank has at the request of the Tender agree to give you his guarantee as hereinafter contained.

NOW THEREFORE in consideration of the premises we the under signed, hereby covenant that the aforesaid tender of the Tenderer shall remain open for acceptance by you during the period of validity as mentioned in the tender or any extension thereof as you and the Tenderer may subsequently agree and if the Tenderer shall, for any reason back out, whether expressly or impliedly, from his said tender during the period of its validity or any extension thereof as aforesaid we hereby guarantee to you the payment of the sum of Rs.-----on demand, notwithstanding the existence of any dispute between the Kanpur Electricity Supply Co, Ltd, and the Tenderer in this regard and we hereby further agree as follows:

- a. That you may without affecting this guarantee grant time and other indulgence to or negotiate further with the Tenderer in regard to the conditions contained in the said tender and hereby modify these conditions or add there to any further conditions as may be mutually agreed upon between you and the Tenderer.
- b. That the guarantee herein before contained shall not be affected by any change in the constitution of our Bank or in the constitution of the Tenderer.
- c. That an account settled between you and the Tenderer shall be conclusive evidence against us of the amount due here under and shall not be questioned by us.
- d. That this guarantee commences from the date hereof and shall remain in force till the Tenderer if his tender is accepted by you, furnishes the security as required under the said specifications and executes a formal agreement as therein provided or (till four months after the period of validity) or the extended period of validity as the case may be of the tender whichever is earlier.
- e. That the suppressions the Tenderer and The Bank and The Kanpur Electricity Supply Co, Ltd. herein used shall unless such inter predation is repugnant to the subject or context, include their respective successors and assigns.

## **Standard Bidding Documents for e-tender**

1. Tender Fees (in the form of RTGS/NEFT only); -
2. **Earnest Money Deposit**: - The EMD shall be 1% of the estimated cost of the work/services/supply and in the form of NEFT/RTGS.
3. **Contract Performance Guarantee**: - The Contract Performance Guarantee shall be 10% of the Contract Value of the tender specifications and in the form of RTGS/NEFT/FDR/BG (from a scheduled bank) only.

In any case, the successful bidder shall not be allowed to deduct CPG amount from their running bills and they are required to submit valid & requisite Contract Performance Guarantee.

## Eligibility Criteria/Pre-Qualifying Requirements

1. The tenderers shall either themselves be **manufacturers of the equipment offered**.
2. **Experience:**
  - (i) The manufacturer must have manufactured at least 100% of the specified quantities of each item of identical or similar equipment. (Purchase Order along with Completion certificate/D.I. mentioning supplied quantity must be attached).
3. **Testing Facilities:** The tenderer must have all necessary facilities at their works for carrying out such routine and acceptance tests as prescribed in the relevant IS and any other routine and acceptance test as specified in the specification. Documentary evidence of existence of such facilities will be filed along with the tender.
4. **Type Test/Test Report/Similar Test Report:** The offered equipment must have Type Test/Test Report/Similar Test Report as per relevant IS within the last 5-year period to be reckoned from the date of opening of tender. Photocopy of such Type Test/Test Report/Similar Test Report/certificates must be submitted along with tender bid. In case type test report not is available, bidder should submit undertaking for providing type test report before supply.

### **5. Financial Requirement: -**

- i) The **Minimum Average Annual Turnover (MAAT)** for the best Three years out of the last Five Financial years MAAT should not be less than **Rs. 231.87 Lac**, Document w.r.t MAAT signed by chartered Accountant and must have UDIN. Turnover exclusive GST will be considered for this purpose. CA certificate should specifically mention about it.
  - i) **Net worth** of the bidder should be positive.
  - ii) **Solvency:** - the bidder should have a minimum solvency of Rs. 57,96,750.00 (25% of the Estimated Cost) or credit facility for the same from Nationalized/scheduled bank.
6. The bidder should not be blacklisted/debarred from business in any Govt./Semi Government/PSU/Local Bodies etc. at the time of bid opening. They have to submit an undertaking regarding this along with the bid.
- 7 **Joint venture (JV) is not allowed**  
**Note:** - During evaluation of bids the annual turnover of the bidder shall be considered exclusive of GST even though the estimated cost is inclusive of all taxes.

**FORM OF AGREEMENT**

**(Referred to in clause 3)**

This Agreement made the ..... day of ..... 19 between ..... (hereinafter referred to as the Contractor) of the one part and the KANPUR SUPPLY CO. Limited ..... (hereinafter called he purchaser) of the other part.

Whereas the Purchaser is about to erect and maintain the .....(hereinafter called the WORK) mentioned enumerated or referred to in certain general conditions, specification schedules drawings, from of tender covering letter and schedule of prices which for the purpose of identification have been signed by .....on behalf of .....(the Contractor and ..... ) the Engineer of the Purchaser on behalf of the Purchaser and all of which are deemed to form part of this contract as through separately set out herein and are included in the expression contract whenever herein used.

AND WHEREAS the purchaser has accepted the tender contractor for the provision and executing of the said work for the sum of ..... upon the terms and subject to the conditions hereinafter mentioned NOW THESE PRESENT WITNESS and the parties hereto hereby agree and declare as follows that is to say in consideration of the payments to made to the contracted by the Purchaser as hereinafter mentioned the contractor shall duly provide the plant for the said works and shall do perform all other works and things in the contract mentioned or described or which are implied there from or therein respectively or may be reasonably necessary for the completion of the said works within and at the times and in the manner and subject to the terms, conditions and stipulations mentioned in the said contract. [

**AND**

In consideration of the due provision erection, execution, construction and completion of the said works and the maintenance thereof as aforesaid the Purchaser will pay to the Contractor the said sum of ..... or such other sums as may become payable to the contractor under the provisions of this contract such payment to be made at such time and in such manner as is provided by the contract.

IN WITNESS WHEREOF the parties hereto have signed this deed hereunder on the dates respectively mentioned against the signature of each:

Signed  
(for and on behalf of the  
Purchaser) by  
  
in the presence of

Signed  
  
Contractor  
  
in the presence of

**FORM OF AGREEMENT**  
**(Referred into clause 7-A)**

THIS AGREEMENT made the.....day of.....  
BETWEEN..... son of..... resident of  
..... District..... (Hereinafter called  
"Engineer" of the first part and the KANPUR SUPPLY CO. Limited India (hereinafter called the  
corporation the second part and the ..... company firm (hereinafter  
called the Company) of the third part.

WHEREAS the KESCO (hereafter called The Corporation) have selected the Engineer for practical  
training and the Company/Firm have agreed to give the said practical training to the Engineer  
on the conditions herein after appearing

**NOW THIS INDENTURE WITNESSES AS FOLLOWS**

1. The engineer binds himself to receive practical training on  
..... for a term of at least\*..... with the  
Company/Firms.
2. The Engineer covenants with the Company/Firms as follows:
  - a. That his passage to ..... and back on completion of his period  
of training will be paid by the admissible to .....class of Government  
Servants subject to the conditions specified below.
  - b. That he will during the said terms receive from the on remuneration but the salary he  
has been receiving before proceeding on deputation and such allowances, if any as the Board  
may decide.
  - c. That he shall, during the period of deputation with the Company/Firm be under the direct  
control of the Company/Firm and will abide by all their rules.
  - d. That he shall keep diaries of work done and experience gained by him and will submit  
them periodically to the chief Engineer of KANPUR SUPPLY CO. Ltd. for information.
  - e. That he shall not absent himself without sanction of Company/Firm for any cause  
whatsoever.
  - f. That in case of disobedience, insubordination, unsatisfactory work or breach of any of  
the Conditions herein contained the company/firm may for reasons recorded in writing terminate  
the training of the Engineer with the concurrence of the Board. In case it does so without such  
concurrence it shall be liable to pay all expenses and charges incurred by the Board subsequent  
to such termination provided that the Board considers the ground on which the training was  
terminated to be insufficient. After the grounds have been considered to be insufficient if the

Company/Firm refuses to resume the Engineer's training it shall further be liable to pay the passage to the Engineer back to India.

g. That he shall not hold the corporation liable for damages or compensation for any injury suffered by him through an accident or by reason of any wrongful act neglect or default of the Company/Firm or its servants or agents or from any other cause with employed as such Engineer.

h. That in the event of the period of training being terminated for the reasons specified in clause (f) the Engineer shall forfeit his claim to the return passage which will be granted only on satisfactory completion of the period of training in question.

IN WITNESS WHEREOF the parties here to have hereunto set their hands the day and the year first above written.

Signed By\*

Signed By\*

(Engineer) in the presence of

on behalf of the Corporation and the Company/Firm in the presence of

1\*

1\*

\*\*

\*\*

2\*

2\*

\*\*

\*\*

3\*

3\*



## General Condition of Contract

### For Supply of Material Form -B

General Conditions for the Supply of Plant and Machinery for Works Pertaining to the KESCo

#### Definition of Terms:

1. In constructing these General Conditions and the annexed Specification the following words shall have the meaning herein assigned to them unless there is anything in the subject or context inconsistent with such construction:

The "Purchaser" shall mean the KESCo Ltd and shall include his successors and assigns.

The "Contractor" shall mean the Tenderer whose tender shall be accepted by the Purchaser and shall include such Tender's heirs' legal representatives, successors and assigns.

The "Sub Contractor" shall mean the person named in the contract for any part of the work or any person to whom any part of the Contract has been sublet with the consent in writing of Engineer and the heirs, legal representatives, successors and assigns of such person.

The "Engineer" shall mean the officer placing the order for the work with the Contractor and such other officer as may be duly Authorized and appointed in writing by the Purchaser to act as Engineer for the purposes of the Contract and in case where no such officer has been so appointed, the Purchaser or his duly Authorized representative.

"Plant" shall mean the plant and materials to be provided by the Contractor under the Contract.

The "Contract" shall mean and include the General Conditions Specifications, Schedules, Drawings, Form of Tender, covering letter, Schedule of prices or the final General Conditions, Specifications and Drawings and the Agreement to be entered into under clause 3 of these General Conditions.

The "Specification" shall mean the Specification annexed to these General Condition and the Schedule thereto (if any).

The "Site" shall mean the site of the proposed work as detailed in the Specification or any other place in Uttar Pradesh where work is to be executed under the Contract.

"Month" shall mean calendar month.

"Writing" shall include any manuscript, typewritten or Printed statement under or over signature or seal, as the case may be.

Words importing persons shall include Firms, Companies, Corporation and other bodies whether incorporated or not.

Words importing the singular only shall also include the plural and vice versa where the context requires.

#### Contractor to inform himself fully:

2. The Candidate shall be deemed to have carefully examine the General Conditions. Specifications, Schedules and Drawings. If he shall have any doubt as to the meaning of any portion of these General

Conditions, or of the Specification he shall before signing the Contract set forth the particulars thereof and submit them to the Engineer in writing, in order that such doubt may be removed.

#### **Contract:**

3. A formal agreement shall, if required by the Purchaser, be entered into between the Purchaser and the Contractor of the proper fulfillment of the Contract, Further, if required by the purchaser, Contractor shall deposit with the purchaser as security for the due and perform of the contract such sum not being less than one per cent of the total value of the Contract as may be fixed by the Purchaser either in cash or any other form approved by the Purchaser. The Security deposit shall be refunded to the Contractor on delivery and check of the plant at the site of the work.

The Charges in respect of vetting and execution of the contract document shall be borne by the Contractor. The Contractor shall be furnished with an executed stamped counterpart of the agreement.

After the tender has been accepted by the Purchaser all order or instructions to the Contractor shall, except at herein otherwise provided, be given by the Engineer on behalf of Purchaser.

#### **Contract Drawing:**

4. The Contractor shall submit in duplicate, to the Engineer for his approval, drawings of the General Arrangement of the plant to be provided and such detailed drawings, other than shop drawings, as may be reasonably necessary.

Within fourteen days of the receipt of such drawings the Engineer shall singly his approval or otherwise of the same, and in the event of disapproving the drawing the Contractor shall further drawing for approval.

Within a reasonable period of the notification by the Engineer to the Contractor of his approval of such drawings, three sets, in ink or tracing cloth or ferrogalic prints mounted on cloth, the drawings as approved, shall be supplied to him by the Contractor and be signed by him and the Contractor respectively and be thereafter deemed to be the "Contract Drawings".

These drawings when so signed shall become the property of the purchaser and be deposited with the Engineer, and shall not be departed from in any way whatsoever except by the written permission of the Engineer or hereinafter provided.

In the event of the Contractor desiring to possess a signed set of drawings, he shall supply four sets instead of three sets and in this case the Engineer shall sign the fourth set and return the same to the Contractor.

The Contractor, if required by the Engineer shall supply in addition copies of any drawings other than shop drawings which may reasonable be required for the purpose of the Contract and may make a reasonable charge for such copies.

The Engineer or his duly Authorized representatives, whose name shall have previously been communicated in writing to the Contractor shall have the right, at all reasonable times, to inspect, at the factory of the Contractor, drawings of any portion of the plant.

#### **Mistake in drawings:**

5. The Contractor shall be responsible for and shall pay for any alterations of the plant due to any discrepancies, errors or omission in the drawing and other particulars supplied by him, whether such drawing or particulars have been approved by the Engineer or not, provided that is such discrepancies, errors or omissions are due to inaccurate information or particulars furnished to the Contractor by the

Engineer any alterations in the plant necessitated by reasons of such inaccurate information or particulars shall be paid for by the Purchaser.

If any dimensions figured upon a drawing or a plan differ from those obtained by scaling the drawing or plan the dimensions as figured upon the drawing or plan shall be taken as correct.

