# KANPUR ELECTRICITY SUPPLY COMPANY LTD

# KANPUR



## E-Tender Specification No. 06/IT Cell/24-25

For

## ENGAGEMENT OF AGENCY for Upgrading Existing KESCo RF Network for 3 years

## Date of opening 07.09.2024

Cost of Tender Document (Including GST): Rs. 5900/-

EMD Rs. 129373/-

KESCo/ET-06/IT Cell/24-25

SI. NoTender No. 06/IT Cell/24-25
Issued to
Date
DD No./Cheque No
Issued by (Name)
Designation
Date
Official Seal

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# 2. कानपुर विद्युत आपूर्ति कम्पनी लिमिटेड 14/71, सिविल लाइन्स ''केसा हाउस'' कानपुर

अधोहस्ताक्षरकर्ता द्वारा ई—निविदा पृथक—पृथक दो भागों में निम्न सामग्रियों हेतु केस्को ई—निविदा वेबसाईट <u>https://etender.up.nic.in</u> पर आमंत्रित की जाती हैं। ई—निविदा प्रपत्र पूर्ण कर निविदादाताओं द्वारा वेबसाईट पर खुलने की तिथि के अपरान्ह 12:00 बजे तक अपलोड की जा सकती है। उक्त ई—निविदा उसी दिन 15:00 बजे से 17:00 बजे तक वेबसाईट पर सार्वजनिक रूप से खोली जायेंगी। उक्त तिथि को अवकाश घोषित होने पर निविदायें अगले कार्यदिवस में नियत समय पर खोली जायेंगी।

ई—निविदा धनराशि का भुगतान आर0टी0जी0एस0 (खाता सं0 <u>7723508014</u> आई.एफ.एस.सी.— <u>IDIB000K587</u>) के रूप में, केस्को कानपुर के पक्ष में देय होगी। ई—निविदा प्रपत्र निविदा खुलने की तिथि पर दिये गये समय से दो घण्टे पूर्व तक वेबसाईट से डाउनलोड किया जा सकता है। वेबसाईट पर निविदा प्रपत्रों के साथ यू0टी0आर0 की स्कैण्ड प्रति अपलोड करना अनिवार्य है।

ई—निविदा के प्रथम भाग में धरोहर धनराशि का भुगतान सिर्फ आर0टी0जी0एस0 के माध्यम से ही स्वीकार किया जायेगा जो कि उपरोक्त खाते में देय होगी एवं निविदा प्रपत्र के प्रथम भाग मे निर्धारित पी0 क्यू0 आर0 एवं तकनीकी अभिलेख होंगे तथा निविदा के द्वितीय भाग में दरें एवम् व्यवसायिक शर्तें होगी, बिना धरोहर धनराशि के तथा सशर्त निविदायें खोली/स्वीकार नहीं की जायेंगी।

निविदा सं०	विवरण	धरोहर धनराशि (रू0)	निविदा धनराशि रू0 में (वैट के साथ)	निविदा खोलने की तिथि
06 / आई0टी0सेल / 24—25	Engagement OF Agency for Upgrading Existing KESCo RF Network for 3 years	129373/-	5900/-	07.09.2024

उपरोक्त ई—निविदा की पूर्ण प्रक्रिया केस्को की ई—टेन्डरिंग बेवसाइट <u>https://etender.up.nic.in</u> के माध्यम से की जायेगी।

तकनीकी योग्यता पूरा न करने वाले निविदादाता के निविदा पर विचार नहीं किया जायेगा। सामग्री कय की मात्रा घट बढ़ सकती है।

अधोहस्ताक्षरकर्ता के पास बिना कोई कारण बताये किसी एक अथवा समस्त निविदाओं को स्वीकृत⁄अस्वीकृत करने

का पूर्ण अधिकार सुरक्षित होगा।

 उक्त ई0निविदा में यदि कोई शुद्धीकरण या विस्तारण होता है तो वह ई0निविदा वेबसाइट <u>https://etender.up.nic.in</u> पर अपलोड किया जायेगा, जिसका अलग से प्रकाशन नहीं किया जायेगा।

राष्ट्रहित में बिजली बचायें।

(अधिशासी अभियन्ता) आई0टी0सेल

# **INSTRUCTIONS TO TENDERERS**

### 2.1 <u>PURCHASE OF TENDER</u>

- 2.1.1 All the tenderers have to download the tender document for participation in the tender.
- 2.1.2 The E-Tender document can be downloaded from e-procurement portal of Kesco <u>www.kesco.co.in / https://etender.up.nic.in, duly validated on or before due date and time at e-procurement portal but the price bid proposal (part II) must be submitted in given format on e-procurement portal of Kesco (www.kesco.co.in / https://etender.up.nic.in ). Tender Fee will be deposited online and scanned copy of EMD and Techno-Commercial proposal (part I) must be uploaded online and also it is must to submit these documents in original on or before due date at addres given below only. EMD fee will be deposited online in favour of KESCO, Kanpur payable at Kanpur .</u>

### 2.1.3 EMD/Tender Fees Details:

a) <u>Tender fees can be deposited through RTGS(A/c no. 7723508014, IFSC code-IDBI000K587) in favour of KESCo., Kanpur.</u>

## b) <u>EMD fees can be deposited through RTGS(A/c no. 7723508014, IFSC code-IDBI000K587)</u> Scanned copy of UTR must be uploaded with tender document by the bidder.

## Without EMD, part-II of above tender shall not be opened.

2.1.4 The tenders of those firms who do not purchase tender specifications or not submit the required tender cost along with the tender (In case tender documents are downloaded directly from **Kesco E-tender** website <u>www.kesco.co.in</u> / <u>https://etender.up.nic.in</u>, shall not be considered.

### 2.2 PREPARATION OF TENDER

- 2.2.1 Before submission of the tender, the Tenderers are required to make themselves fully conversant with the Technical Specification, Drawing, Instruction to Tenderer, General Requirement of Specifications including Schedules and General Conditions of Contract of Form-A, as may be applicable so that no ambiguity arises at a later date in any respect.
- 2.2.2 Any inconsistence or ambiguity in the offers made by Tenderer shall be interpreted to the maximum advantage of KESCo and disadvantage to the Tenderer. The Tenderer shall have no right to question the interpretation of the KESCo in all such cases and the same shall be binding on the tenderer.
- 2.2.3 The tender should be prepared and submitted strictly in accordance with the instruction contained in these specifications. The tender should be complete in all respect. Tender must be submitted in the manner specified on the attached prescribed Schedule and/or copies thereof. To complete the proposal, the Tenderer must fill in the tender form, Declaration, all Schedules & datasheet, annexed with the specification, item in accordance with the instructions and notes supplementary thereto. The interpolations, insertions, cutting & corrections made in the tender offers should be duly initiated by the tenderer.
- 2.2.4 Tenderer should supply the data required, in sheets annexed with the specifications by typing at appropriate places against each item to facilitate preparation of comparative statements. These sheets must be properly sealed and signed by authorized representative of the Tenderer

certifying the data submitted. All schedules must be duly filled in and shall be enclosed with each copy of the tender. In case the Tenderer does not supply any of the required information in the

tender, necessary loading may be made while evaluating the prices of his offer without giving him any further opportunity to supply or clarify the same.

The Tenderers are notified that in case the required information are not furnished in the specified proforma/schedules attached with the specification, KESCo shall not be responsible for any error in the evaluations of their tender on this account.

Further, the failure to comply with this requirement may result in the rejection of the tender at the discretion of KESCO.