**Subletting of contract:**

6. The Contractor shall not, without consent in writing of the Engineer or Purchaser which shall not, be unreasonably withheld, assign or sublet this Contract any substantiate part there of other than for raw materials, for minor details or for any part of the plant of which makers are named in the Contract provided that any such consent shall not relieve the Contractor from any obligation, duty or responsibility under the contract.

**Patent rights:**

7. In the event of any demand being made or action being brought against the Purchaser for infringement or alleged Infringement of Letters patent, in respect of any plant, or thing used or supplied b the Contractor under this Contract or in respect of any method of using or working by the Purchaser of such plant, or thing the Contractor will intimacy the Purchaser against such claim or demand and all costs and expenses arising from or incurred by reason of such claim or demand PROVIDED THAT the Purchaser shall notify the Contractor immediately any claim is made and that the Contractor shall be at liberty, if he so desires, with the assistance of the Purchaser, if required but at all the Contractor's own expenses to conduct all negotiations for the settlement of the same or any litigation that may arise there from and PROVIDED THAT no such machine, plant or thing shall be used by the Purchaser for any purpose or in any manner other than that for which they have been supplied by the Contractor and specified under this Contract.

**Quality of materials:**

8. The plant shall be manufactured and constructed in the best and most substantial and most workmanlike manner and with materials of the best or of approved qualities for their respective uses.

**Packing:**

9. The Contractor shall be responsible for security, protecting and packing the plant so as to avoid damage under normal condition of transport.

**Delivery and import license fee:**

10. The cost of delivering the whole of the material f.o.r., at the railway stations specified shall be borne by the Contractor.

The Import Lenience fee for the Import of equipment or component part of raw materials, if required, shall be paid by the Contractor even when the Import License may have to be taken in the name of the Purchaser.

**Power to vary or omit work:**

11. No alteration, amendments, omission, additions, suspensions, or variations of the plant therein after referred to as "Variation" under the Contract as shown by the contract drawings or the Specifications shall be made by the Contractor except as directed in written by the Engineer but the Engineer shall have full power, subject to the provision hereinafter contained from time to time during the execution of the Contract by notice in writing to instruct the contractor to make such variations without prejudice to the Contract, and the Contractor, shall make such variation, and be bound by the same conditions

as for as applicable as through the said variation occurred in the specification. If any suggested variation would, in the opinion of the Contractor if carried out prevent him from fulfilling any of his obligations or guarantees under the Contract, he shall notify the engineer thereof in writing and the Engineer shall decide forthwith whether or not the same shall be carried out and if the Engineer confirm his instructions, the Contractor's obligation and guarantees shall be modified to such an extent as may be justified. The Difference of cost, if any, occasioned by any such variations shall be added to, or deducted from, the contract price as the case may require. The amount of such difference, if any shall be ascertained and determined in accordance with the rates specified in the schedules of Prices so far as the same may be applicable and where the rates are not contained in the said Schedules, or are not applicable they shall be settled by the Engineer and Contractor jointly, as far as possible, before such variations are carried out. Provided that the Purchaser shall not become liable for the payment of any charge in respect of any such variations, unless the instructions for the performance of the same shall have been given in writing by the Engineer.

In the event of the Engineer requiring any variations, such reasonable and proper notice shall be given to the Contractor as will enable him to make his arrangements accordingly and in cases where goods or materials have already been prepared or any design drawings, or patterns have been made or work done that required to be allotted the Engineer shall allow such compensation in respect the as he shall consider reasonable.

Provided that no such variations, shall except with the consent in writing of the Contractor be such as will involve an increase or decrease of the total price payable under the Contract by more than 10 per cent thereof.

In every case in which the Contractor shall receive instructions from the Engineer for carrying out any work which either then or later will in the opinion of the contractor, involve a claim for additional payment, the Contractor, shall as soon as reasonably possible after the receipt of such instructions inform the Engineer of such for additional payment.

#### **Negligence:**

12. If the contractor shall neglect to manufacture or supply the plant with due diligence and expedition or shall refuse or neglect to comply with any reasonable orders given to him in writing by the Engineer in connection with the manufacture or supply, or shall contravene any provision of the Contract the Purchaser may give seven days' notice in writing to the contractor, to make good the failure neglect or contravention complained of and if the contractor shall fail to comply with the notice within a reasonable time from the date of service thereof in the case of a failure, neglect or contravention capable of being made good within that time, then and in such case if the Purchaser shall think fit it shall be lawful for him to take the manufacture or supply of plant wholly, or in part, out of the contractor's hand and give it to another person on contract at a reasonable price and the Purchaser shall be entitled to retain and apply any balance which may be otherwise due on the Contract by him to the Contractor or such part thereof as may be necessary to the payment of the cost of manufacture or supply of such plant as aforesaid.

#### **Death Bankruptcy to:**

13. If the contractor shall die or commit any act of Bankruptcy, or being a corporation commence to be wound up except for reconstruction purposes or carry on its business under a Receiver, the executors, successors, or other representatives in law of the estate to the contractor or any such receiver, liquidator, or any person in whom the contract may become vested shall forthwith give notice thereof in writing to the purchaser and shall for one month, during which he shall take all reasonable steps to prevent stoppage of the manufacture of plant have the option of carrying out the contract subject to his or their providing such guarantee as may be required by Purchaser, but not exceeding the value of the plant, for the time being remaining unexecuted. In the event of stoppage of the manufacture of the plant the period of the option under this clause shall be fourteen days only provided that should the above option not be exercised, the contract may be determined by the Purchaser by notice in writing to the contractor, and the Purchaser may exercise the same power which he could exercise

and will have the same rights which he would have under the last preceding clause if the work had been taken out of the contractor's hands under the clause.

**Inspection and testing:**

14. The Engineer and his duly authorized representatives, shall have at all reasonable time access to the contractor's premises, and shall have the power at all reasonable times to inspect and examine the materials and workmanship of the plant during its manufacture there and if part of the plant is being manufactured on other premises the contractor shall obtain for the Engineer and for his duly authorized representatives permission to inspect it as if the plant manufactured on the contractor's own premises.

The Engineer shall on giving seven days' notice in writing to the contractor setting out any grounds of objections which he may have in respect of the work be at liberty to reject all or any plant or workmanship connected with such work which, in his opinion, are not in accordance with the contract or are in his opinion defective for any reason whatsoever. Provided that if such notice be not sent to the contractor within reasonable time after the Engineer, he shall not be entitled to reject the said plant workmanship on such grounds. Unless specifically provided otherwise all tests shall be made at contractor's work before shipment.

The contractor shall, if required give the Engineer notice of any material being ready for testing and Engineer, or his said representative if so desired, shall on giving twenty-four hour's previous notice in writing to the contractor attend at the contractor's premises within seven days of the date on which the material is notified as being ready, failing which visit the contractor may proceed with the tests, which shall be deemed to have been made in Engineer's presence and he shall forthwith forward to the Engineer duly certified copies of the tests in duplicate.

**Test at contractor's Premises:**

15. In all cases where the contractor provides for tests, whether at the premises of the contractor or of any sub-contractor the contractor, except where otherwise specified shall provide free of charge such labour, materials, electricity fuel water, stores apparatus, plant in accordance with the contract and shall give facilities to the Engineer or to his authorized representative to accomplish such testing.

If special tests other than those specified in the contract are required, they shall be paid for by the Purchaser as "Variations" under clause II.

When the tests have been satisfactorily completed at the contractor's works the Engineer shall issue a certificate to that effect.

**Test on site:**

16. In all cases where the contract provides for tests on the site, the purchaser, except otherwise specified, shall provide, free of charge, such labour, materials, electricity, fuel water, stores, apparatus and instruments as may be requisite from time to time and as may reasonably be demanded, efficiently to carry out such tests of the plant or workmanship in accordance with the contract.

In the cases of contractor requiring electricity for test on site such electricity shall be supplied to the contractor in the most convenient form available.

**Delivery of plant:**

17. The plant or material shall not be forwarded until shipping/dispatch instructions shall have been given to the contractor.

Notification of delivery or dispatch in regard to each and every consignment shall be made to the purchaser immediately after dispatch or delivery. The Supplier shall further supply to the Consignee

a priced invoice and packing account of all stores delivered or dispatched by him. All packages, containers, bundles and loose materials forming part of each and every consignment shall be described full in the packing account, and full details of the contents of packages and quantity of materials shall be given to enable to consignee check the stores on arrival at destination.

**Engineer's Supervision:**

18. The manufacture and supply of plant shall be carried out under the direction and to the reasonable satisfaction of the Engineer.

**Engineer's decision:**

19. In respect of all matters which are left to the decision of the Engineer including the granting or withholding of certificates the Engineer shall if required to do so by the Contractor, give in writing a decision thereon, and his reasons for such decision. If the decision is not accepted by the contractor the matter shall at the request of the contractor be referred to arbitration under the provision for arbitration hereinafter contained, but subject to the right of reference to arbitration such decision shall be final and binding on the contractor.

**Liability for accident and damage:**

20. The contractor shall be responsible for loss, damage or depreciation to goods up to delivery at site.

**Replacement of defective plant or materials:**

21. If during the progress of manufacture of supply or plant the Engineer shall decide and notify in writing to the contractor that the contractor has manufactured any plant or part of plant unsound or imperfect, or has supplied any plant inferior in quality to that specified, the contractor on receiving details of such defect or deficiency shall at his own expense, within such time that may be reasonably necessary for the purpose proceed to after reconstruct or remove such plant or part of plant, or supply fresh materials up to the standard of the specification and in case the contractor shall fail to do so, the Purchaser may, on giving the contractor seven days' notice in writing of his intention to do so proceed to after reconstruct or remove such plant or part of plant or supply of all such materials at the contractor cost provided that nothing in this clause shall be deemed to deprive the Purchaser of or affect any rights under the Contract which he may otherwise have in respect of such defects or deficiencies.

**Deduction from contract price:**

22. All costs, damages or expense which the Purchaser may have paid for which under the contract the contractor is liable may be deducted by the Purchaser from any money due or which may become due by him to the contractor under this contract, or may be recovered by suit or otherwise from the contractor.

Any sum of money due and payable to the contractor (including security deposit returnable to him) under this contract may be appropriated by the Purchaser and set off against any claim of the Purchaser for the payment of a sum of money arising out of or under any other contract made by the contractor, with the Purchaser.

**Terms of payment:**

23.
  1. Subject to any deduction which the Purchaser may be Authorized to make under the contract, or subject to any additions or deductions provided for under clause 11. the Contractor shall on the certificate of the Engineer be entitled to payment as follows:

- a. Ninety percent of the f.o.r. contract value of the plant in rupees on receipt by the purchaser of the contractor's invoice giving the number and date of railway receipt covering the dispatch of the plant from the Indian port and of the advice note giving case number and contents, together with a certificate by the contractor to the effect that the plant detailed in the said advice note has actually been dispatched under the said railway receipt and that the contract value of the said plant so dispatched is not less than the amount entered in the invoice.
- b. Ten percent of the f.o.r. contract value on presentation of the contractor's invoice when each commercially useable section of the plant is completed and the last portion of such section has been dispatched and the whole material has been delivered at the place fixed for delivery and checked at the site of the work within one month of such delivery, whichever is earlier.

Provided that each of the payments under this clause shall be due on the last day of the month in which the invoice for the amount due together with necessary documents is received by the Purchaser:

Provided also that the Purchaser shall not be bound to make any payment under sub-clause (a) unless the amount of such payment represents at least 8 percent of the total contract value of the plant.

If at the time at which the last installment becomes payable there are minor defects in the plant which are not of such importance as to affect the full commercial use of the plant, then the Purchaser shall be entitled to retain such part of the installments as represents the cost of making good such minor defects and any sum so retained shall, subject to the provision of clause 30, become due upon such minor defects being made good. If the Purchaser desires that the plant or any portion should not be dispatched by the Contractor when it is due for dispatch, the Contractor shall for such plant or portion at his works and be responsible for all risk. For such storage the Purchaser shall pay to the contractor at a rate to be mutually agreed upon between the parties, but not exceeding 5s (five shillings) per ton per week payable quarterly plus interest @ 1 percent per annum above the current rate of the State Bank of India, on 80% of the contract value of the plant or portion thereof so stored for the period from the date on which the said plant or portion becomes due and is ready for shipment up to the date on which it is actually shipped.

#### **Provisional sums:**

24. In any case where the contract price includes a provisional sum to be provided by the contractor for meeting the expenses of extra work or for work to be done or material to be supplied by a sub-contractor such sum shall be expended or used, either wholly or in part or be not used at the discretion of the Engineer and entirely as he may decide and direct. If no part or only a part thereof be used then the whole or the part not used, as the case may be shall be deducted from the contract price. If the sum used is more than such provisional sum the contractor shall pay the excess. In the case of material supplied or work done by a sub-contractor, the total of the net sum paid to the sub-Contractor on account of such materials or works and a sum equal to 10% of such net sums allowed as contractor's profit shall be deemed to be the sum used. None of the work or articles to which such sum of money refers shall be done or purchased without the written order of the Engineer. The Contractor shall allow the subcontractors every facility for the supply of materials or execution, of their several works simultaneously with his own, and shall within fourteen days after the Engineer has requested him in writing to do so pay the dues of such sub-contractors on account of such materials or works: PROVIDED ALWAYS that the contractor shall have no responsibility with regard to such works or articles unless he shall have previously approved the sub-contractor and/or the material or plant to be supplied.

#### **Certificate of Engineer:**

25. Every application to the Engineer for a certificate must be accompanied by a detailed invoice (in duplicate) setting forth in order of the Schedule of Prices, particulars of the plant supplied and the

certificates as to such plant as in the reasonable opinion of the Engineer, in accordance with the contract shall be issued within fourteen days of the application for the same.  
The Engineer may, by any certificate make any correction or modification in any previous certificate which shall have been issued by him any payments shall be regulated and adjusted accordingly.

**Certificate not to effect right of the Purchaser or Contractor:**

26. No certificate of the Engineer on account nor any sum paid on account by the Purchaser, nor any extension of term granted under clause 26 shall affect or prejudice the rights of the Purchaser, against the Contractor either under this Agreement or under the law, or relieve the Contractor, of his obligations for the due Performance of the Contract or be interpreted as approval of the plant manufactured or supplied, and no certificate of the Engineer shall create liability in the Purchaser to pay for any alteration amendments, variations or additions not ordered in writing by the Engineer, or absolve the Contractor of his liability for the payment of damages whether due, ascertained or certified or not or of any such sum against the payment of which he is bound to indemnify the Purchaser nor shall any such certificate nor the acceptance by him of any sum paid on account or otherwise affect or prejudice the rights of the contractor against the Purchaser either under this Agreement or under the law.

**Suspension of works:**

27. The Purchaser shall pay to the Contractor all reasonable expenses incurred by the Contractor by reason of suspension of the manufacture of plant or delay in shipment by order in writing of the Purchaser or the Engineer unless such suspension or delay shall be due to some default on the part of the Contractor or Sub-Contractor.

**Extension of time for completion:**

28. The time given to the Contractor for dispatch or delivery shall be reckoned from the date of receipt by the Contractor of the order, together with all necessary information and drawings, to enable the work to be put in hand.

In all cases in which progress shall be delayed by strikes lockouts, fire accidents defective materials delay in approval of drawings or any cause whatsoever beyond the reasonable control of the Contractor, and whether such delays or impediment shall occur before or after the time or extended time, for dispatch or delivery, a reasonable extension of time shall be granted.

**Price reduction:**

29. If the Contractor shall fail in the due performance of his Contract within the time fixed by the contract or any extension thereof, the contractor agree to accept a reduction of the Contract price by half percent per week reckoned on the contract value of such portion only of the plant as cannot in consequences of the delay be used commercially and efficiently during each week between the appointed or extended time, as the case may be and actual time of acceptance under clause 210, and such reduction shall be in full satisfaction of the Contractor's liability for delay but shall not in any case exceed 10 percent of the contract value of such portion of the plant.

**Rejection of defective plant:**

30. If the completed plant or any portion thereof, before it is taken over under clause 210 be found to be defective, or fails to fulfill the requirements of the contract the Engineer shall give the Contractor notice setting forth particulars of defects or failure, and the Contractor shall forthwith make the defective plant good, or alter the same to make it comply with the requirements of Contract. If the Contractor fails to do so within a reasonable time the Purchaser may reject and replace, at the cost of the Contractor, the whole or any portion of the plant as the case may be which is defective or fails to fulfill the requirements of the Contract. Such replacement shall be carried by the Purchaser within a reasonable



time and a reasonable price, and where reasonably possible to the same specification and under competitive condition. In case of such replacement by the purchaser the Contractor shall be liable to pay to the Purchaser the extra cost if any, of such replacement delivered and/or erected as provided for in the original Contract, such extra cost being the ascertained difference between the price paid by the purchaser under the provisions above mentioned for such replacement and the Contract price for the plant so replaced and also to repay any sum paid by the purchaser to the Contractor in respect of such defective plant. If the purchaser does not so replace the rejected plant within a reasonable time, the Contractor shall be liable only to repay to the Purchaser all moneys paid by the Purchaser to him in respect of such plant.

In the event of such rejection, the Purchaser shall be entitled to the use of the plant in a reasonable and proper manner for a time reasonably sufficient to enable him to obtain other replacement plant. During the period the rejected plant is used commercially the Contractor shall be entitled to reasonable sum as payment for such use.

#### **Taking over:**

31. Where the specification calls for performances test before shipment and these have been successfully carried out, the plant shall be accepted and taken over and the Engineer shall notify the Contractor to that effect. When the specification calls for tests on site the plant shall be taken over immediately after such tests have been satisfactorily carried out and the Engineer shall notify the Contractor to that effect.

Such notification shall not be unreasonably withheld nor shall the Engineer delay giving such notification on account of minor omission and defects which does not necessarily delay shipment nor affect the commercial use of the plant without any serious risk. PROVIDED ALWAYS that the Contractor undertakes to make good such omissions and defects at the earliest moment.

#### **Maintenance:**

32. For period of 36 (Thirty Six) calendar months commencing immediately upon the setting to work of the plant or 42 months from the date of receipt of equipment by the Purchaser at site whichever is earlier called the Maintenance period" the Contractor shall remain liable to replace any defective parts that may develop in plant of his own manufacture or those of his sub-contractors approved under clause 6, under conditions provided for by the contract under proper use and arising, solely from design, materials or workmanship PROVIDED ALWAYS that such defective parts as are not repairable at site and are not essential in the meantime to the maintenance in commercial use of the plant are promptly returned to the Contractor's work at the expense of the Contractor unless otherwise arranged.

If it becomes necessary for the Contractor to replace or renew any defective parts of the plant under this clause, the provisions of the first paragraph of this clause shall apply to the parts of the plant so replaced or removed until the expiration of six months from the date of such replacement or renewal or until the end of the above-mentioned period of twelve months whichever may be the later.

If any defects be not remedied within a reasonable time the Purchaser may proceed to do the work at the Contractor's risk and expense, but without prejudice to any other right which the Purchaser may have against the Contractor in respect of such defects.

The repaired or new parts will be delivered in accordance with clause 10. The Contractor shall bear reasonable cost of minor repairs carried out on his behalf at site.

At the end of "The Maintenance Period" the Contractor's liability shall cease. In respect of goods not covered by the first paragraph of this clause, the Purchaser shall be entitled to the benefit of any guarantee given to the Contractor by the original supplier or manufacturer of such goods.

#### **Arbitration:**

33. If any dispute, difference or controversy shall at any time arise between the Contractor on the one hand and the Kanpur Electricity Supply Co, Ltd. and the Engineer of the contract on the other touching the contract or as to the true construction, meaning and intent or any part or condition of the same, or as the manner of execution or as to the quality or description of or payment for the same, or as to the true intent, meaning, interpretation, construction or effect of the clauses of the contract, specifications or drawings or any of them, or as to anything to be done committed or suffered in pursuance of the contract of specifications or as to the mode of carrying the contract, into effect, or as to the breach or alleged breach of the contract or as to any claims on account to such breach or alleged breach or as to obviating or compensating for the commission of any such breach or as to any other matter or thing whatsoever connected with or arising out of the contract and whether before or during the progress or after the completion of the contract, such question, difference or dispute shall be referred for adjudication to the chairman, UP State Electricity Board or to any other person nominated by him in this behalf and his decision un writing shall be final Landing and conclusive in case of refusal/neglect by such nominee M.D Kanpur Electricity Supply Co, Ltd.. may nominate another person in his place. This submission shall be deemed to be a submission to arbitration within the meaning of the India Arbitration Act 11040 or any statutory modification thereof. The arbitrator may from time to time with consent of the parties enlarge the time for making and publishing the award.

Upon every or any such reference, the cost of an incidental to the reference and award respectively shall be in discretion of the arbitrator who shall be competent to determine the amount thereof direct the same to be taxed as between solicitor and client or as between party and to direct by whom and to whom and in what manner the same shall be burns and paid.

Work under the contract shall if reasonably possible, continue during the Arbitration proceedings and no payments due or payable by the Kesco shall be withheld on account of such proceedings.

**Construction of contract:**

34. The contract shall in all respect be construed and operated as a Contract as defined in the Indian Contract Act, 1872, and all payments there under shall be made in rupees unless otherwise specified.

**Marginal Note:**

35. The marginal note to any clause of this Contract shall not affect or control the construction of such clause.

**FORM OF AGREEMENT  
(BEFERRED TO IN CLAUSE -3)**

This Agreement made on the ----- day of -----1108-----Between -----  
(hereinafter referred to as the Contractor) of the one part AND the KESCo (hereinafter called Purchaser) of  
the other part

WHEREAS the purchaser is about to erect and maintain the ----- (hereinafter  
called the works) and for the purpose requires the plants and machinery mentioned and specified in certain  
general conditions, Specifications Schedules, Drawings, form of tender covering letter and schedule of price  
which, for the purpose of identification has been signed by ----- on behalf of the Contractor  
and ----- (the engineer of the Purchaser) on behalf of the Purchaser of which are seemed to  
form part of this contract as through separately set out herein and are included in the expression "Contract"  
whenever herein used.

AND WHEREAS the Purchaser has accepted the tender of the Contractor for the supply and delivery of the  
said plant and machinery for the sum of ----- upon the terms and subject to the Conditions  
hereinafter mentioned.

NOW THESE PRESENT WITNESSES and the parties here to hereby agree and declare as follows that is to  
say in consideration of the payment to be made to the Contractor by the purchaser as thereafter mentioned  
the Contractor shall and will fully provide the said plant and machinery for the said works on the terms and  
conditions mentioned in the Contract.

AND in consideration of the due provisions of the said plant and machinery by the Contractor and due  
performance of this part of the contract, the purchaser does hereby for himself his successors or assigns  
covenant with the Contractor that he (the Purchaser) his successor or assigns will pay to the contractor the  
said sum of ----- or such other sum as may become payable to the Contractor under the  
provision of the Contract such payments to be made at such time and in such manner as is provided by this  
contract. IN WITNESS WHERE OF the Parties here to have signed this Deed here under on the dates  
respectively mentioned a against the signature of each.

Signed

(for and on behalf of the Purchaser)

(Date)

In the presence of

(Date)

(Date)

Signed

(Contractor)

(Date)

In the presence of

(Date)

(Date)

e-tender no. .... FOR THE WORK OF ..... IN THE JURISDICTION OF Store Purchase  
(NAME OF DISTRIBUTION DIVISION) UNDER EDC (NAME OF DISTRIBUTION CIRCLE &  
DISCOM)

From: -

M/s.....  
.....  
.....

To,  
**The Superintending Engineer,**  
Material Management  
KESCo Kanpur

Dear Sir,

With reference to your tender for the above work, I/We offer to submit our proposal having rates for site, erection at site in the schedule annexed or such portion thereof, as you may determine in strict accordance with the terms, conditions and instructions to the tenderer and conditions of the tender and sale contained in Part-1 of the above referred tender to the satisfaction of the seller or in default thereof to forfeit to and pay to (KESCo), the sum of money mentioned in the said conditions.

**THE RATES QUOTED ARE NET AND FIRM AND IN FULL SATISFACTION OF ALL CLAIMS. I/WE AGREE TO ABIDE BY THIS TENDER FOR THE PERIOD OF 180 DAYS FROM THE DATE OF OPENING OF BID PART-1.**

A sum of Rs. .... vide no. .... dated ..... of ..... bank, in the form of RTGS/NEFT having UTR no. .... vide ..... (Name of Bank) as tender cost has been deposited in the Discom account. The proof of the same has been annexed with the bid proposal.

A sum of Rs. .... vide no. .... dated ..... of ..... bank, in the form of ..... And having the validity for the period of ..... as earnest money pledged in favour of .....is enclosed, the full value of which shall be retained by the (Name of Discom) on account of earnest money security deposit specified in the said clause of the "Instructions to the Tenderers".

I/we hereby undertake and agree to execute a contract in accordance with the said 'Terms, Conditions & Instruction to the Tenderer' of the tender bid specification.

Firm RTGS Details: -

The details of the funds (earnest money/Tender Fees) given by the firm in the present tender, are deposited in the departmental account, as mentioned herein under: -

Firm current account number-

Name of Bank with address: -

IFSC code of the branch-

Amount: - Rs. .... & head (EMD/Tender Cost)

UTR no.-

Yours faithfully,

Signature of the authorized Signatory  
(With complete address & Seal)

**Part-1**  
**DECLARATION**

(To be executed on a non-judicial stamp paper)

Tender Invited by: - Executive Engineer (Store Purchase)

Tender for: - For the work of ..... in the jurisdiction of Store Purchase under KESCO.

Name of Tenderer: -

Specification no.: -

Date of opening of bid part-1: -

IN CONSIDERATION of the KESCO, having treated the tenderer to be an eligible bidder whose tender may be considered, the tenderer hereby agrees to the condition that the proposal in response to the above invitation shall not be withdrawn by us within 180 days from the date of opening of the tender (or any extension thereof), also to the condition that if thereafter the tenderer does withdraw his proposal within the said period, the earnest money deposited by them may be forfeited by the Superintending Engineer, EDC-Discom, and at the discretion of the purchaser. The purchaser may debar the tenderer from tendering for a minimum period of one year reckoned from the date of opening of the tender.

Signed this ..... day of .....20

Place:

Signed by

State title whether Proprietor/Partner  
(With complete address & Seal)

## **SCHEDULE OF GENERAL PARTICULARS**

1. Name of the Tenderer
  - (a) Head Office address:
  - (b) Registered Office address:
  - (c) Postal address of tenderer:
  - (d) Fax No.:
  - (d) E-mail id: -
2. Name and address of manufacturer of the major equipment's
3. Works:
  - (a) Location with full postal address
  - (b) Total space occupied in sq. meters.  
(approximate within 5%)
  - (c) Constructed area in sq. meters  
(approximate within 5%)
4. Name and address of local representative and his telephone number
5. Name and address of the officer of the tenderer / manufacturer to whom all reference shall be made for expeditious co-ordination.
6. Name of foreign collaborator, if any.
7. Whether the designs are their own or obtained from other sources. If from other sources the same may be indicated.
8. The name, designation, qualification and experience of the engineer employed by the tenderer in design, development and manufacturing of the quoted equipment.
9. Authorized capital of the company.
10. Total annual turnover of the firm during last three financial years.
11. Actual production per year of the equipment quoted during last five financial years giving quantity and bill value rounded off to two decimal places of Rs. Lacs excluding Central Excise.
12. Manufacturing capacity per month of the quoted equipment otherwise.
13. State the name and designation of your relative(s) if any, working in Uttar Pradesh Power Corporation Ltd.
14. Ten percent (10%) Performance Security in terms of requirement of specification is to be deposited within 30 days of placement of order. Whether or not willing to deposit. If no, state reasons.