- 2.2.5 KESCO may revise or amend these specifications and drawings etc. prior to the date notified for opening of tenders. Such revision/amendment, if any, will be communicated to all prospective tenderers as amendment/addendum to the specification maintaining reasonable time schedule for preparation of tender by the Tenderers.
- 2.2.6 A set of technical, descriptive and illustrative literature along with drawing must accompany each copy of the tender so that clear understanding of equipment offered is obtained.
- 2.2.7 Tenderer shall ensure to put initials on each and every page of the tender. Last page of each document forming part of the tender shall bear full signature under official seal fully disclosing the name, designation and relationship with the firm to the signatory. In case of partnership concern, the tender may be signed by all the partner of the firm or one of them holding power of attorney (copy of the power of attorney of the signatory of bid shall be submitted with the bid). In case of corporation/company, tender may be signed either by the president or secretary of such authority to be furnished alongwith the offer). Besides this, the Tenderer shall ensure to furnish the following information
  - i) Name, designation, profession with postal address of all the partners. Directors and other persons authorized to conduct business in respect of this tender.
  - ii) Postal addressed of the firms works, Regd. and Head offices, Sales office and Local office etc.
  - iii) Names and postal address of their authorized local representative/Liaison officers.
- 2.2.8 The tender sent by post must be posted by registered Post with AD sufficiently in advance so as to reach the KESCO by the scheduled date and time submission of tender. Any tender received after the date and time of submission even on account of Postal delay shall not be opened. The tenderers are, therefore, requested to ensure in their own interest that the tenders are delivered in time. Tender submitted by Telegram/Telex/Fax/Email etc. shall not be accepted under any circumstances.
- 2.2.9 Tenderer, if so desire, may authorize one representative for attending tender opening on his behalf. In such instance, the representative shall be required to submit the authorization certificate with his signature duly attested by the person signing tender on behalf of the tenderer. This certificate shall be submitted to the authority opening the tender. In absence of such certificate, no representative shall be allowed to participate in tender opening.
- 2.3 <u>PRE-QUALIFYING CONDITIONS</u> Enclosed in Tender documents.

#### 2.4 DATE OF CONSIDERATION

Date of consideration of all the claims of experience and financial status shall be with reference to the date of opening of the tender.

All statements and claims should by duly supported by authenticated copies of documents without which the tender is liable to be rejected summarily.

#### 2.5 <u>SUBMISSION OF TENDER</u>

2.5.1 Tenderer shall deposit E-TENDER Fee Online and submit the bid in two parts-Hard bid and electronic bid. <u>Part-I bid</u> shall be uploaded to Kesco portal (<u>www.kesco.co.in / https://etender.up.nic.in</u>) and also hard copy of it shall be submitted in sealed envelope- Envelope-1 'Containing EMD deposition intimation (It shall be deposited Online) along with confirmation of validity, Envelope-2 (Technical offer), with all referred superscriptions i.e. name of the Package, due date & time, Bidders Name & Address should be addressed to and submitted to :-

Executive Engineer (IT CELL),

Kanpur Electricity Supply Company Limited Kesa House, 14/71 Civil Lines, Kanpur-208001 Ph. No.: 9838074858; E-mail: kescoitcell@gmail.com Website: <u>www.kesco.co.in / https://etender.up.nic.in</u>

And Part-II bid (Price Bid) shall be electronic bid and shall be submitted at e-procurement portal https://etender.up.nic.in

 i) <u>TENDER BID PART-I (Envelope-1)</u> (Earnest money, confirmation of validity and proof of purchase): This part shall contain the earnest money, confirmation of validity of offer for 180 days and proof of purchase of tender document.

The cover of this part shall be super-scribed "Tender Bid Part-I Earnest Money, Validity and proof of purchase against Specification No. ..... due for opening on ......"

ii) <u>TENDER BID PART-I(Envelope-2)</u>(Technical & Commercial Bid): This part shall contain Technical & Commercial particulars and other Terms & Conditions except prices.

The cover of this part shall be super-scribed "Tender Bid Part-II Technical & Commercial Bid against Specification No. ...... due for opening on ......".

iii) <u>TENDER BID PART-II</u> (Price Bid):

This part shall contain prices only shall be <u>bid electronically</u> and shall be submitted at e-procurement portal **www.kesco.co.in** / https://etender.up.nic.in of Kesco.

The detailed BOQ structure( Schedules and annexures) are given in tender document for understanding of work structure.

- v) Tender bid Part-II only of those bidders will be opened whose tender bid Part-I shall be found appropriate in accordance with the specification.

In case tenders are not submitted in Separate parts and super-scribed as above, the same may not be considered.

2.5.2.1 TENDER BID PART-IA (Earnest money, confirmation of validity and proof of purchase):

SI. No.	E-Tender specification no.	Concerned Division	Earnest Money Deposit (Rs.)
1	06/IT CELL/24-25	IT CELL	129373

- 2.5.2.2 Tenderer is required to deposit earnest money of the amount specified above. Earnest money of inadequate value shall not be accepted. In case any Tenderer deposits earnest money of a lesser amount, his offer shall be rejected. There shall be no exemption from earnest money, even if the tenderer is registered with DGS & D, Store Purchase Section of UP or UP Small Scale Industries.
- 2.5.2.3 The earnest money shall be accepted in any of the following forms only: EMD shall have to be submitted online from any scheduled bank/ nationalized bank in favor of KESCO, Kanpur payable at Kanpur.
- 2.5.2.4 The tenderer has to specifically confirm the validity of his offer for 180 days from the date of opening in tender bid Part-I and wherever asked to be indicated.

- 2.5.2.5 Offers without proper earnest money and/or a letter confirming the validity for 180 days shall not be considered under any circumstances.
- 2.5.2.6 The earnest money shall be refunded after award is finalized. However the earnest money of successful tenderer shall be retained till such time he deposits security.
- 2.5.3 TENDER BID PART-IB (Technical & commercial):

This part of the bid shall contain all Technical, Commercial and other terms and conditions. Following documents duly filled in, must also accompany the Tender Bid Part-IB:

1.	Schedule-A	Tender Form
2.	Schedule-B	Documents regarding pre-qualification details of the Tenderer.
3.	Schedule-C	Declaration
4.	Schedule-D	Format for Curriculum Vitae
5.	Schedule-E	General Particulars
6.	Schedule-F	List of drawing/literature enclosed with the tender.
7.	Schedule-G	Deviation from Technical Specification.
8.	Schedule-H	Deviation from Instruction to Tenderer
9.	Schedule-I	Deviation from General Requirement of Specifications.
10.	Schedule-J	Deviation from General Conditions of Contract, Form A and it's ADDENDA.
11.	Schedule-K	Work Completion Schedule
12.	Schedule-L	Schedule of Quantities (Not applicable)
13.	Schedule-M	Statement giving details of Proprietorship/partnership of tendering firm.
14.	Complete Technical de	tails, specifications & literature/drawing of equipment offered.

15. Income Tax clearance certificate.

Note: No price is to be indicated in any form in way in the above schedules for any item in Tender Bid Part-II whatsoever.

### 2.5.4 TENDER BID PART-II (Price Bid):

This part shall contain prices only shall be <u>bid electronically</u> and shall be submitted at e-procurement portal https://etender.up.nic.in

### 2.5.5 PROCEDURE FOR OPENING AND PROCESSING OF TENDERS

- 2.5.5.1 Part-I A (Earnest money, confirmation of validity and proof of purchase) of the tender accompanied with the required earnest money, validity of offer and proof of purchase of tender document' shall be publicly opened first.
- 2.5.5.2 On scrutiny, all those tenderers whose earnest money, validity of offer and proof of purchase of tender document shall be found to be of adequate amount and proper as specified shall be eligible for opening of tender bid Part-IB.
- 2.5.5.3 Tender bid Part-IB (Technical & Commercial Bid) of all those bidders, who will clear tender bid Part-IA as indicated above, shall be publicly opened just after tender bid Part-I.
- 2.5.5.4 Tender bid Part-IB shall be scrutinized and processed in this office to ensure that the same are conforming to the technical requirements of the specification. Queries as raised by the purchaser on the technical matters as may be necessary, shall be referred to the tenderers to give them chance to clarify only technical details furnished or any wanting information, in order to ensure whether the Tenderer is capable to execute the job strictly in accordance with the technical specification.

- 2.5.5.5 Such queries when raised from this office should be replied within the time stipulated from the date of dispatch of such letters from the concerned office, failing which, tenders shall be finalized on the basis of the information as may be available. It shall be, therefore in the best interest of the tenderers to give complete and comprehensive technical particulars/description and details of the equipment offered by them confirming to the technical requirement.
- 2.5.6 Based on the information in the tender bid Part-IB, offers of all the tenderers shall be evaluated by the purchaser. Based on this evaluation, price bid of only those tenderers, who will be found suitable to carry out the job, shall be opened electronically at a later announced date.

The date of opening of the price part shall be dully intimated to such tenderers, later on after completion of scrutiny.

2.5.7 Any action on the part of the Tenderers to revise the price/prices and/or change the structure of price(s) at his own instance after the opening of the tender may result in rejection of the tender and/or debarring the Tenderer from participating in other tenders by the KESCO one year in the first instance. In such cases, earnest money submitted in Part-I shall also be forfeited.

#### 2.6 <u>VALIDITY</u>

The tenders shall be valid for a period of 180 Calendar days from the date of opening. Tenders with lesser validity are liable to be rejected.

#### 2.7 PRICE & PRICE STRUCTURE

#### 2.7.1 PRICE:

- 2.7.1.1 The bidder shall quote all prices on firm price basis and no price adjustment, whatsoever, on account of variation of input materials/labour cost or due to change in the rate/applicability of taxes/duties/levies shall be applicable during the execution of the contract. Any deviation in this regard shall not be acceptable by the Owner.
- 2.7.1.2 All prices components shall remain firm during the currency of the contract.

#### 2.7.2 PRICE STRUCTURE

- 2.7.2.1 The bidder shall quote exact price for the entire scope of work covered under the package. The bidder shall also furnish breakup of the prices, in the appropriate fields of electronic price template, to facilitate payment to the contractor during various intermittent stages. The break-up of prices to be quoted shall be as below:
  - i) <u>Supply price of equipment/materials</u>: This price shall include ex-works price and all applicable taxes and duties to be indicated separately.
  - ii) Freight & Insurance Charges for delivery of all equipment/materials from the manufacturer's works to the final destination sites.
  - iii) <u>Erection Charges:</u> This price shall include unloading at site, handling, storage safe keep up, erection, testing, commissioning of the equipment/materials and to provide any such services at site as specified in the technical specification.
- 2.7.3 <u>TAXES & DUTIES</u>

All supply prices quoted should be exclusive of all taxes & duties on finished products. However Octroi charge shall be inclusive in the Ex Works price. The bidder shall also furnish breakup of the prices, in the appropriate fields of electronic price template, to facilitate payment to the contractor during various intermittent stages. The bidder shall quote all prices on firm price basis and no price adjustment, whatsoever, on account of variation of input materials/labour cost or due to change in the rate/applicability of taxes/duties/levies etc shall be applicable during the execution of the contract. Any deviation in this regard shall not be acceptable by the Owner.

#### 2.8 EVALUATION OF TENDER:

- 2.8.1 The purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required Earnest Money have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
- 2.8.2 In comparing Tenders and in making awards, the Purchaser may consider such factors as compliance with specifications relative quality and adaptability of suppliers and services experience, record of integrity in dealing, ability to furnish repairs and maintenance services, the time of delivery, capability to perform and available facilities such as adequate shops, plant equipment, technical Organization etc.

#### 2.8.3 <u>The bid shall be evaluated on the basis of the price quoted for the complete scope of work covered in</u> the package. The tenderer shall quote for the complete package .

- 2.8.4 The Bidder shall necessary quote all price components, i.e., supply price, Freight & insurance charges and erection price in the relevant schedules of the bid. Bids with incomplete scope of work shall be rejected.
- 2.8.5 No deviation shall be allowed in the Payment Terms Mentioned in Clause 15 of General Requirements of Specification.
- 2.8.6 Any rebate/discount Linked with quantity, terms of payment, any other conditions shall not be considered for the purpose of evaluation and comparison of such offer vis-à-vis others. However, the same may be availed while placing orders with such successful Tenderers.
- 2.8.7 If the Tenderer fails to quote prices for any of the item(s)/component(s) as asked for, the highest prices as quoted by other tenderer(s) for the same shall be added to arrive at ex-works price destination computed prices of such tenderer for comparison purposes only.
- 2.8.8 The price shall be compared inclusive of all taxes and duties.
- 2.8.9 Loading as may be deemed necessary in the opinion of the purchaser to bring the various offers at par each for comparison purpose only may be done at the discretion of the purchaser.

#### 2.9 SPLITTING OF ORDER

The Purchaser reserves the right to split the order among various successful tenders in any manner he chooses without assigning any reasons whatsoever.

#### 2.10 AWARD OF CONTRACT

- 2.10.1 The purchaser is not bound to accept the lowest or any tender and may reject any or all the tenders without assigning reason.
- 2.10.2 The successful Tenderer, if required to do so, may have to enter into a contract agreement with the Purchaser as per General Conditions of Form-A and its other Conditions attached with the tender specification.
- 2.10.3 For signing the contract a duly authorized representative of the successful Tenderer shall be duly intent, failing to which it shall be considered that he is not interested in accepting the offer and actions as deemed fit shall be taken by purchaser without making any further correspondence with successful Tenderer.

#### 2.11 INCOME AND SALES TAX CLEARANCE CERTIFICATE

The Tenderer shall furnish with the tender, Income Tax, and Sales Tax clearance certificate for current as well as of the preceding year from the competent authority. Alternatively, Tenderer shall give valid reasons for his inability to finish such a certificate.

The Purchaser reserves the rights to reject any tender if income tax/sales tax clearance certificates are not furnished or the reasons for the Tenderer's inability to furnish such certificates are not given clearly in the tender.

#### 2.12 <u>DEVIATIONS</u>

- 2.12.1 The offer should be strictly in line with the conditions, specifications and other requirements mentioned in this Tender specification document.
- 2.12.2 No deviations are permitted except under special circumstances.

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- 2.12.3 Should the Tenderer wish to depart from the General requirements of Technical specifications or General Conditions of Contract Form-A in any way, he must draw specific attention to such departure(s). All such deviations shall specifically be titled up in the relevant deviation schedule.
- 2.12.4 This specification is mainly for the guidance of the Tenderer/manufacturer. These requirements of necessity included some specific elements of construction and materials but are not intended to prevent improvement.
- 2.12.5 If the Tenderer proposes any deviation from this specification these will be considered provided, they are necessary either to improve the utility, performance and efficiency or to secure overall economy. This will be clearly and explicitly explained in the tender. Such deviations shall also be brought out in the prescribed schedule.
- 2.12.6 If deviations are not specifically recorded in these schedules and submitted alongwith the tender documents, it will be presumed that there are no deviations and this interpretation will be binding upon the Tenderer. Purchaser is, however, not bound to accept all or any deviations as mentioned in such schedule.
- 2.12.7 Tenderers are also advised not to enclose their own standard or printed terms and conditions for sale etc. as the same shall not be considered.
- 2.12.8 Should the Tenderer wish to depart from the provisions of the specifications, either on account of manufacturing practices or for any other reason, he shall clearly mention the departure and submit complete justification supported by information, drawings etc., as this will enable to assess the suitability of equipment(s) offered.
- 2.12.9 In the event of tenderer's specifications drawing forms and tables etc. being found to disagree with the requirement of this specification at any stage, these specifications shall be binding, unless the departures have been duly approved in writing by the purchaser.

#### 2.13 <u>CANVASSING</u>

No tenderer shall canvass any corporation's official or the Engineer, with respect to his own or other tender. Contravention of this condition will result in rejection of the tender.

This clause shall not be deemed to prevent the Tenderer, from supplying to the Engineer any further information/clarification asked for by Engineer.

#### 2.14 PENALTY CLAUSE

It may very clearly be noted by all that no modification in price reduction clause no. 27 of contract Form-A, shall be accepted i.e. broadly a price reduction of 0.5% per week subject to a maximum of 10% shall be applicable.

#### 2.15 <u>STANDARDS</u>

Except as modified by this tender specification, all materials and equipment shall conform to the requirement of the latest editions of relevant ISS/IEC, the salient point of comparison between the standards adopted and relevant ISS/IEC standards shall be indicated clearly in the proposal.

## 2.16 <u>VARIATION IN QUANTITY OF MATERIAL/EQUIPMENT</u>

The requirement indicated in this specification can vary to the extent of 50% on either side.