- |     |   |          |
|-----|---|----------|
| 15. | Whether certificates for satisfactory performance of offered equipment enclosed/not enclosed. If yes, give the quantity to which it refers.   |          |
| 16. | Whether quoted ex-works price are firm  | YES / NO |
| 17. | Whether ex-works prices quoted or not.  | YES / NO |
| 18. | Whether packing, forwarding freight & insurance cover (for transit plus 30 days storage thereafter) has been quoted beside ex-works prices (All these charges are to be clubbed)  | YES / NO |
| 19. | Whether the erection, testing and commissioning prices are quoted or not  | YES / NO |
| 20. | Terms of payment as mentioned in relevant clause are acceptable or not  | YES / NO |
| 21. | Give Sales Tax / Trade Tax registration Number, (Enclose last clearance certificate)<br>Central<br>State  |          |
| 22. | Income Tax Clearance Certificate of current and the preceding year enclosed or not.   | YES / NO |
| 23. | Have you ever been declared bankrupt? If yes, please give details.  | YES / NO |
| 24. | Whether the Tenderer is agreeable to execute the contract in case the deviations stipulated by him are not acceptable to the purchaser.   | YES / NO |
| 25. | Give two references (Name, Designation and complete postal address) that can rectify Tenderer's financial status and capacity to undertake such works. One of the references should be from any scheduled Nationalized bank in India. | YES / NO |
| 26. | Have you offered any discount and if so, then what is the rebate/discount in Rs.  |          |

**NOTE: Bidder shall have to demonstrate his offered system within week of intimation by purchaser.**

Seal of the Company

Full Signature :

Name :

Designation :

Date :

## **SCHEDULE 'G'**

**(Part II)**

### **DEVIATIONS FROM "TECHNICAL SPECIFICATION"**

All deviations from the "Technical Specification" shall be filled in clause by clause, in this schedule. Compliance with the specifications will be taken as granted if the deviations are not specifically mentioned in this schedule. In case there are not deviation (s), the 'NIL' Information should be furnished. In case tenderer is required to accept the standard clause, he should indicate the amount in tender bid part – II, schedule P2 which the tender price will thereby increase / decrease.

Sl. No.	Page No.	Clause No. and stipulation in (Name of Discom) Specification	Deviation
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The Tenders hereby certifies that the above mentioned are the only deviations from the "Technical Specification".

Seal of the company

Signature :

Name :

Designation :

Date :



## SCHEDULE 'H'

(Part II)

### DEVIATIONS FROM "INSTRUCTION TO TENDERERS"

All deviations from the "Instructions to Tenderers" shall be filled in clause by clause in this schedule. Compliance with the specifications will be taken as granted if the deviations are not specifically mentioned in this schedule. In case there are no deviation (s), the 'NIL' Information should be furnished. In case tenderer is required to accept the standard clause, he should indicate the amount in tender bid part – II, schedule P2 which the tender price will thereby increase / decrease.

Sl. No.	Page No.	Clause No. and stipulation in (Name of Discom) Specification	Deviation
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The Tenders here by certifies that the above mentioned are the only deviations from the "Instruction to Tenderers ".

Seal of the company

Signature:

Name:

Designation:

Date:

## SCHEDULE 'I'

(Part I)

### DEVIATIONS FROM "GENERAL REQUIREMENT OF SPECIFICATION"

All deviations from the "General Requirement of Specification" shall be filled in clause by clause in this schedule. Compliance with the specifications will be taken as granted if the deviations are not specifically mentioned in this schedule. In case there are no deviation (s), the 'NIL' Information should be furnished. In case tenderer is required to accept the standard clause, he should indicate the amount in tender bid part – II, schedule P-2 which the tender price will thereby increase / decrease.

Sl. No.	Page No.	Clause No. and stipulation in (Name of Discom) Specification	Deviation
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The Tenders here by certifies that the above mentioned are the only deviations from the "General Requirements of Specification".

Seal of the company

Signature:

Name:

Designation:

Date:

## Technical Specification for

### 11 kV, 3P4W Oil cooled, Combined CTPT Units with Other Accessories Such as Meter Box, GI Pipe & Control Cable.

#### 1. Scope:

This specification covers designing, manufacturing, assembling, stage testing, inspection, supply, loading at factory, transportation to stores, unloading at stores of 11KV, 3P4W, 0.5 accuracy class, CTPT Combined, Oil Cooled Metering Units of CTR- 10/5 A, 15/5 A, 20/5 A, 30/5 A, 50/5 A, 100/5A & 150/5A with Other Accessories Such as Meter Box, GI Pipe & Control Cable.

#### 2. Applicable Standards:

Except where modified by this specification the component parts of the equipment shall comply with the following IS available (the latest versions).

Current Transformers	:	IS 16227 (Part 1 & 2), IEC 60044-1
Potential Transformers	:	IS 16227 (Part 1 & 3), IEC 60044-2
HV Porcelain Bushing	:	IEC 60137/2017
Oil	:	IS 335/1983
Electric Strength for Insulation Oil	:	IS 6792/1992
Galvanization	:	IS 2633/1986
Primary Terminals	:	IS 10601
Method of High Voltage Testing	:	IS 2071, IEC 60
Partial Discharge Measurement	:	IS 11322, IEC 44 (Part 4), IEC 270
Method of RIV Test on HV Insulators	:	IEC 8263

#### 3. Service Conditions:

Max. Altitude above Mean Sea Level	:	400 Mtr.
Max. Ambient Average Temperature	:	50 <sup>0</sup> C
Max. Temperature in Shade	:	45 <sup>0</sup> C
Min. Ambient Air Temperature	:	- 5 <sup>0</sup> C
Relative Humidity	:	10-100%
Max. Annual Rainfall	:	1875 mm
Max. Wind Pressure	:	150 Kg/mm <sup>2</sup>
Isoceraunic Level	:	50 (Days/Year)
Climate	:	Moderately Hot, Humid, Tropical, Conducive to rust & fungus growth.

#### 4. Metering Unit Type:

- a) The 3P4W, metering transformer equipment should be of pole mounting type of outdoor use.
- b) They are to be used in 11kV Three Phase system with solidly earthed neutral and should also be suitable for 3 Phase 3 Wire 50 Hz network.
- c) The equipment is required for operation of HT Tri-vector Meters and should be oil cooled.

## 5. Ratings for Metering Units:

The 11 kV, 3P4W, Combined CTPT Outdoor unit shall have the following ratings:

S. NO.	PARAMETERS	VALUES
1	Rated Voltage	11 kV
2	Highest System Voltage	12 kV
3	Insulation Level	12 kV
4	Standard Impulse Withstand Voltage	75 kV Peak
5	<b>1 Minute Power Freq. withstand Voltage</b>	
5.1	Primary	28 kV
5.2	Secondary	3 kV
6	Short Time Thermal Current & its Duration	6 kA for 1 Sec for CT ratio up to 20/5 A
		13 kA for 1 Sec for CT ratio > 20/5 A & 18.4 kA for 1 Sec for CT ratio >= 150/5 A
7	Class of Accuracy	0.5 S
8	Rated burden per phase	For CTs: 15 VA
		For PTs: 50 VA
9	Frequency	50 Hz
10	Maximum Attainable Winding Temperature	85° C
11	Minimum Phase to Phase distance	255 mm
12	Shortest distance between metal part & earth	190 mm
13	Creepage distance of HV bushing	300 mm (Min.)
14	Thickness of MS Tank	5 mm (Min) for top cover, 3.15 mm for bottom & all other sides
15	Paint shade and thickness	RAL 7032 with double coat (85 microns min.)
16	Galvanization	Entire tank including secondary chamber shall be hot dip galvanized
17	Bi-metallic terminal connector	Bi-metallic terminal connector with a nut, plane washer, spring washer & check nut suitable for Al./Cu. Conductor required for different rating of metering units. Six nos. to be provided with each metering units.
18	Minimum Volume of oil	Shall not be less than 45 Litres
19	Max Ratio & Phase Angle Error	As per IS

## 6. Design:

- a) The design shall incorporate every reasonable precaution and provisions for safety of all those concerned in the operation and maintenance of the equipment. **A pressure relief valve with metallic cap** shall be invariably provided to the CTPT set. It shall be provided at the top cover of the tank.

All outdoor apparatus shall be so designed that water cannot collect at any point and enter the CT/PT set. The top cover of the tank, secondary terminal cover, inspection chamber cover plate may be designed accordingly. All outdoor apparatus shall be so designed that water cannot collect at any point and enter the CT/PT set. The top covers of

the tank, secondary terminal cover, inspection chamber cover plate are suitable bent at the edges **(at least 25mm bent)** so that the gaskets are not exposed to moisture.

- b) The equipment shall be designed to ensure satisfactory operation under all conditions of service to facilitate easy inspection, cleaning and repairs.
- c) All connections and terminals shall be of sufficient size for carrying the specified currents continuously without undue heating.
- d) All bolts, nuts, washers in contact with non-ferrous parts shall be of brass.
- e) All ferrous parts including bolts & nuts liable to corrosion, forming integral part of the equipment shall be smoothly and continuously hot dip galvanized.
- f) The secondary terminal box with double door arrangement (Inner & Outer) and oil gauge shall be provided with Metering Units. The inner door of the secondary chamber should be of hinge type with suitable handle/knob & sealing arrangement.
- g) The core shall be high grade non-ageing electrical silicon laminated steel of low hysteresis loss and high permeability to ensure high accuracy, at both normal and over current/voltage.
- h) All winding shall be of insulated high grade Electrolytic copper wire and the manufacturing of the units shall be done in completely closed and air-conditioned room otherwise Fiber glass insulation sleeves are to be provided for primary winding. Details of winding and core shall be furnished.
- i) The CTPT set should have Three CTs and One three phase PTs with star / star connection.
- j) Sealing bolts for sealing at 4 points on the secondary terminal box (both inner & outer door) and the top cover of the tank shall be provided. This may be made by providing a hole on tail of corner bolts of adequate size to pass the sealing wire of above 13 SWG.

#### **7. Fluctuation In Voltage & Frequency:**

For continuous operation entire equipment shall be subjected to variation of voltage up to +20% & -30% of rated voltage and frequency of +/- 5% of rated frequency.

#### **8. Instrument Transformers (CT &PT):**

- a) The voltage and current transformers shall have normal continuous rating as per the schedule of requirement.
- b) The voltage transformer shall be so designed that the increased magnetizing currents due to any persisting over voltage, does not produce injurious overheating. Phase barriers shall be provided.
- c) The peak value of the rated dynamic current shall not be less than 2.5 times the rated short time thermal current unless stated otherwise. (or confirming IS 16227)
- d) Modified Polyester Enamel Copper Wire is to be used for winding and it shall conform to IS-13730/ Part - 34 (latest version).
- e) The winding shall be neatly laid and anchored.
- f) The metering set tank and other metal parts shall be galvanized both inside & outside as per latest IS applicable.
- g) The terminals of the Instrument Transformer shall be clearly marked by distinctive letters of IS: 16227/ Part – 1 & 3 (latest version) for voltage transformer and of IS 16227/Part – 1 & 2 (latest version) for current transformers.

#### **9. Incoming Side:**

##### **a) Terminals:**

Brass rods 12 mm dia up to 20A & 16mm dia >20A for Primary and 6 mm dia for secondary. The lugs shall be properly crimped & brazed.

##### **b) Bushing for outgoing side of CT/PT set:**

- i. The porcelain portion of HT bushings shall be of standard make and conform to IEC 60137.
- ii. The dimensions of the bushings shall conform to IS: 3347/ Part - 3/ 1972. The minimum phase to phase clearance shall be as per IS/GTP.
- iii. The bushings shall be of reputed manufacturers which are having complete testing facilities. It should be ISI marked.
- iv. The bushing stems shall be provided with suitable bimetallic connectors so as to connect the jumper without disturbing the bushing stem. The bush rod stem length should be at least 40 mm and 3 nuts with 2 flat washers of brass material should be provided with each bush rod.