#### 2.17 WORK SCHEDULE

- 2.17.1 The schedule for completion of all activities covered under the package is indicated in schedule-K.
- 2.17.2 The basic consideration and the essence of the Contract shall be strict adherence to the time schedule for performing the specified Works.
- 2.17.3 This completion period is subject to the condition that the land for construction of sub-station is readily available and handed over to the contractor within a month of LOI.

In case the land is not available or site of proposed substation is changed due to any reason the completion period shall be accordingly extended.

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- 2.17.4 The completion Schedule as stated above shall be one of the major factors in consideration of the bids.
- 2.17.5 The Owner reserves the right to request for the change in the work Schedule before award of the contract to the successful Bidder.
- 2.17.6 The successful bidder will be required to prepare a detailed PERT Network and finalize the same with the Owner. In this network, schedule of supply of material should be directly linked with the progress of erection work at site.

#### 2.18 DRAWINGS & MANUALS

Along with tender, the Tenderer shall submit the manual.

### 2.19 <u>SPARE PARTS</u>

#### 2.20 FOREIGN EXCHANGE

Tenderer offering equipment without involving any foreign exchange and commitment on the part of purchaser will be considered.

#### 2.21 LOCAL CONDITIONS

2.21.1 It will be imperative on each Bidder to fully inform himself of all local conditions and factors which may have any effect on the execution of the Contract covered under these documents and specifications.

The owner shall not entertain any request for clarifications from the bidders, regarding such local conditions.

2.21.2 It must be understood and agreed that such factors have properly been investigated and while submitting the proposals. No claim for financial adjustment to the Contract awarded under these specifications and documents will be entertained by the Owner. Neither any change in the time schedule of the Contract nor any financial adjustments arising thereof shall be permitted by the Owner, which are based on the lack of such clear information or its effects on the cost of the Works to the Bidder.

#### 2.22 SCHEDULE OF QUANTITIES AND BASIS OF EVALUATION

- 2.22.1 The schedule of Quantities of supply & services to be provided under the contract is given in the Technical Specification. Such quantities of items are tentative and shall be subject to change during the execution of the contract.
- 2.22.2 Bids shall, however, be evaluated on the basis of the prices quoted by the bidders for such tentative quantities indicated in the technical specification. During the execution of the contract, the contractor shall be paid based on the unit rates quoted for the actual quantity executed as per the finalized bill of quantities.

#### 2.23 <u>INSURANCE</u>

2.23.1 The Bidder's insurance liabilities pertaining to the scope of Works are detailed out in Clauses titled 'Insurance' in General Requirements of Specifications, Form-A including its corrigenda/addenda and technical specification. Bid price shall include all the cost in pursuance of fulfilling all the insurance liabilities under the Contract.

### 2.23.2 ARITHMETICAL ERRORS

Arithmetical errors will be rectified on the following basis:

- a. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and total price shall be corrected.
- b. If there is a discrepancy between words and figures, the amount in words will prevail.
- c. If the Bidder does not accept the correction of the errors as above, his Bid will be rejected and the amount of Earnest Money forfeited.

#### 2.24 <u>AWARD CRITERIA</u>

2.24.1 The Purchaser will award the Contract to the successful Bidder whose bid has been considered to be substantially responsive and has been determined as the lowest evaluated bid, provided that the Bidder is determined to be qualified to perform the Contract satisfactorily. The Purchaser shall be the sole judge in this regard.

2.24.2 The Purchaser 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 Bidders on these grounds for the Purchaser's action.

#### 2.25 CONTRACT PERFORMANCE SECURITY AND PERFORMANCE GUARANTEE(CPG)

2.25.1 The successful bidder to whom the work is awarded shall be required to furnish a bank guarantee from a scheduled bank/ nationalized bank in specified format in Favor of the owner. The amount of this BG shall be equal to 10% of the total contract value. This bank guarantee shall be common both for contract security as well as contract performance guarantee.

In first phase this BG shall act as contract security and shall guarantee the faithful execution of the contract in accordance with the terms and conditions specified in these documents.

In the first phase this bank guarantee shall act as contract security from the date of letter of award (LOA) till the execution period of this project or the date of completion and handing over of the project, whichever comes later.

The successful bidder further guarantees that all the equipment's supplied and installed shall be free from all defects in design, material and workmanship. Also the contractor will provide full remedy to all the defects observed by the owner free of charge upon his written complaint / notice.

2.25.2 In second phase this bank guarantee shall act as contract performance guarantee and shall cover the successful and satisfactory operation of the equipment's supplied and erected under this contract for the period as specified under guarantee period.

Since as per clause 36 of Form-A and clause9 of its addenda, guarantee period is 36 months, after handing over of the complete project, this bank guarantee shall be valid for 36 months after successful completion and handing over of the project as performance guarantee.

- 2.25.3 As such this bank guarantee should be valid for a total sum period of execution period and guarantee period to cover contract security and contract performance with condition of extension from time of time if required and a further claim period of 6 months.
- 2.25.4 The Contract Performance Security is intended to secure the performance of the entire contract. However, it is not to be construed as limiting the damages stipulated in other clauses in the Bidding documents.
- 2.25.5 Upon submission of the Contract Performance Security by the Contractor, its verification and acceptance by the Owner, the earnest money deposit of the Contractor shall be released to him.

#### 2.26 Corrigendum

Should the Utility deem it necessary to amend the tender document, it shall do so by uploading the corrigendum on the website. At any time prior to the deadline for submission of the tender, the Utility may amend the tender document by issuing corrigenda. In order to provide prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the Utility can, at its discretion, extend the last date for the receipt of tender document.

2.27 Websites

The web-site are: <u>e-procurement portal www.kesco.co.in / https://etender.up.nic.in</u> of KESCo. The details regarding the tender process shall be available on the same. The eligible bidders should visit the website from time to time and get the status updates. All details uploaded on the website from time to time shall be deemed to have been provided to all the bidders.

#### 2.28 Email of the Bidder

The bidder will have to quote e-mail address of the firm along with name and mobile numbers of the key persons. Any correspondence done after opening the bid by e-mail will be treated valid.

#### 2.29 <u>AUTHORITY TO RECEIVE THE OFFERS:</u>

Tenderer shall submit the bid in two parts-Hard bid and electronic bid. <u>**Part-I bid**</u> shall be in <u>**hard form**</u> and shall be submitted in sealed envelope containing 2 envelopes-Envelope-1 (EMD online submission intimation,

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confirmation of validity, E-TENDER Fee deposition intimation), Envelope-2 (Technical offer) with all referred superscriptions i.e. name of the Package, due date & time, Bidders Name & Address should be addressed to and submitted to :-

## **Executive Engineer (IT Cell)**

Kanpur Electricity Supply Company Limited Kesa House, 14/71 Civil Lines, Kanpur-208001 Ph. No.: 9838074858; E-mail: kescoitcell@gmail.com Website: www.kesco.co.in / https://etender.up.nic.in

### And Part-II bid (Price Bid) shall be electronic bid and shall be submitted at e-procurement portal

https://etender.up.nic.in

2.30 Curriculum Vitae of Key Personals

The tenderer will submit the CV of the key persons in charge, who will be responsible for execution of the work under the package.

## Executive Engineer (IT CELL)

Kanpur Electricity Supply Company Limited Kesa House, 14/71 Civil Lines, Kanpur-208001 Ph. No.: 9838074858; E-mail: kescoitcell@gmail.com Website: www.kesco.co.in / https://etender.up.nic.in

No offer should be sent by Fax or Email. Offers received in the designated office after the due time and date mentioned above or received through Fax or e-mail shall not be opened. KESCO will not accept any liability if the bid is received late due to postal delay and/or due to any other reason whatsoever. KESCO will also not accept any liability if bids and associated documents are not received or received in parts.

## SCHEDULE 'A' Part -I TENDER FORM

To,

The Executive Engineer(IT CELL) Kesco Headquarter, Kesa House, 14/71 Civil Lines, Kanpur.

Sir,

With reference to your invitation to tender for the above I/We hereby offer to the Uttar Pradesh Power Corporation Ltd. Items in the schedule of prices and delivery annexed or such portion thereof as you determine in strict accordance with the annexed conditions of contract Form 'B'/'A' specifications and schedule of Rates to the satisfaction of the purchaser or in default thereof to forfeit and pay to the Uttar Pradesh Power Corporation Ltd. The sum of money mentioned in the said conditions.

A sum of Rs.-----in the form of ------in favors of the Kanpur Electricity Supply Company KESCo, Kanpur is enclosed with Part-1 of the offer as earnest money.

I/We hereby undertake and agree to execute a contract in accordance with the conditions of the contract.

Encl: As above

Date-----

Day of-----

200-----

Your Faithfully

Witness:

-

(Name & Signature )

(Signature of the tenderer in full)

Address:

Name

Occupation

Seal

## SCHEDULE "B" Part -I

## PRE QUALIFICATION DETAILS OF THE OFFER

- 1. Name of Applicant / Company / Firm .
- 2. Brief description of the bidder.
- (Individual Firm/Joint venture/ Private Limited Company/ Consortium) may be specified.
- 3. Details of registration with appropriate authorities (enclose the copies)
- 4. Address & phone No.
- (A) Register Office
- (B) Head Office

## 5. **Experience of execution of contracts.**

Sl.	Complete postal address	Description of job	Period of	Amount
No.	including designation of	executed	completion	
	Authority placing order,			
	Copy of order and			
	Satisfactory execution			
	Certificate may also be			
	Enclosed.			

## Note: performances certificate may also be enclosed.

6.(A) Total amount of the bidder during last three years per balance sheet:

## **Years**

## **Turnover (Amount in corers)**

- (1)
- (2)
- (3)
- (B) In case bidder is a consortium of firms, turnover of its lead manager may be detailed separated year wise. All the members of consortium shall have to fill above particulars, separately.

Full Signature: Name: Designation: Date:

Seal of the Company

## SCHEDULE"C" PART-1

## **DECLARATION**

(To be executed as a non-judicial stamp paper of Rs. 10/-with a revenue stamp of Rs 1/- price affixed)

Tender invited by

The Executive Engineer (IT CELL) Kesco Headquarter, Kesa House, 14/71 Civil Lines, Kanpur.

Tender for
Name of tenderer
Specification No. and date of opening

IN CONSIDERATION of the KESCo having treated the Tenderer to be an eligible person whose tender may be considered, the Tenderer hereby agree to the condition that the proposal in response to the above invitation shall not be withdrawn with in six months (or any extension thereof) from the date of opening of the tender , also to the condition that if there after the Tenderer does withdraw his proposal within the said period , the Earnest Money deposited by him may be forfeited to the KESCo and at the discretion of the Purchaser, the purchaser may be 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	200
Place	-Signed by	
	.State title (whether Proprietor/P	artner/Consortium)

Witness

Name of the firm

Address of the firm

Signature

Seal of the firm

## SCHEDULE "E" Part -I

## **SCHEDULE OF GENERAL PARTICULARS**

1.	Name (a)	e of the Tenderer Head Office address	:
	(b)	Registered Office address	
(c)	Postal	al address of the tenderer :	
	(c)	Telegraphic address	:
2.	Name	e and address of local representative	
and hi	s telepł	hone number, if any :	
3.	Work	ζS	
	(a)	Location and address of works	:
(b)	Total	Space occupled in sq. meters	
	(appro	roximate with in 5%) :	
	(c)	Constructed area in sq. meters	
	(appro	roximate with in 5%) :	
	Name	e and address of local representative and his e and address of the officer of the Tenderer ference shall be made for expeditious	<b>▲</b>
6.	Whetl	ther the tender is sole proprietor/ partnership	o concern Private Ltd.
		pany/ Public Under taking/ joint venture con	
_			lete information Name & address in respect of each
Partne	r/Direc	ctors of consortium members. )	

7. Name of foreign collaborator, if any

8. Whether the designs are their own or obtained from other sources. If from other sources . If from other sources the same may be indicated.

9. The Name, designation, qualification and experience of the engineer employed by the tenderer in design, development and manufacturing of the quoted equipment.

10. Authorised capital of the company.

11. Total annual turnover of the firm during last five financial years

12. Actual production per year of the equipment quoted. During last five financial years giving quantity and bill value rounded off two decimal place of Rs. Lacs excluding Central Excise.

13. Manufacturing capacity per month of the quoted equipment ( item wise)

14. State the name and designation of your relative (s) if any working in KESCo.

15. 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.

16. Whether certificates for satisfactory performance of offered equipment enclosed, if yes ,give the quantity to which it refers.

17	Whether quoted ex- works price are firm	Yes/No		
18	Whether ex- works prices quoted or not.	Yes/No		
19	Whether packing, forwarding fright & insurance Cover (for	r transit plus		
30 days storage thereafter) has been quoted beside ex-works prices (All				
these charges are to be clubbed) Yes/No				

20. Whether the erection, testing& commissioning prices are quoted or Not

		Yes/No
21.	Terms of payment as mentioned in relevant clause are acceptable or not	
22		Yes/No
22	Give Sales tax/ Trade tax registration no. (Enclose last clearance certificate )	
23.	<ul><li>(1) Central</li><li>(2) State</li></ul>	
23.	Income tax clearance certificate of current and the preceding tear	
enclos	sed or not	Yes/No
24.	Have you ever been declared bankrupt? If yes please give details	Yes/No
25. the de	Whether the tenderer is agreeable to execute the contract in case viations stipulated by him are not acceptable to the	
purch		Yes/No
26.	Give two reference (Name, Designation and complete postal address) who can rectify Tenderer's financial status and capacity to undertake such works. One of the reference should be from any scheduled nationalised bank in India.	Yes/No
27. rebate	Have you offered and discount and if so, than but is the / discount in rupees.	

Seal of the Company

Full Signature: Name: Designation: Date:

## **SCHEDULE "F"**

Part -I

## LIST OF DRAWINGS & LITERATURE ENCLOSED WITH THE TENDER

Sl. No. Drawing / Literature No. Title

Seal of the Company

Full Signature: Name: Designation: Date:

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KESCo/ET-06/IT Cell/24-25

## SCHEDULE 'G

## Part -I

## **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 deviation 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 by which the tender price will there by increase/ decrease.

Sl. No.	Page No.	Clause NO. and Stipulation	Deviation
	-	in KESCo Specification	

The Tenderer hereby certifies that the above mentioned are the only deviations from the "Technical Specification".

Full Signature: Name: Designation: Date:

Seal of the Company

KESCo/ET-06/IT Cell/24-25

## SCHEDULE "H" Part -I

## **DEVIATIONS FROM "INSTURCTIONS TO TENDERERS**

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 deviation 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 by which the tender price will there by increase/ decrease.

Sl. No.	Page No.	Clause NO. and Stipulation	Deviation
		in KESCo Specification	

The Tenderer hereby certifies that the above mentioned are the only deviations from the "Instructions to Tenderers".

Seal of the Company

Full Signature: Name: Designation: Date:

## SCHEDULE "I" Part-I

## DEVIATIONS FROM GENERAL REQUIREMENTS OF 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 deviation 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 by which the tender price will there by increase/ decrease .

Sl. No.	Page No.	Clause NO. and Stipulation	Deviation
		in KESCo Specification	

The Tenderer hereby certifies that the above mentioned are the only deviations from the "General requirements of specification".

Full Signature: Name: Designation: Date:

Seal of the Company

KESCo/ET-06/IT Cell/24-25

## SCHEDULE "J" Part-I

## DEVIATIONS FROM GENERAL CONDITIONS OF CONTRACT FORM B"

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 deviation 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 by which the tender price will there by increase/ decrease

Sl. No.	Page No.	Clause NO. and Stipulation	Deviation
	-	in KESCo Specification	

The Tenderer hereby certifies that the above mentioned are the only deviations from the "General Conditions of Contract Form A/B".

Full Signature: Name: Designation: Date:

Seal of the Company

## <u>SCHEDULE "K"</u> Part I

## WORK COMPLETION SCHEDULE

The following is work completion schedule which shall be followed in completion of the work covered under the above package. The periods in indicated in, from the date of insurance of notification of Award of Contract.