#### 10. Steel Tank:

- a) The oil filled container incorporating the voltage transformers and current transformers should be fitted with incoming and outgoing primary terminals and secondary terminal box. The secondary terminal box shall be arranged on sides. The general arrangement drawing with 3 bushing on the incoming side and 3 bushings on the outgoing side shall be submitted along with tender. Adequate level of oil shall be maintained in the tank for proper cooling & curb flashover.
- b) The tank shall be built with a plate of 5 mm thick top and 3.15 mm sides and bottom and with all fittings shall be capable of withstanding without leakage or distortion at the standard test pressure. All joints of the tank and fittings shall be hot oil tight and no leakage should occur during service. Both side of the joint should have continuous welding.
- c) The tank will be finished with min. **2 coats of zinc rich epoxy paint** externally. The inner surface shall be painted with oil resistance white enamel paint.
- d) It shall be provided with an oil gauge. The oil gauge glass shall be fixed to the side of the raised wall of the inspection box.
- e) The tank shall be provided with necessary lifting lugs. Tank including top cover shall be hot dip Galvanized.
- f) The secondary terminal box cover, tank cover and other vertical joints where gaskets are used may be suitably bent at least **25 mm** bent with necessary sealing arrangement with **sealing bolts at all corners and bolts should be at least 10 mm diameter GI bolts spaced maximum 70 mm apart**. This is to safeguard against seepage of water into tank in case of damaged gasket. Eye holes shall be made in all bolts used in the tank, inspection chamber, secondary chamber, fixing of bushings for sealing.
- g) The **6 mm** gaskets shall be dovetailed without joints to prevent moisture entry. In case of dovetailed joint, they shall not be more than two. The gaskets shall be of good quality **Neoprene or superior quality rubberized gasket**.
- h) Two earthing terminals shall be adequate size protected against corrosion and metallicly clean and identified by means of the sign marked in a legible and indelible manner on or adjacent to the terminals.
- i) All bolts should be provided with 2 flat washers and a spring washer with a nut.
- j) Conservator should not be provided for these CTPT sets.
- k) The Secondary terminal box incoming hole should be 32 mm diameter and at a suitable height from bottom to avoid replacement/ modification of secondary wires pipe when CTPT set is replaced. The secondary terminals size should be 6 mm diameter, 25 mm stem length, 2 flat washers with 3 nuts of brass material should be provided. The terminals should be provided at least 70 mm height from incoming hole and clearances shall be as per IS to avoid shorting terminals due to secondary wires pipe.
- l) Secondary chamber shall have double door (inner & outer) with suitable arrangement for sealing of both the doors. The inner door shall be of transparent polycarbonate so that

secondary terminal connections can be viewed without breaking the inner door seals. The inner door shall be provided with suitable handle/knob.

#### 11. Meter BOX, GI Pipe & Control Cable:

The meter box, GI pipe and secondary wiring shall be provided with each unit.

The meter box shall be made of MS with thickness of 2 mm and dimensions of approx. **500 mm (L) X 400 mm (D) X 400mm (H)** and shall be **hot dip galvanized** and shall be suitable to accommodate Purchaser's HT Tri vector meter. The meter box shall have degree of **IP55** for protection against dust and water. The meter box shall have only front opening with two doors in order to make the meter chamber pilfer proof as well as tamper proof. The outer door and inner door shall be made of MS with provision of window made of transparent toughened glass and fitted with wire mesh for meter reading. The transparent sheet of acrylic or another polymer is not acceptable for door window. The outer door shall be provided with at least one locking and two nos. sealing arrangements. Necessary sealing arrangements shall also be provided on the inner door of the meter chamber along with the provision of window to enable meter reading. A frame of slotted hanger shall be provided inside the Meter box on which the meter shall be mounted.

A **GI pipe shall be hot dip galvanized** and should be of **40 mm** outer dia. and **1500 mm** length with flanges welded at both ends shall be supplied with each unit. One of the flanges provided on either ends of the GI pipe shall be bolted to the bottom of secondary terminal box of the CT/ PT unit. The bolts used for tightening the flanges shall have sealing arrangement.

1.1KV, 10 core X 2.5 mm<sup>2</sup>, PVC insulated, multi strand, armored, Copper cable with colour coding, thimble (bottle type one side and ring type another side) and ferrule along with marking shall be provided from secondary terminal box of CT PT unit to meter box through GI pipe. The marking on ferrule shall be RS1, R, RS2 for R phase, YS1, Y, YS2 for Y phase, BS1, B, BS2 for B phase and N for neutral. The wiring shall be neatly bunched together and length of cable shall be 2.5 meter. Suitable size of lugs shall be used to tighten the wire with the unit's secondary terminals. For the mounting of the meter box on the channel two flat plates of 5mm thick with hole for M16 bolt shall be provided on either side at top corners of the box along the axis and also at side wall bottom edge along the height.

The CT/PT unit shall be complete in all respects. Any fitting, accessories or apparatus which may not have been specifically mentioned in this specification but which is/ are considered necessary shall be deemed to have included. All the bolts and iron material used shall be hot dip galvanized.

#### 12. Oil

The insulation oil used in the tank shall comply with the requirements specified in relevant IS: 335/ 93 (latest revision)

#### 13. Tests:

##### a) Type Tests:

- i. The equipment offered shall be fully type tested from Govt. approved laboratory such as CPRI/ERDA/ ERTL etc. or any NABL accredited laboratory by the bidder as per the relevant standards.
- ii. The bidder shall furnish copies of Type Test Reports with the bid for the offered material.
- iii. The bidders also furnish type test certificates for bushings and oil along with the bid. **The type test certificates shall be not older than 5 years from the date of opening of bid.**
- iv. **Type Tests for CTs (as per relevant IS)**

- Verification of terminal marking & polarity.
  - Short time current test.
  - Temperature rise test.
  - Lightning Impulse Test.
  - High Voltage Power frequency wet withstand voltage test.
  - Determination of errors or other characteristics according to the requirements of the appropriate designation or accuracy class.
- v. Type Tests for PTs (as per relevant IS)**
- Verification of terminal marking & polarity.
  - Temperature rise test.
  - Lightning Impulse Test.
  - High Voltage Power frequency wet withstand voltage test.
  - Determination of errors according to the requirements of appropriate accuracy class.
- vi. Type Tests for Transformers Bushings (as per relevant IS)**
- Wet power frequency voltage with stand test.
  - Dry lightning impulse voltage withstand test.
  - Temperature rise test.
  - Thermal short time current withstand test.
  - Cantilever load withstand test.
- b) Acceptance & Routine Tests:**
- The following shall be conducted at factory premises for acceptance of material.
- i. Verification of Terminal marking and polarity.
  - ii. Power frequency/dry withstand tests on primary windings.
  - iii. Power frequency dry withstand tests on secondary windings.
  - iv. Determination of errors according to the requirements of the appropriate accuracy class.
  - v. Temperature rise Test.
  - vi. Air pressure test on empty tank of transformer opened for physical verification test (One per each lot offered during pre-dispatch inspection)
- c) Inspection and Testing of Transformer Oil**
- To ascertain the quality of transformer oil the manufacturer's test report should be submitted at the time of inspection. Arrangements should also be made for testing the transformer oil, after taking out the samples from the manufactured CTPT sets and tested in the presence of KESCO's representative (or) if desired, in an independent laboratory.
- d)** All acceptance and routine tests as stipulated in the relevant standards for CTs & PTs shall be carried out by the supplier in presence of KESCO's representatives.

**14. Deviations:**

Any deviation(s) from the specified specifications of CTPT set (MU) and Standard Lab (CPRI/ERDA etc.) Type Tested CTPT set (MU) along with detailed reasons for deviations shall be submitted along with tender.

**15. Tolerances:**

Unless otherwise specified herein the test value of the transformers supplied should be within the tolerance limit permitted in the IS on the guarantee values.

**16. Name Plate:**

The following additional details shall be embossed / punched / casted/ laser printed on a metallic plate with at least 10 mm letter size and the name plate shall be of non-detachable type



& fixed with rivets (not with bolts &nuts). The respective sides shall be painted “INCOMING, OUTGOING, Sl. No., CT Ratio, R, Y, B” with suitable font readable from 30feets.

- Make- Name of Manufacturer
- Ratio (CT & PT)/ Frequency (CT&PT)
- Rated Output and corresponding Accuracy Class (CT&PT)
- Highest System Voltage, Insulation Level & Short time Thermal Current (CT&PT)
- Rated voltage factor & corresponding rated time
- Number of phases & method of connection (connection diagram)
- Earthed / Uearthed
- Reference standard
- Serial No. & Type Designation
- Month & Year of Manufacturing
- Guarantee - 66months
- Purchase Order No. and Date
- PROPERTY OF KESCO

#### 17. Guarantee:

The supplier shall give Guarantee for the satisfactory functioning of the material / equipment as per specification, for a minimum period of **60 months from date of commissioning or 66 months from the last date of receipt of material in good condition at departmental store for each consignment whichever is earlier**. The bidder shall be liable to undertake the replacement or rectify defects at his own cost within mutually agreed timeframe. The bidder shall further be responsible for free replacement for another period of three years from the end of guarantee period for any “latent defect” if noticed and reported to purchaser.

#### 18. Fittings:

Sl. No.	Particulars	Quantity
1	Rating & Terminal marking plates (non-detachable)	1 No.
2	Earthing terminals with bolt, nut & washers for connecting earth wire	2 Nos.
3	Lifting Lugs	
3.1	For main tank	4 Nos.
3.2	For top cover	2 Nos.
4	Pressure relief valve with metallic cap	1 No.
5	Bimetallic terminal connectors on the HV bushings	6 Nos.
6	HV bushings Outdoor	6 Nos.
7	Secondary terminals bushings	As per requirement of CT ratio
8	Base Mounting Channel	2 Nos.

## GURANTEED TECHNICAL PARTICULARS

**For Supply of 11 kV, 3P4W Oil cooled, Combined CTPT Units with Other Accessories  
Such as Meter Box, GI Pipe, Control Cable.**

Sl. No.	Particulars	Requirement	Bidder's Offer
1	Manufacturer's Name & Address	To be indicated	
2	Manufacturer's Type & Design	To be indicated	
3	Type of Cooling	To be indicated	
4	Nominal System Voltage	11 kV	
5	Highest System Voltage	12 kV	
6	Frequency	50 Hz	
<b>7</b>	<b>Specification of CT &amp; PT of Metering Unit</b>		
<b>(A)</b>	<b>Current Transformer</b>		
i	Type	Oil immersed	
ii	Accuracy Class	0.5 s	
iii	Rated Output	15 VA	
iv	Insulation Level	28 kV <sub>rms</sub> /75 kV <sub>pk</sub>	
v	Short time thermal current rating for 1 sec	a. 6 kA for up to 20/5 A & 13 kA for >= 20/5 A b. 18.4 kA for >= 150/5 A	
vi	Saturation factor	To be indicated	
vii	Normal current density of primary winding	<= 1.6 Amp/mm <sup>2</sup>	
viii	Knee Point Voltage	To be indicated	
ix	Continuous percentage over load	120%	
x	ISF	As per IS	
<b>(B)</b>	<b>Potential Transformer</b>		
i	Type	Oil immersed	
ii	PT Ratio	11 kV/√3/ 110V/√3	
iii	Rated output VA/phase	50 VA	
iv	Class of accuracy	0.5 s	
v	Insulation level	28 kV <sub>rms</sub> /75 kV <sub>pk</sub>	
vi	Winding Connection	Star/Star	
vii	Rated voltage factor & duration	To be indicated	
<b>8</b>	<b>Details of Metering Unit</b>		
<b>(A)</b>	<b>Current Transformer</b>		
<b>I</b>	<b>Weight of core &amp; winding</b>		
i	Core	To be indicated in a separate sheet for each rating	
ii	Primary Winding		
iii	Secondary Winding		
<b>II</b>	<b>Resistance of winding per phase at 75° C</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>III</b>	<b>Cross Section area of each turn (in mm<sup>2</sup>)</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>IV</b>	<b>No. of turns</b>		
i	Primary		

ii	Secondary	To be indicated in a separate sheet for each rating	
<b>V</b>	<b>Winding Material type</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>VI</b>	<b>Core Material type</b>	To be indicated in a separate sheet for each rating	
<b>(B)</b>	<b>Potential Transformer</b>		
<b>I</b>	<b>Weight of core &amp; winding</b>		
i	Core	To be indicated in a separate sheet for each rating	
ii	Primary Winding		
iii	Secondary Winding		
<b>II</b>	<b>Resistance of winding per phase at 75° C</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>III</b>	<b>Cross Section area of each turn (in mm<sup>2</sup>)</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>IV</b>	<b>No. of turns</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>V</b>	<b>Winding Material type</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>VI</b>	<b>Core Material type</b>	To be indicated in a separate sheet for each rating	
<b>(C)</b>	<b>MS Tank</b>		
<b>I</b>	<b>Construction Material</b>	MS Hot dip Galvanized tank	
<b>II</b>	<b>Galvanization of Tank</b>	Metering unit tank including top cover, secondary chamber shall be hot dip galvanized	
<b>III</b>	<b>Tank Dimension in mm</b>		
i	Length	To be indicated	
ii	Breath	To be indicated	
iii	Height	To be indicated	
<b>IV</b>	<b>Thickness</b>		
i	Side walls, Bottom	3.15 mm	
ii	Top	5 mm	
<b>V</b>	Edge Bending	To be provided on top cover	
<b>VI</b>	Standard pressure & duration that can be withstand	To be indicated	

<b>(D)</b>	<b>Oil</b>		
i	Grade of Oil	To be indicated	
ii	Quantity of oil in Liters.	To be indicated (min 45 Liters.)	
<b>(E)</b>	<b>HV Bushing</b>		
i	Type	To be indicated	
ii	Make	To be indicated	
iii	Creepage distance of HV Bushing	300 mm (Min.)	
iv	Bi-metallic terminal connector	6 Nos. Bi-metallic terminal connectors with nut, plain washer, spring washer & check nut suitable for Aluminium conductor as per CT rating to be provided	
<b>(F)</b>	<b>Gasket Details</b>		
<b>I</b>	<b>Type of Gasket to be used on</b>		
i	Top Cover tank	To be indicated	
ii	Secondary terminal box	To be indicated	
iii	HV Bushings	To be indicated	
<b>II</b>	<b>Thickness of Gasket to be used on</b>		
i	Top Cover tank	To be indicated	
ii	Secondary terminal box	To be indicated	
iii	HV Bushings	To be indicated	
<b>(G)</b>	<b>Studs Details</b>		
<b>I</b>	<b>Primary Stud</b>		
i	Material	To be indicated	
ii	Size	M12 up to 20A & M16>20A	
<b>II</b>	<b>Secondary Stud</b>		
i	Material	To be indicated	
ii	Size	M6	
<b>III</b>	Gap between I/C & O/G Studs of same phase	Minimum 15° angle with the vertical axis to maintain a good distance at stud levels.	
<b>(H)</b>	<b>Identification/Marking</b>		
<b>I</b>	<b>Primary Terminals</b>		
i	Incoming	RM, YM, BM	
ii	Outgoing	RL, YL, BL	
<b>(I)</b>	<b>Secondary Terminals</b>		
i	CT Marking	RS1-RS2-RS3, YS1-YS2-YS3, BS1-BS2-BS3	
ii	PT Marking	R, Y, B, N	
<b>(J)</b>	<b>Clearance</b>		
i	Minimum Phase to Phase distance	255 mm	
ii	Shortest distance between metal part & earth	190 mm	
<b>(K)</b>	<b>Meter Box</b>	As per tender requirement.	
i	Material & Thickness of the meter box		
ii	Protection against penetration of dust & water		
iii	Dimensions		
iv	Locking & Sealing Arrangement	Yes/No	

<b>(L)</b>	<b>G I Pipe</b>	As per tender requirement.	
i	Size		
ii	Length		
<b>(M)</b>	<b>Secondary Wire</b>	As per tender requirement.	
i	Size		
ii	Type		
iii	Lugs Provided	Yes/No	
iv	Ferrule Provided	Yes/No	
v	Cable Length	2.5 Mtr.	
<b>9</b>	Total weight of complete MU including all accessories & oil	To be indicated	
<b>10</b>	Maximum attainable winding temperature	85° C	
<b>11</b>	Double door type secondary chamber & sealing arrangement	Secondary chamber shall have double door (inner & outer) with suitable	
		Arrangement for sealing of both the doors. The inner door shall be of transparent polycarbonate so that secondary terminal connections can be viewed without breaking the inner door seals. The inner door of the secondary chamber should be of hinge type with suitable handle/knob & sealing arrangement.	
<b>12</b>	Name Plate	As per tender requirement.	
<b>13</b>	Sealing Arrangements	The secondary terminal box cover, tank cover sealing arrangements have to be done with sealing bolts at all corners and bolts should be at least 10 mm diameter GI bolts spaced maximum 70 mm apart. Sealing holes also to be provided in the bolts fitted with bushing & body for sealing, so that one cannot open the bushing without breaking seals. Eye holes shall be made in all bolts used in the tank, inspection chamber, secondary chamber, fixing of bushings for sealing.	

## GURANTEED TECHNICAL PARTICULARS

### For Oil to be used in 11 kV Metering Units

Sl. No.	Particulars	Requirement	Bidder's Offer
1	Appearance	The oil shall be clear and transparent and free from suspended matter or sediments and should conform to IS - 335 or latest versions.	
2	Density at 27 <sup>o</sup> C (Max)	0.89 Gm/Cm <sup>3</sup>	
3	Kinematic Viscosity at 27 <sup>o</sup> C (Max)	27 CST	
4	Interfacial Tension at 27 <sup>o</sup> C (Max)	0.04 N/M	
5	Flash Point, pensky – marten (Closed)(Min)	140 <sup>o</sup> C	
6	Pour Point (Max)	-10 <sup>o</sup> C	
7	Neutralization Value: a) Total acidity (Max) b) In-organic acidity alkalinity	0.01 Nil	
8	Corrosive Sulphur	Non-corrosive	
9	Electrical Strength (Breakdown Voltage/Min) a) New Unfiltered Oil b) After Filtration	30 kV(rms) 50 kV(rms)	
10	Dielectric dissipation factor (Tan delta at 90 <sup>o</sup> C (Min))	0.005	
11	Specific resistance (Resistivity) a) At 90 <sup>o</sup> C (Min) b) At 27 <sup>o</sup> C (Min)	30x10 <sup>12</sup> ohms-cm 500x10 <sup>12</sup> ohms-cm	
12	Oxidation Stability a) Neutralization value after oxidation (Max) b) Total sludge after oxidation (Max)	0.5 mg KOH/g 0.05% by weight	
13	Ageing characteristics after accelerating ageing (open breaker method with copper catalyst) for 96 Hrs. (as per ASTM D. 1934-1978)		
a	Specific resistance (Resistivity)		
	At 27 <sup>o</sup> C (Min)	2.5x10 <sup>12</sup> ohms-cm	
	At 90 <sup>o</sup> C (Min)	0.5x10 <sup>12</sup> ohms-cm	
b	Dielectric dissipation factor tan delta at 90 Deg. C (max)	0.50	
c	Total sludge Value (Max)	0.5	
d	Total Acidity (Max)	0.5	
14	Presence of oxidation inhibitor	Nil	
15	Water content (Max)	50 ppm	

**Technical Specification for**  
**33 kV, 3P4W Oil cooled, Combined CTPT Units with Other Accessories Such as**  
**Meter Box, GI Pipe & Control Cable.**

**1. Scope:**

This specification covers designing, manufacturing, assembling, stage testing, inspection, supply, loading at factory, transportation to stores, unloading at stores of 33 kV, 3P4W, 0.2 accuracy class, CTPT Combined, Oil Cooled Metering Units of CTR- 100/1 A & 200/1 A with Other Accessories Such as Meter Box, GI Pipe & Control Cable.

**2. Applicable Standards:**

Except where modified by this specification the component parts of the equipment shall comply with the following IS available (the latest versions).

IS 16227 (Part 1 & 2), IEC 60044-1 :	Current Transformers
IS 16227 (Part 1 & 3), IEC 60044-2 :	Potential Transformers
IEC 61869 :	Instrument Transformers
IEC 60137/2017 :	HV Porcelain Bushing
IS 5621/1980 :	Hollow insulators for use in Electrical Equipment
IS 8603/2008 :	Dimensions for Porcelain Transformer Bushings for use in Heavily Polluted Atmospheres
IS 1271/1985 :	Specification for Thermal evaluation and classification of Electrical insulation
IS 5561 :	Specification for Electric Power connectors
IS 335/1993 :	Oil
IS 6792/1992 :	Electric Strength for Insulation Oil
IS 2633/1986 :	Galvanization
IS 10601 :	Primary Terminals
IS 2071, IEC 60 :	Method of High Voltage Testing
IS 11322, IEC 44 (Part 4), IEC 270 :	Partial Discharge Measurement
IEC 8263 :	Method of RIV Test on HV Insulators
IS 9335/1984 :	For Cellulosic papers for electrical purpose
IS 13778 :	Winding Cu Wire.

**3. Service Conditions:**

Max. Altitude above Mean Sea Level :	400 Mtr.
Max. Ambient Average Temperature :	50 <sup>0</sup> C
Max. Temperature in Shade :	45 <sup>0</sup> C
Min. Ambient Air Temperature :	- 5 <sup>0</sup> C
Relative Humidity :	10-100%
Max. Annual Rainfall :	1875 mm
Max. Wind Pressure :	150 Kg/mm <sup>2</sup>
Isoceraunic Level :	50 (Days/Year)
Climate :	Moderately Hot, Humid, Tropical, Conducive to rust & fungus growth.

**4. Metering Unit Type:**

- d) The 3P4W, metering transformer equipment should be of pole mounting type of outdoor use.
- e) They are to be used in 33 kV Three Phase system with solidly earthed neutral and should also be suitable for 3 Phase 3 Wire 50 Hz network.
- f) The equipment is required for operation of HT Tri-vector Meters and should be oil cooled.

## 5. Ratings for Metering Units:

The 11 kV, 3P4W, Combined CTPT Outdoor unit shall have the following ratings:

S. NO.	PARAMETERS	VALUES
1	Rated Voltage	36 kV (rms)
2	Service Voltage	33 kV (rms)
3	Frequency	50 Hz
4	No. of Phases	3
5	Standard Impulse Withstand Voltage	170 kV Peak
6	<b>1 Minute Power Freq. withstand Voltage (on assembled CTPT Set)</b>	
6.1	Primary	70 kV (rms)
6.2	Secondary	3 kV (rms)
6.3	1 Minute wet withstand voltage	Rt. 2*70 kV Peak
7	Make of insulation paper/polyester film	To be provided by bidder
8	Density of insulation paper/polyester film	To be provided by bidder
9	Thickness of insulation paper/polyester film	To be provided by bidder
10	Oil Volume	120 Litre (Min.)
11	Oil BDV Strength	30 kV & 70 kV
12	Water Content in Oil	30 mg/kg & 40 mg/kg
13	Total weight of assembled CTPT unit	To be provided by bidder
14	<b>Current Transformer</b>	
14.1	Transformation Ratio (CT Ratio)	100/1 A, 200/1 A
14.2	Rated Output (VA Burden)	10 VA
14.3	Class of Accuracy	0.2s
14.4	Rated Continuous Thermal Current	1.2 times primary current
14.5	Short Time Thermal Current & its Duration	26.3 kA for 1 Sec.
14.6	Rated Dynamic Current	2.5 times short time thermal current rating
14.7	Number of cores	One
14.8	Instrument security factor	≤ 5
14.9	<b>Limits of Current (ratio) Error &amp; phase displacement</b>	
14.9.1	Percentage of rated current	± Percentage current (ratio) error
	1	0.75
	5	0.35
	20	0.2
	100	0.2
	120	0.2
14.9.2	Percentage of rated current	± Phase displacement in minutes
	1	30
	5	15
	20	10
	100	10



	120	10
14.10	Maximum Temperature rise over ambient temperature	55° C as per IS
14.11	Resistance of winding at 75° C per phase at HV	To be provided by bidder
14.12	Resistance of winding at 75° C per phase at LV	To be provided by bidder
<b>15</b>	<b>Potential Transformer</b>	
15.1	Transformation Ratio	33 kV/√3/ 110V/√3
15.2	Rated Output (VA Burden)	50 VA/Phase
15.3	Rated Voltage factor & time	1.2 continuous & 1.9 for 8 Hours
15.4	Class of Accuracy	0.2 s
15.5	Winding Connection	Yyn
15.6	Limit of Voltage (ratio)error	±0.2
15.7	Limit of phase displacement (minutes)	±10
15.8	Maximum temperature rise over ambient temperature	55° C as per IS
<b>16</b>	<b>Bushings</b>	
16.1	Material of bushings	Porcelain
16.2	Dimensions of bushings	As per IS 8603-2008
16.3	Minimum Creepage distance between phase and earth	25 mm/kV 900 mm (Min.)
16.4	Material for Rod of Bushings	Copper/Brass
16.5	Connector on HT bushing	Tinned Copper (6 Nos.)
16.6	Cap on Bushing	06 Nos., UV resistant, FR grade, with insulation grade of 33kV
<b>17</b>	<b>Meter Box</b>	
17.1	Material and Thickness of the Meter Box	MS sheet, Minimum 2 mm
17.2	Protection against penetration of dust and water	IP-55
17.3	Dimensions	To be provided by bidder
<b>18</b>	<b>Tank</b>	
18.1	Thickness of the CT/ PT tank	To be provided by bidder
18.2	Dimensions of tank	To be provided by bidder
18.3	Total weight of CT-PT unit (Kg)	To be provided by bidder
18.4	Weight of core and winding of CT (Kg)	To be provided by bidder
18.5	Weight of core and winding of PT (Kg)	To be provided by bidder
18.6	a) Walls & Base Thickness b) Cover Thickness	a) 3.15 mm b) 5 mm
18.7	Paint shade and thickness	RAL 7032 with double coat (85 microns min.)
18.8	Bushing distance between metal part and earth (mm)	To be provided by bidder
18.9	Clearance between HV to earth (mm)	To be provided by bidder
18.10	Pressure Release Device	Yes, Required
18.11	Oil Drain Plug	Yes, Required
18.12	Oil Level Gauge	Yes, Required
<b>19</b>	<b>Earthing Terminals</b>	Yes, 2 Nos. Required
<b>20</b>	<b>Base Mounting Channel</b>	Yes, Required

## 6. Design:

The 33kV CTPT unit shall comprise of one number three phase potential transformer and three numbers single phase current transformers contained in a fully weather proof outdoor, pole mounting type MS tank, The CTPT unit design shall be hermetically sealed & maintenance free. The combined tank shall be of rectangular shape with round edges and fabricated from tested quality of mild steel of minimum thickness 3.15 mm. The top cover of the tank shall have a thickness of 5 mm (min.) and sideward slope to allow drainage of rainwater.

The tank body shall be welded with 4 numbers inverted U-type lifting lugs made of MS sheet (min. 8 mm thickness) at 4 top corners of tank body for balanced lifting of the tank. These lifting lugs location should be such that it shall not create any hindrance while lifting it with slings. Electrostatic and Electromagnetic shielding shall be ensured to eliminate the effect of electromagnetic induction/ electrostatic discharge between the CT and the PT secondary windings. Normal current density shall not be more than 1.6 A/mm<sup>2</sup> in primary winding of the CT. **Nitrogen gas filling shall be done to prevent absorption of moisture in the field for longer life.**

The tank shall be electrically welded for accommodating instrument transformers with suitable bolted (SS 304) cover. No fuses either on primary or secondary side of PT shall be provided. The PT shall have three phase star connection with HV neutral floating. The primary winding shall be designed for unearthed neutral, i.e. for the highest system voltage 36 kV and the winding should have uniform insulation from terminal to neutral and not graded insulation. The Entry of incoming and outgoing cable of the HT Bushing shall be marked by R1, Y1, B1 & R2, Y2, B2 and the same shall be reflected in the top view of the drawing. The respective Sides shall be painted 'INCOMING' and 'OUTGOING'. The Size of the Earthing Bolts shall be M16. **Pressure Release Valve (PRV) of min 1 inch dia. shall be provided along with the arrangement of splash guard. The material of the PRV shall be brass. Oil Level indicator along with Nitrogen filling valve shall also be provided.**

### 6.1 Winding & Core

Both primary and secondary winding of PT and secondary winding of CT must be resin cast. The resin cast CT & PT shall remained dip in oil. The PT primary winding conductor shall be of Grade 3 conductors/wires. Conductor insulation used for CT primary must be of class H only. All windings of CT and PT must undergo vacuum pressure impregnation with 'H' class varnish of reputed make. After varnish impregnation all coils to be undergo epoxy resin casting with 'F' class resin of reputed make. Leads shall be brought out from epoxy casting. Leads shall be brought out from resin casting or Resin casting unit shall have automatic making unit for resin and filler with vacuum chamber. The lead size shall be same as per conductor diameter. **Copper wire is to be used for winding and it shall conform to IS: 13778 (Latest Version)**

The core material of CT PT unit shall be of high grade non ageing electrical silicon CRGO steel of first quality having low hysteresis loss and high permeability to ensure accuracy at both terminal and over current/ voltage. B-H curve of the core material to be used shall be provided by the bidder. All clearances and safety measures shall be taken in compliance of relevant sections of regulation/standards. The grade of the Core shall be ZDKH or better.