Sl.No.	Activity	Completion period in months
1.	Completion of detailed engineering	
2.	Manufacturing of equipment / materials.	
	(a) Commencement	
	(b) Completion	
3.	Shipments	
	(a) Commencement	
	(b) completion	
4.	Establishment of site office	
5.	Erection	
	(a) Commencement	
	(b) completion	
6.	Testing & Pre-commissioning	
	(a) Commencement	
	(b) completion	
7.	Commissioning	
8.	Total time period required to complete the whole	
	work from the date of award of contract.	

Note: Completion period of parallel activities should be clearly indicated.

Full Signature: Name: Designation: Date:

Seal of the Company

## SCHEDULE "M"

## Part I

## STATEMENT GIVING DETAILS OF PROPRIETOR/ PARTNERS/ DIRCTORS/ EXCUTIVES/ PRSSIDENT/ SCRETARY OF TENDERING FIRM The Executive Engineer (IT CELL)Kesco Headquarter, Kesa House, 14/71Civil Lines, Kanpur.

Sl.No.	Full Name Designation	Full address permanent official address	Telephone No.	Full specimen Signature	Relationship with firm's Proprietor
1.	FOR PERSONS SIGNIN	G TENDERS			
	1. 2.				
	3.				
2.	PROPRIETOR				
	1. 2.				
	3.				
3.	PARTNERS				
5.	1.				
	2.				
	3.				
4.	DIRECTORS				
	1.				
	2.				
	3.				
5.	EXECUTIVES				
	1.				
	2.				
	3.				
6.	PRESIDENT/SECRETAI	RY (AS THE CA	SE MAY BE	()	
	1.	<b>`</b>		,	
	2.				
	3.				

Note:

(1) Above details of consortium firms may be specified separately.

(2) In each the person who has signed the tender document must enclosed the attested photocopy of power of attomey for singing the tender (To be marked as Schedule-M)

## Seal of the Company

Full Signature: Name: Designation: Date:

## SCHEDULE 'Q' Part II

## SCHEDULE OF QUANTITIES AND PRICES FOR SPARE PARTS RQUIRED BY THE PURCHASER

Sl.No.	item	Unit quo in	ted price rs.	Total unit Price (Rs.)	Present duties &	rates of & taxes
		Ex-works	packing Forwarding Freight and Transit cum 30 days Storage Insurance		Excise Duty %	
1	2	3	4	5	6	7

NOTE: The quoted prices of spare parts shall be "FIRM" in all respect.
Seal of the Company

Full Signature:
Name:
Designation:

Date:

KESCo/ET-06/IT Cell/24-25

#### SCHEDULE P-2 PART-II SCHEDULE OF PRICE INCREASE/ DCREASE DUE TO DEVIATION FROM SPECIFICATION

Sl.No.	ITEM	Unit price in Rs.	Total price in Rs.
1.	Price effect due to deviations		
	mentioned in SHEDULE 'G'		
2.	Price effect due to deviations		
	mentioned in SHEDULE 'H'		
3.	Price effect due to deviations		
	mentioned in SHEDULE 'I'		
4.	Price effect due to deviations		
	mentioned in SHEDULE 'J'		

Seal of Company

Full Signature Name: Designation: Date:

KESCo/ET-06/IT Cell/24-25

## **3.PRE -QUALIFICATIONS REQUIREMENT**

The bidder shall have to necessarily meet the following prequalifying conditions: -

- 1. The bidder should have successfully executed similar type of work in last three financial years from the date of opening of bid part-1 in Central Govt/State Govt/PSU/Other Govt bodies as follows:
  - a. Should have executed at least one work order, having minimum order value of 80% of the estimated cost (equivalent to Rs. 1,03,49,832/- or more) OR
  - b. Should have executed at least two work orders, each having minimum order value of 50% of the estimated cost (equivalent to Rs. 64,68,645/- or more) OR
  - c. Should have executed at least three work orders, each having minimum order value of 40% of the estimated cost (equivalent to Rs. 51,74,916/- or more).
- 2. The bidder should have the following Financial Capabilities:
  - a. 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. 1,29,37,290/- for which the bidder is required to submit CA Certified Financial Statement.
  - b. Net worth of the bidder should be positive.
  - c. The bidder should have minimum solvency of Rs. 32,34,323/- for which it is required to submit solvency certificate from Scheduled Bank/Govt bodies or Chartered Accountant or Credit limit from nationalized/Scheduled Bank.
- 3. The bidder should not be blacklisted from any Govt. organization for which the bidder is required to submit undertaking for the same.
- 4. The bidder shall have to provide character certificate issued from District Magistrate or in case character certificate is not available then bidder is required to furnish undertaking in this regard along with copy of applying application for Character Certificate.
- 5. Firm must submit site survey report of at least 50% location for better understanding of this project.
- 6. If Bidder is not an OEM, then Bidder must submit manufacturer Authorization form (MAF) against this bid for device.

# **Technical Specification**

	Point-to-Multipoint Radio - Base station specification				
SI. No.	Features	Description	Compliance	Make and Model	
1	Frequency	Radio System should operate in India ISM Band as per WPC Regulation GSR 1048(E)			
2	Frequency Band Support	Should support multiband in 5 GHz - in case Govt. releases new frequency under unlicensed band in future, hardware should not be changed			
3	LOS, nLOS opreation	Should support Line of sight / near Line of sight			
4	Channel Bandwidth	20 MHz, 40 MHz & 80 MHz			
5	Channel spacing	Should be 5 MHz or better			
6	Max Output Power at Antenna port	Should support 27 dBm or better; user configurable in 1 dBm steps			
7	Modulation	OFDM, MIMO supported withBPSK, QPSK, 16-QAM, 64-QAM, 256 QAM with Forward Error Correction (FEC)			
		Should support automatic adaptive modulation			
8	Architecture	Base Station: 90° / 120° Dual polarized sectoral antenna			
0	Architecture	Single CAT5e / CAT6 Cable between IDU & ODU			
10	Distance Coverage	Product should be capable of providing communication to minimum 10 KMs			
11	CPE supported per Base station	Should support at least 60 Remote CPEs			
12	Transmit Power	Should support Automatic Transmit Power Control (ATPC) by Base Station			
13	Bandwidth restriction	Should support the MIR/CIR configuration to ensure SLA			
14	Ethernet Latency	Should be less than 20 ms			
15	DHCP	Should support DHCP client			
16	Protocol Filtering	System should support the protocol filtering based on interface			
17	Broadcast Rate Limit	System must be able to limit broadcast rate			
18	Link Test Utility	Should support the inbuilt link test utility to calculate the throughout and efficiency of link			
		Should support 128 bit AES encryption			
		Should support Layer 2 firewall to allow/deny based on VLAN, Ethertype, Source and Destination MAC address in wireless/Ethernet port			
19	Security	Should support Layer 3 firewall to allow/deny based on IP address, Network and DSCP/TOS.			
		System should have option to use RADIUS authentication for better security and protection from intruder			