The insulating paper / polyester film used for insulation shall be of high insulation grade, excellent mechanical strength (tensile, tear and stretch), high purity, chemical stability, and heat resistance. The paper density if the used shall be approx. 60-190 g/m<sup>2</sup>. The insulating paper shall be used of Weidmann or better/ polyester film shall be used of Gharware Polyester Limited or better. The insulating materials for winding between HV and LV and between interlayer of the winding and for end turn shall be of reputed make. However, end turns shall be provided with reinforced insulation and lead connecting the bushing shall be provided with extra insulation. The lugs shall be properly crimped and soldered.

The copper conductor in secondary winding of CT shall not be less than 40 sq.mm and shall be of adequate cross-section to carry defined rated current for respective ratios. The primary winding conductor shall also be of adequate cross section area to carry 120% of full load current continuously without damaging the insulation due to overheating.

To prevent moisture entry in the bushing chamber, the nuts on the top of the stem shall be properly sealed. For HT Termination, 6 nos. high performance material insulation cap which is UV stable and track resistant shall be provided by the bidder.

## 6.2 Oil

The oil shall be filled to the required level (full-mark) with new, unused, clean, standard mineral oil in compliance with type I transformer oil as per **IS 335** and shall be free from all the traces of Polychlorinated Biphenyl (PCB) compounds. The use of recycled oil is not acceptable. The oil shall be filtered and tested for break down voltage (BDV) and moisture content before filling. Oil shall be filled under vacuum.

## 6.3 Bushing

The equipment shall be supplied with 6 Nos. outdoor single terminal, porcelain bushings of reputed make (as approved by KESCO) without arcing horns, 3 nos. for incoming and 3 nos. for outgoing, with Copper/ Brass studs as per the rating. The bushings shall be rated for 36 kV and shall be suitable for use in heavily polluted atmosphere. The bushings shall confirm to **IS: 8603/2008** for the dimensions and **IS: 5621 and IEC 60137** for other electrical requirements. To prevent moisture entry in the bushing chamber the nuts on the top of the stem shall be properly sealed.

The bidder shall provide high performance material insulation cap which is UV stable & FR grade along with CT PT Units for use on bare termination during installation and cap will cover complete bare bushing to avoid any Bird age and Transient Fault. The cap material shall be high quality for 33KV voltage.

The Size of the **HT Bushing Rods shall be 16 mm** bushing for 100/1 A & 200/1 A. The bushing shall be vertical.

All HT bushings (06 nos.) shall be provided with tinned plated brass connector so that cable jumpers can be connected in these connectors. The design of connector shall be in such a way that cable jumper up to 300 mm<sup>2</sup> size cable can be connected from top side and capable to carry full load current.

## 6.4 Steel Tank

The oil filled container incorporating the voltage transformers and current transformers should be fitted with incoming and outgoing primary terminals and secondary terminal box. The secondary terminal box shall be arranged on sides. The general arrangement drawing with 3 bushing on the incoming side and 3 bushings on the outgoing side shall be submitted along with tender. Adequate level of oil shall be maintained in the tank for proper cooling & curb flashover.

The tank shall be built with a plate of 5 mm thick top and 3.15 mm sides and bottom and with all fittings shall be capable of withstanding without leakage or distortion at the standard test pressure. All joints of the tank and fittings shall be hot oil tight and no leakage should occur during service. Both side of the joint should have continuous welding.

It shall be provided with an oil gauge. The oil gauge glass shall be fixed to the side of the raised wall of the inspection box.

The tank shall be provided with necessary lifting lugs. Tank including top cover and secondary chamber shall be hot dip Galvanized.

The secondary terminal box cover, tank cover and other vertical joints where gaskets are used may be suitably bent at least 25 mm bent with necessary sealing arrangement with sealing bolts at all corners and bolts should be at least 10 mm diameter GI bolts spaced maximum 70

mm apart. This is to safeguard against seepage of water into tank in case of damaged gasket. Eye holes shall be made in all bolts used in the tank, inspection chamber, secondary chamber, fixing of bushings for sealing.

The 6 mm gaskets shall be dovetailed without joints to prevent moisture entry. In case of dovetailed joint, they shall not be more than two. The gaskets shall be of good quality Neoprene or superior quality rubberized gasket.

## 6.5 Terminal Box

All secondary terminals shall be brought out in a weather proof secondary terminal box on one side of the combined CT/PT unit for easy access. The terminal box shall have degree of IP55 for protection against dust and water. The exterior of this terminal box shall be hot dip galvanized. Arrangement for shorting of CT secondary terminals shall be provided in the CT secondary terminal box through shorting link made of copper. The secondary terminals shall be clearly marked with identification number and polarity indications to facilitate connection to external wiring and shall comply with the requirements of the relevant standards.

The terminal box shall be provided with removable cable glands suitable for 1.1kV, 10 core X 2.5 mm<sup>2</sup>, PVC insulated, multi strand, armored cable. The following designs are acceptable for CT cable connections:

- a. Preferable: The terminal box and one end of the cable must have male-female Nylon 66 connectors/couplers of 250 series. The other end of the cable shall have bottle-type thimbles.
- b. Thimble (bottle type one side and ring type another side)

Copper cable with colour coding, and ferrule along with marking shall be provided from secondary terminal box of CTPT unit to meter box through GI pipe. The length of cable shall be 2.5 meters. The cable glands shall be of brass and shall be included within the scope of supply. Secondary terminal box cover shall have nuts, bolts and washers (all of SS 304) with hole for sealing arrangements. The secondary terminal box shall be placed at the left side of the outgoing HT terminals w.r.t. equipment.

## 6.6 Painting

All interior and exterior of tanks, meter box and other metal parts shall be thoroughly cleaned to remove all rust, corrosion, grease or other adhering foreign matter. All steel surfaces in contact with insulating oil as far as accessible shall be painted with not less than two coats of heat resistant, oil insoluble, insulating varnish. Steel surfaces exposed to the weather shall be given a priming coat of zinc chromate and two coats of powder coating shall be done. The coating shade shall be **RAL 7035 (Grey)** with thickness not less than **85 microns**. It shall not shed off or wrinkle or be removed by abrasion due to normal handling.

## 6.7 Meter Box, GI Pipe & Secondary Wiring

The meter box, GI (hot-dip galvanized) pipe and secondary wiring shall be provided with each unit. The meter box shall be made of MS with thickness of 2 mm and dimensions of approx. 500 mm (L) X 400 mm (D) X 400mm (H) and shall be suitable to accommodate KESCO's HT Energy meter. The meter box shall have degree of IP55 for protection against dust and water ingress.

The meter box shall have only front opening with two doors in order to make the meter chamber pilfer proof as well as tamper proof. The outer door shall be made of MS with provision of window made of transparent toughened glass and fitted with wire mesh for meter reading. The transparent sheet of acrylic (another polymer is not acceptable for door window). The outer door shall be provided with at least one locking and two nos. sealing arrangements. Necessary sealing arrangements shall also be provided on the inner door of the meter chamber along with

the provision of window to enable meter reading. A frame of slotted hanger shall be provided inside the Meter box on which the meter shall be mounted.

A GI pipe of 40 mm outer dia. and 1500 mm length with flanges welded at both ends shall be supplied with each unit. The two curved ends of GI pipe emanating at the end of meter box and CTPT tank, should also be of 40mm outer dia. with flange. One of the flanges provided on either ends of the GI pipe shall be bolted to the bottom of secondary terminal box of the CT/ PT unit. The bolts used for tightening the flanges shall have sealing arrangement. 1.1KV, 10 core X 2.5 mm<sup>2</sup>, PVC insulated, multi strand, armored, Copper cable with colour coding and ferrule along with marking shall be provided from secondary terminal box of CT PT unit to meter box through GI pipe. The marking on ferrule shall be RS1, R, RS2 for R phase, YS1, Y, YS2 for Y phase, BS1, B, BS2 for B phase and N for neutral. The wiring shall be neatly bunched together and length of cable shall be 2.5 meters. Suitable size of lugs shall be used to tighten the wire with the unit's secondary terminals. For the mounting of the meter box on the channel two flat plates of 5mm thick with hole for M16 bolt shall be provided on either side at top corners of the box along the axis and also at side wall bottom edge along the height. The CT/PT unit shall be complete in all respects. Any fitting, accessories or apparatus which may not have been specifically mentioned in this specification but which is/ are considered necessary shall be deemed to have included. All the bolts and iron material used shall be of SS 304.

## 6.8 Earthing

Two earthing terminals shall be adequate size protected against corrosion and metallicly clean and identified by means of the sign marked in a legible and indelible manner on or adjacent to the terminals.

- a) All bolts should be provided with 2 flat washers and a spring washer with a nut.
- b) Conservator should not be provided for these CTPT sets.
- c) The Secondary terminal box incoming hole should be 32 mm diameter and at a suitable height from bottom to avoid replacement/ modification of secondary wires pipe when CTPT set is replaced. The secondary terminals size should be 6 mm diameter, 25 mm stem length, 2 flat washers with 3 nuts of brass material should be provided. The terminals should be provided at least 70 mm height from incoming hole and clearances shall be as per IS to avoid shorting terminals due to secondary wires pipe.
- d) Secondary chamber shall have double door (inner & outer) with suitable arrangement for sealing of both the doors. The inner door shall be of transparent polycarbonate so that secondary terminal connections can be viewed without breaking the inner door seals. The inner door shall be provided with suitable handle/knob.

## 6.9 Mounting Arrangement

The under base of all CTPT sets shall be provided with two 75 x 40 mm GI channels and foundation dimensions shall be suitable placing with tank base uniform for all sets with only +/- 2 mm tolerance, to avoid modification of structure/ plinth, whenever CTPT set is replaced.

## 6.10 NAME PLATE AND MARKING

The unit shall be provided with a name plate clearly visible and effectively secured against removal. The name plate shall be indelibly and distinctly marked with all essential particulars as per relevant standards along with the following.

- i) Manufacturer's name
- ii) Month and Year of manufacture (MM/YYYY)
- iii) Serial number and Type designation
- iv) Rated primary and secondary currents
- v) Rated frequency
- vi) Rated output and the corresponding accuracy class

- vii) Highest system voltage
- viii) Rated insulation level
- ix) Rated short time thermal current
- x) Rated dynamic current if different than 2.5 times the rated STC rating
- xi) Rated primary and secondary voltage
- xii) Rated voltage factor and corresponding rated time
- xiii) Number of phases and method of connection
- xiv) Earthed or unearthed
- xv) Guarantee period
- xvi) Reference standard
- xvii) Property of KESCO.

The following to be marked with black ink on yellow paint with font size of 200, on the tank body on two opposite faces:

- i) CT Ratio (e.g. 200/1 A)

## 7. Tests

All routine, acceptance & type tests shall be carried out separately in accordance with the relevant IS/IEC. All routine/acceptance tests shall be conducted on sample units as per IS and the reports has to be sent to KESCO, in case of material inspection at factory. All routine/acceptance tests shall be witnessed by KESCO's authorized representative nominated by MD KESCO. All the components shall also be type tested as per the relevant standards. For Bushings all the tests defined in IEC 60137 shall be conducted. KESCO reserves the right to get the type test done on any of the supplied lot by the bidder. If the Units fail the testing, the bidder shall replace the entire lot, free of cost. For CT/PT unit following tests shall be necessarily conducted on CTs and PTs in addition to the tests specified in IS/IEC.

### 7.1 Type Test

#### A. For CT

- (i) Verification of Terminal marking & Polarity
- (ii) Short time current tests
- (iii) Temperature rise test
- (iv) Lightning impulse test for current transformers for service in electrically exposed installation
- (v) High voltage power frequency wet Withstand voltage tests on outdoor current transformers up to and including 245 kV
- (vi) Determination of errors or other characteristics according to the requirements of the appropriate designation or accuracy class
- (vii) Instrument Security Current Test
- (viii) Chopped lighting impulse test

#### B. For PT

- (i) Verification of Terminal marking & Polarity
- (ii) Lightning impulse test for voltage transformers for service in electrically exposed installation
- (iii) High voltage power frequency wet Withstand voltage tests on outdoor voltage transformers up to and including 245 kV
- (iv) Determination of errors or other characteristics according to the requirements of the appropriate designation or accuracy class
- (v) Chopped lighting impulse test
- (vi) Short circuit withstand capability test

### C. Transformer Bushings

- (i) Wet power frequency voltage with stand test.
- (ii) Dry lightning impulse voltage with stand test.
- (iii) Temperature rise test.
- (iv) Thermal short time current withstand test.
- (v) Cantilever load withstand test.