20	Throughput	Should provide more than 500 Mbps aggregate Ethernet throughput Per Sector	
21	Spectral Efficiency	Minimum 7 bps/Hz or better	
22	Bandwidth allocation	System should be able to configure symmetric & asymmetric bandwidth	
		System should haves' interference mitigation techniques with support of TDD synchronization using GPS and the robust software	
23	23 Interference mitigation techniques	Should support Frequency re-use with GPS sync and interference mitigation	
		System should support internal / external GPS synchronization technique to eliminate interference in colocated scenario	
24	Interfaces	Should support 100/1000Base(T) Full Duplex, rate auto negotiated, 802.3at compliant	
25	Management	System should have support of protocols: IPv4/ IPV6, UDP, TCP, IP, ICMP, SSH, SNMPv2c, HTTPs, , IGMP Snooping,	
		System should have support of Network Management with HTTPs, SSH, SNMPv2c	
26	VLAN	System should have the support of VLAN based on IEEE 802.1Q with 802.1p priority	
27	Priority Management	System should provide option to define priority for management and data traffic	
28	QoS	Should support at least 3 queues or better with packet classification by DSCP, COS, VLAN ID, IP & MAC address, Broadcast, Multicast and CPE Priority	
29	Error Correction	Forward Error Correction coding and ARQ should be supported	
30	Performance Statistics	System should provide detailed statistics of Wireless and LAN Interface	
50	renormance statistics	System should have the option of uploading syslog data to Syslog Server	
		Should support Spectrum scanner / monitor to analyze the interference	
31	Tools	Should have inbuilt tools like Ping, Traceroute to get help in troubleshooting	
32	Power Consumption	Should not exceed 12 W	
33	Surge Suppression	Should have inbuilt surge protection of 1 Joule Integrated	
34	Operation Temperature	30°c to 60°C	
35	Enclosure	IP67 & IP68 Compliant or better	
36	WPC Approval	System must be approved from WPC - ETA certificate to be submitted	
37	Certification	FCC CFR 47 Part 15 Class B IC RSS-210 Issue 8, Annex 8 (or latest) IC RSS247 Issue 1 (May 2015) ETSI EN302 502 v2.1.1 ETSI EN301 893 v2.1.1	
		EMC: EN 301 489-1	

	Point-to-Multipoint Radio - CPE Radio Specification						
SI. No	Features	Specifications	Compliance Y/N	Make and Model			
		Make and Model					
1	Frequency	Radio System should operate in India ISM Band as per WPC Regulation GSR 1048(E)					
2	Frequency Band Support	Should support multiband in 5 GHz - in case Govt. releases new frequency under unlicensed band in future, hardware should not be changed					
3	LOS, nLOS operation	Should support Line of sight / near Line of sight					
4	Channel Bandwidth	20 MHz, 40 MHz & 80 MHz					
5	Channel spacing	Should be 5 MHz or better					
6	Max Output Power at Antenna port	Should support 27 dBm or better; user configurable in 1 dBm steps					
7	Modulation	OFDM, MIMO supported with BPSK, 16-QAM, 64-QAM, 256-QAM with Forward Error Correction (FEC)					
8		Should support automatic adaptive modulation					
9	Architecture	Dual polarized Integrated dish antenna with 24 dBi gain or better					
10	Architecture	Single CAT5e / CAT6 Cable between IDU & ODU					
11	Distance Coverage	Product should be capable of providing communication more then 10 KMs					
12	Transmit Power	Should support Automatic Transmit Power Control (ATPC) by Master Radio					
13	Bandwidth restriction	Should support the MIR/CIR configuration to ensure SLA					
14	Ethernet Latency	Should be less than 10 ms					
15	DHCP	Should be able to serve as DHCP Server and DHCP client					
16	Protocol Filtering	System should support the protocol filtering based on interface					
17	Broadcast Rate Limit	System must be able to limit broadcast rate					
18	Link Test Utility	Should support the inbuilt link test utility to calculate the throughout and efficiency of link					
19	Security	Should support 128 bit AES encryption					
20	Throughput	Should provide more than 500 Mbps aggregate Ethernet real usable throughput					
21	Spectral Efficiency	Minimum 6 b/Hz or better					
22	Bandwidth allocation	System should be able to configure symmetric & asymmetric bandwidth					
23	Interfaces	Should support 100/1000Base(T) Full Duplex, rate auto negotiated					
24	Management	System should have support of protocols: IPv4/IPv6, UDP, TCP, IP, ICMP, SSH, SNMPv2c, HTTPs, IGMP Snooping, NTP					
25		System should have support of Network Management with HTTPs, SSH, SNMPv2c					

26	VLAN	System should have the support of VLAN based on IEEE 802.1Q with 802.1p priority	
27	Priority Management	System should provide option to define priority for management and data traffic	
28	QoS	Should support at least 3 queues or better with packet classification	
29	Error Correction	Forward Error Correction coding and ARQ should be supported	
30	Performance Statistics	System should provide detailed statistics of Wireless and LAN Interface	
31	Performance Statistics	System should have the option of uploading syslog data to Syslog Server	
32	Tools	Should support Spectrum scanner / monitor to analyze the interference without disturbing the active traffic	
33		Should have option to connect to the radio device using WiFi from any WiFi supported device to install/configure or manage the device	
34		Should have inbuilt tools like Ping, Traceroute to get help in troubleshooting	
35	Power Consumption	Should not exceed 12W	
36	Surge Suppression	Should have inbuilt surge protection	
37	Operation Temperature	30°c to 60°C	
38	Enclosure	IP55 or better	
39	WPC Approval	System must be approved from WPC - ETA certificate to be submitted	
40		FCC / IC / CE	
41		FCC Part 15 Class B	
42	Certification	ETSI EN302 502 v2.1.1 ETSI EN301 893 v2.1.1	
43			

		Point-to- Point or - CPE station specification		
SI. No	Features	Specifications	Compliance Y/N	Make and Model
		Make and Model		
1	Frequency	Radio System should operate in India ISM Band as per WPC Regulation GSR 1048€ in between 4.9 to 6.0 Ghz bands		
2	Channel Bandwidth	Should Support 20 MHz, 40 MHz & 80 MHz with 5 Mhz Channel Spacing		
3	Max Transmit Power	Should support 28 dBm (combined, to regional EIRP limit) (1 dB interval)		
4	Modulation	802.11ax, OFDM, 2x2 MIMO supported with BPSK, 1024-QAM with Forward Error Correction (FEC) & Should support automatic adaptive modulation		
5	Distance Coverage	Product should be capable of providing communication more then 10 KMs		
6	Link Test Utility	Should support the inbuilt link test utility to calculate the throughout and efficiency of link		
7	Security	Should support 128-bit AES encryption		
8	Throughput	Should provide more than 900 Mbps aggregate Ethernet throughput		
9	Spectral Efficiency	Minimum 8.5 b/Hz or better		
10	Bandwidth allocation	System should be able to configure symmetric & asymmetric bandwidth		
11	Interfaces	Should support 1 x RJ-45, 1 x SFP, Ports		
12	Management	System should have support of protocols: IPv4/IPv6 (Dual Management Stack), UDP, TCP, ICMP, SNMPv2c, NTP, STP, IGMP, SSH		
13	Power Consumption	Should not exceed 28W		
14	Operation Temperature	,-30°C to 55°C		
15	Enclosure	IP67 including metal housing		
16	Antenna	Support External Antenna Port of Desired gain		
17	Certificate	Radio should be TEC Approved		
18		FCC / IC / CE		
19		FCC C058940P102A		
20	Certification	ETSI C050940P001A Industry Canada Cert 109W-0062		
21		CE EN 301 893 V2.1.1 (5.4 GHz), EN 302 502 V2.1.1 (5.8 GHz)		

# Scope of work

S.N.	Terms & conditions	Consent/ Compliance Yes/No	Remarks
1.	Vendor is required to supply all hardware at KESCo IT Cell /store and final inspection will be carried out at the same store.		
2.	Vendor will be responsible for installation, commissioning, operation and maintenance at different sites of KESCo (Distribution Division/ Sub Division & other offices)		
3.	Vendor will have to deliver the Complete material within 4 months and should install & commissioned as per requirement of KESCo.		
4.	Vendor should provide all the original media for manuals and drivers along with hardware.		
5.	Warranty of items will start after delivery.		
6.	All items supplied should be brand new and no used or refurbished item will be accepted.		
7.	Vendor should have back-to-back support from OEM for spares and technical expertise for maintenance of the equipment covered under the scope of work during the warranty period. MAF should be provided by vendor on OEM's letter head specifically for this tender valid for warranty period mentioned in technical specifications.		
8.	Vendor shall have to deposit Performance Bank Guarantee/FDR 3% of the order value for entire guarantee period.		

# 5. General Condition of Contract For Supply of Plant and the execution of works in connection with Schemes in UPPCL

# Form -A

#### Definition of Terms:

1. In construing these general conditions and the annexed specification the of following words shall have the meaning here in assigned to them unless there is anything in the subject or context in consistent with such construction.