## 7.2 Routine Test

### A. For CT

- (i) Verification of terminal marking and polarity
- (ii) Power frequency dry withstand tests on primary windings
- (iii) Power frequency dry withstand tests on secondary windings
- (iv) Over voltage inter-turn tests
- (v) Partial discharge test in accordance with IS
- (vi) Determination of errors or other characteristics according to the requirements of the appropriate designation or accuracy class

### B. For PT

- (i) Verification of terminal marking and polarity
- (ii) Power frequency dry withstand tests on primary windings
- (iii) Power frequency dry withstand tests on secondary windings
- (iv) Over voltage inter-turn tests
- (v) Partial discharge test in accordance with IS
- (vi) Determination of errors or other characteristics according to the requirements of the appropriate designation or accuracy class

### C. For Oil

- (i) BDV testing (as per IS 335)
- (ii) Water content test (as per IS 335)

### D. For Enclosure

- (i) Enclosure tightness test, as per IEC 61869 Part-1

## 7.3 Acceptance Test

Same as Clause 7.2

## 8. Type Test Certificates

The bidder shall furnish the type test certificates for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at CPRI/ERDA/ NABL accredited lab, as per the relevant standards. Type tests should have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid.

## 9. Guarantee:

The supplier shall give Guarantee for the satisfactory functioning of the material / equipment as per specification, for a minimum period of **60 months from date of commissioning or 66 months from the last date of receipt of material in good condition at departmental store for each consignment whichever is earlier**. The bidder shall be liable to undertake the replacement or rectify defects at his own cost within mutually agreed timeframe. The bidder shall further be responsible for free replacement for another period of three years from the end of guarantee period for any "latent defect" if noticed and reported to purchaser.

**10. Fittings:**

<b>Sl. No.</b>	<b>Particulars</b>	<b>Quantity</b>
<b>1</b>	Rating & Terminal marking plates (non-detachable)	1 No.
<b>2</b>	Earthing terminals with bolt, nut & washers for connecting earth wire	2 Nos.
<b>3</b>	Lifting Lugs	
<b>3.1</b>	For main tank	4 Nos.
<b>3.2</b>	For top cover	2 Nos.
<b>4</b>	Pressure relief valve with metallic cap	1 No.
<b>5</b>	Bimetallic terminal connectors on the HV bushings	6 Nos.
<b>6</b>	HV bushings Outdoor	6 Nos.
<b>7</b>	Secondary terminals bushings	As per requirement of CT ratio
<b>8</b>	Base Mounting Channel	2 Nos.



## GURANTEED TECHNICAL PARTICULARS

**For Supply of 33 kV, 3P4W Oil cooled, Combined CTPT Units with Other Accessories  
Such as Meter Box, GI Pipe, Control Cable.**

Sl. No.	Particulars	Requirement	Bidder's Offer
1	Manufacturer's Name & Address	To be indicated	
2	Manufacturer's Type & Design	To be indicated	
3	Type of Cooling	To be indicated	
4	Nominal System Voltage	33 kV	
5	Highest System Voltage	36 kV	
6	Frequency	50 Hz	
<b>7</b>	<b>Specification of CT &amp; PT of Metering Unit</b>		
<b>(A)</b>	<b>Current Transformer</b>		
i	Type	Oil immersed	
ii	Accuracy Class	0.2 s	
iii	Rated Output	10 VA	
iv	Insulation Level	70 kV <sub>rms</sub> /170 kV <sub>pk</sub>	
v	Short time thermal current rating for 1 sec	25 kA for 1 Sec.	
vi	Saturation factor	To be indicated	
vii	Normal current density of primary winding	<= 1.6 Amp/mm <sup>2</sup>	
viii	Knee Point Voltage	To be indicated	
ix	Continuous percentage over load	120%	
x	ISF	As per IS	
<b>(B)</b>	<b>Potential Transformer</b>		
i	Type	Oil immersed	
ii	PT Ratio	33 kV/√3/ 110V/√3	
iii	Rated output VA/phase	50 VA	
iv	Class of accuracy	0.2 s	
v	Insulation level	70 kV <sub>rms</sub> /170 kV <sub>pk</sub>	
vi	Winding Connection	Star/Star	
vii	Rated voltage factor & duration	To be indicated	
<b>8</b>	<b>Details of Metering Unit</b>		
<b>(A)</b>	<b>Current Transformer</b>		
<b>I</b>	<b>Weight of core &amp; winding</b>		
i	Core	To be indicated in a separate sheet for each rating	
ii	Primary Winding		
iii	Secondary Winding		
<b>II</b>	<b>Resistance of winding per phase at 75° C</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>III</b>	<b>Cross Section area of each turn (in mm<sup>2</sup>)</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>IV</b>	<b>No. of turns</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		

<b>V</b>	<b>Winding Material type</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>VI</b>	<b>Core Material type</b>	To be indicated in a separate sheet for each rating	
<b>(B)</b>	<b>Potential Transformer</b>		
<b>I</b>	<b>Weight of core &amp; winding</b>		
i	Core	To be indicated in a separate sheet for each rating	
ii	Primary Winding		
iii	Secondary Winding		
<b>II</b>	<b>Resistance of winding per phase at 75° C</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>III</b>	<b>Cross Section area of each turn (in mm<sup>2</sup>)</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>IV</b>	<b>No. of turns</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>V</b>	<b>Winding Material type</b>		
i	Primary	To be indicated in a separate sheet for each rating	
ii	Secondary		
<b>VI</b>	<b>Core Material type</b>	To be indicated in a separate sheet for each rating	
<b>(C)</b>	<b>MS Tank</b>		
<b>I</b>	<b>Construction Material</b>	MS Hot dip Galvanized tank	
<b>II</b>	<b>Galvanization of Tank</b>	Metering unit tank including top cover, secondary chamber shall be hot dip galvanized	
<b>III</b>	<b>Tank Dimension in mm</b>		
i	Length	To be indicated	
ii	Breath	To be indicated	
iii	Height	To be indicated	
<b>IV</b>	<b>Thickness</b>		
i	Side walls, Bottom	3.15 mm	
ii	Top	5 mm	
<b>V</b>	Edge Bending	To be provided on top cover	
<b>VI</b>	Standard pressure & duration that can be withstand	To be indicated	
<b>(D)</b>	<b>Oil</b>		
i	Grade of Oil	To be indicated	

ii	Quantity of oil in Liters.	To be indicated (min 120 Liters.)	
<b>(E)</b>	<b>HV Bushing</b>		
i	Type	To be indicated	
ii	Make	To be indicated	
iii	Creepage distance of HV Bushing	900 mm (Min.)	
iv	Bi-metallic terminal connector	6 Nos. Bi-metallic terminal connectors with nut, plain washer, spring washer & check nut suitable for aluminium conductor as per CT rating to be provided	
<b>(F)</b>	<b>Gasket Details</b>		
<b>I</b>	<b>Type of Gasket to be used on</b>		
i	Top Cover tank	To be indicated	
ii	Secondary terminal box	To be indicated	
iii	HV Bushings	To be indicated	
<b>II</b>	<b>Thickness of Gasket to be used on</b>		
i	Top Cover tank	To be indicated	
ii	Secondary terminal box	To be indicated	
iii	HV Bushings	To be indicated	
<b>(G)</b>	<b>Studs Details</b>		
<b>I</b>	<b>Primary Stud</b>		
i	Material	To be indicated	
ii	Size	M12 up to 20A & M16>20A	
<b>II</b>	<b>Secondary Stud</b>		
i	Material	To be indicated	
ii	Size	M6	
<b>III</b>	Gap between I/C & O/G Studs of same phase	Minimum 15° angle with the vertical axis to maintain a good distance at stud levels.	
<b>IV</b>	All bolts, nuts, washers in contact with non-ferrous parts shall be of brass. All other parts including bolts & nuts liable to corrosion, forming integral part of the equipment shall be SS.		
<b>(H)</b>	<b>Identification/Marking</b>		
<b>I</b>	<b>Primary Terminals</b>		
i	Incoming	RM, YM, BM	
ii	Outgoing	RL, YL, BL	
<b>(I)</b>	<b>Secondary Terminals</b>		
i	CT Marking	RS1-RS2-RS3, YS1-YS2-YS3, BS1-BS2-BS3	
ii	PT Marking	R, Y, B, N	
<b>(J)</b>	<b>Clearance</b>		
i	Minimum Phase to Phase distance	430 mm	
ii	Shortest distance between metal part & earth	380 mm	
<b>(K)</b>	<b>Meter Box</b>	As per tender requirement.	
i	Material & Thickness of the meter box		

ii	Protection against penetration of dust & water		
iii	Dimensions		
iv	Locking & Sealing Arrangement	Yes/No	
<b>(L)</b>	<b>G I Pipe</b>	As per tender requirement.	
i	Size		
ii	Length		
<b>(M)</b>	<b>Secondary Wire</b>	As per tender requirement.	
i	Size		
ii	Type		
iii	Lugs Provided	Yes/No	
iv	Ferrule Provided	Yes/No	
v	Cable Length	2.5 Mtr.	
<b>9</b>	Total weight of complete MU including all accessories & oil	To be indicated	
<b>10</b>	Maximum attainable winding temperature	85° C	
<b>11</b>	Double door type secondary chamber & sealing arrangement	Secondary chamber shall have double door (inner & outer) with suitable	
		Arrangement for sealing of both the doors. The inner door shall be of transparent polycarbonate so that secondary terminal connections can be viewed without breaking the inner door seals. The inner door of the secondary chamber should be of hinge type with suitable handle/knob & sealing arrangement.	
<b>12</b>	Name Plate	As per tender requirement.	
<b>13</b>	Sealing Arrangements	The secondary terminal box cover, tank cover sealing arrangements have to be done with sealing bolts at all corners and bolts should be at least 10 mm diameter GI bolts spaced maximum 70 mm apart. Sealing holes also to be provided in the bolts fitted with bushing & body for sealing, so that one cannot open the bushing without breaking seals. Eye holes shall be made in all bolts used in the tank, secondary chamber, fixing of bushings for sealing.	
<b>14</b>	Fittings	As per tender clause	
<b>15</b>	Packing	Individual Metering Unit shall be packed in wooden	

		crate box (cage type) with the MU fitted with the base to avoid damage during transportation.	
<b>16</b>	Equi Potential Link	02 Nos. of diagonally Cu. Strip, Equi potential link to be provided between top cover and bottom cover of the MU.	

## GURANTEED TECHNICAL PARTICULARS

**For Oil to be used in 33 kV Metering Units**

Sl. No.	Particulars	Requirement	Bidder's Offer
1	Appearance	The oil shall be clear and transparent and free from suspended matter or sediments and should conform to IS - 335 or latest versions.	
2	Density at 27 <sup>o</sup> C (Max)	0.89 Gm/Cm <sup>3</sup>	
3	Kinematic Viscosity at 27 <sup>o</sup> C (Max)	27 CST	
4	Interfacial Tension at 27 <sup>o</sup> C (Max)	0.04 N/M	
5	Flash Point, pensky – marten (Closed)(Min)	140 <sup>o</sup> C	
6	Pour Point (Max)	-10 <sup>o</sup> C	
7	Neutralization Value: c) Total acidity (Max) d) In-organic acidity alkalinity	0.01 Nil	
8	Corrosive Sulphur	Non-corrosive	
9	Dielectric dissipation factor (Tan delta at 90 <sup>o</sup> C (Min))	0.005	
10	Specific resistance (Resistivity) c) At 90 <sup>o</sup> C (Min) d) At 27 <sup>o</sup> C (Min)	30x10 <sup>12</sup> ohms-cm 500x10 <sup>12</sup> ohms-cm	
11	Oxidation Stability c) Neutralization value after oxidation (Max) d) Total sludge after oxidation (Max)	0.5 mg KOH/g 0.05% by weight	
12	Ageing characteristics after accelerating ageing (open breaker method with copper catalyst) for 96 Hrs. (as per ASTM D. 1934-1978)		
a	Specific resistance (Resistivity)		
	At 27 <sup>o</sup> C (Min)	2.5x10 <sup>12</sup> ohms-cm	
	At 90 <sup>o</sup> C (Min)	0.5x10 <sup>12</sup> ohms-cm	
b	Dielectric dissipation factor tan delta at 90 Deg. C (max)	0.50	
c	Total sludge Value (Max)	0.5	
d	Total Acidity (Max)	0.5	
13	Presence of oxidation inhibitor	Nil	
14	Water content (Max)	50 ppm	

**SCHEDULE P-I (PART-II)**  
**SUMMARY BID PRICE SCHEDULE AGAINST Kesco-e-tender No.-30/24-25**  
**Kanpur Electricity Supply Company Ltd.**

Sl. No.	Item	Unit	Qty.	Unit Work price (Rs)					Total Price (Rs) (4X11)	
				Unit Ex works rate per Month in Rs.	Duties and taxes		Unit ex- Works price including duties and taxes (5+6+7)	Unit & insurance		Unit FOR(D) price (8+10)
					GST	Any other tax				
1	2	3	4	5	6	7	8	9	10	11
1	Metering Unit O/D Type CT/PT 11 KV CTR 10/5AMP.	Nos	300							
2	Metering Unit O/D Type CT/PT 11 KV CTR 20/5AMP.	Nos	150							
3	Metering Unit O/D Type CT/PT 11 KV CTR 30/5AMP.	Nos	60							
4	Metering Unit O/D Type CT/PT 11 KV CTR 50/5AMP.	Nos	40							
5	Metering Unit O/D Type CT/PT 11 KV CTR 100/5AMP.	Nos	30							
6	Metering Unit O/D Type CT/PT 11 KV CTR 150/5AMP.	Nos	5							
7	33 KV CT/PT Unit 100/1A.	Nos	20							
8	33 KV CT/PT Unit 200/1A.	Nos.	10							

1. The above quantity is tentative and may vary  $\pm 20\%$