"The Purchaser" or the Board shall means the UPPCL 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 Tenderer'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 Sublette with the consent in writing of the 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 Engineer for the purpose of the contract in case of such officer has been so appointed, the purchaser or his duly authorised representative.

"Plant" Equipment", "Material", "Work" or "Works" shall mean respectively the plant and materials to be provided and work or works to be done by the Contractor under the contract.

The "Contract" shall meant the include the general conditions specifications, schedules drawings, Form or 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 Conditions and the schedules thereto (if any).

The site shall mean the site of the proposed work as detailed in the Specifications or another place in Uttar Pradesh where work is to be executed under the Contract.

:"Test on Completion" shall mean such tests as are prescribed by the Specification to be made by the Contractor before the plant is taken over by the purchaser.

"Commercial Use" shall mean that use of work which the contract contemplates or of which it is commercially capable.

"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 person, shall include Firms, Companies, Corporations and other bodies whether incorporated or not.

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

2. The contractor shall be deemed to have carefully examined the General Conditions, Specifications, Schedules and Drawings, If he shall have any doubt as to the meaning of any portion of these General Condition or of the Specifications, 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 for the proper fulfillment of the Contract.

Further if required by the Purchaser, the contractor shall deposit with the Purchaser as security for the due and faithful performance of the Contract such sums not being less than one percent of the total value of the Contract as may be fixed by the Purchaser either in case or in any other form approved by the Purchaser.

The security deposit shall be refunded to the to the Contractor on the satisfactory completion of tests and the taking over of the plant by the purchaser.

The charge 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 counter-part of the Agreement. The import license fee will in each have to be paid by the Contractor. Import license may have to be taken in the Board's name.

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

#### Contract Drawings:

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

Within fourteen days of the receipt of such drawings the Engineer shall signify his approval or otherwise of the same, and in the event of his disapproving the drawing the contactor shall submit further drawings 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 on tracing cloth or ferrogalic prints mounted on cloth of the drawings as approval shall be supplied to him by the Contractor and be signed by him and by the contractor respectively and thereafter deemed to be the Contractor Drawings.

These drawings when signed shall become the property of the Purchaser and be deposited with the Engineer, and shall not be departed from in any way what so every except by the written permission of the Engineer as herein after provided. During the execution of the works one of the sets of drawings shall be available for reference on the site.

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 return the same to the Contractor.

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

The Engineer, or his duly authorised representative, 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 work.

Mistake in Drawings:

5. The Contractor shall be responsible for and shall pay for any alterations of the work due to any discrepancies, errors and omission in the drawings or other particulars supplied by him whether such discrepancies, errors or omission are due to inaccurate information particulars furnished to the Contractor by the Engineer, any alterations in the work necessiated by reason of such inaccurate information or particular shall be paid for by the Purchaser.

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

#### Subletting of Contract:

6. The Contractor shall not, without the consent, in writing of the Engineer or Purchaser, which shall not be unreasonably withheld assign or sublet his Contract, or any substantial part thereof other than for raw materials for minor details, or for any part of the work of which the 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 claim or demand being made or action being brought against the Purchaser for infringement or alleged infringement of letters-patent in respect of any machine plant, work or thing used or supplied by the Contractor under this Contract or in respect of any method of using or working by the Purchaser of such machine plant, work or thing the Contractor will indemnify the Purchaser against such claim or demand and all costs and expenses arising from or incurred by reasons of such claims or demand PROVIDED THAT the Purchaser shall notify that 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 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 work or thing shall be used by Purchaser for any purpose or in any manner other that for which they have been supplied by the Contractor and specified under this Contract.

#### Training of Engineer:

A. The Contractor shall train at his works Engineer/Engineers of the Purchaser in the manufacture and assembly of machinery and its parts for a period of -----. A separate agreement for such training shall be signed by the Engineer/Engineers selected for training, the Purchaser and the Contractor on the form appended hereto.

#### Quality of Material:

8. The Plant shall be manufactured and constructed in the best and most substantial and most workman like manner and with material of the best or of approved qualities for their respective uses.

Packing

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

Delivery:

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10. The cost of delivering the whole of the material f.o.r. at the railway station specified or on the site as the specification may define and the cost of the packing and unless otherwise agreed, import duties and customs dues shall be borne by the Contractor.

Fencing and lighting for works than transmission lines:

11. Except as hereinafter provided that Purchaser shall unless otherwise specified be responsible for the proper fencing, guarding, lighting and watching of all works other than transmission lines comprised in the Contract and other for the proper provision of temporary, roadways, footways, guards and fences as far as the same may be rendered necessary by reason of the work for the accommodation and production of foot passenger or other traffic and of the owners and occupies of adjacent property and of the public.

#### For transmission lines:

The Contractor shall at all time provide sufficient fencing, notice boards lights and watchman to protect and warn the public and guard the work of transmission lines and in case the contractor fail to make such provision made by him is considered by the Purchaser to be inadequate the Purchaser may make such provision or further provisions s he may consider necessary and charge the cost thereof to the Contractor.

If during the period of erection of a plant the Contractor or his workman or servant shall injure or destroy any part of a building or other structure contiguous to the work in progress or if any damage shall be caused from any cause whatsoever to other works (whether in progress or completed) forming part of the work for which the plant is being installed or if any imperfections become apparent in these works the causes of which imperfections are attributable to the Contractor or his workmen or servants the Contractor shall make good such damages and imperfection and if he fails to do so within a reasonable time the purchaser may cause the same to be made good and may deduct the cost thereof from any sum that may then or at any time thereafter become due to the Contractor or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof or may recover it otherwise.

#### Power of vary or omit work:

12. No alterations amendments omission, additions suspensions of variations of the work (hereinafter referred to as "Variation") under the Contract as shown by the drawings of the specification shall be made by the contractor except as directed in writing by the Engineer, but the Engineer shall have full power, subject the provision hereinafter contained from time to time during the execution of the contract by notice in writing to instruct Contractor to make such variation without prejudice to Contract, and the Contractor shall carry out such instructions and be bound by the same conditions as far as applicable as through the said variations occurred in the specifications. If any suggested variations 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 instruction the Contractor's obligations 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 or deducted from Contract price as the case may require. The amount of such rates specified in the schedule 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 instruction 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 proper notice shall be given to the Contractor as will enable him make his arrangement accordingly, and in case where goods or materials have already been prepared or any designs, drawings, patterns have been made or work done that require to be altered, the Engineer shall allow such Compensation in respect thereof as he shall consider reasonable.

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

In every case in which the Contractor shall receive instructions from the Engineer for carrying out any work 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 claim for additional payment.

# Negligence:

13. If the Contractor shall neglect to execute the work with due diligence and expedition or shall refuse or neglect to comply with any reasonable orders given him in writing by the Engineer in connection with work or shall contravene any provision of 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 the Purchaser shall be at liberty to employ other workmen and forthwith perform such work as the Contractor may have neglected to do or if the Purchaser shall think fit, it shall be lawful for him to take the work wholly, or in part out of the Contractor's hands and give it to another person on contract at a reasonable price or provided any other materials tools tackles or labour for the purpose of completing the work or any part thereof and in that event the Purchaser shall without being responsible to the Contractor for fair wear and tear of the same have free use of all the materials, tools or other things which may be on the site, for use at any time in connection with the work to the exclusion of any right of the Contractor over the same, 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 such part thereof as may be necessary to, to the payment of the cost of executing such work as aforesaid.

If the cost of executing the work as aforesaid shall exceed the balance due to the Contractor, and the Contractor fails to make good the deficiency the Purchaser may recover it from the contractor in any lawful manner or the Purchaser may sell the said materials tools tackle or other things belonging to the Contractor, and the proceeds of such sale shall be applied towards the payment of such deficiency and the costs of and incidental to such sale and any balance remaining after crediting the same shall be paid to the Contractor on the certificate of the Engineer provided that when all expenses cost and charges incurred in the completion of the work are paid by the Contractor all such materials tools, tackle or other things remaining unsold shall be removed by the Contractor.

# Death, Bank, ruptcy etc .:

14. 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 representative in law of the estate of 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 which he shall take all reasonable steps to prevent a stoppage of the work have the option of carrying out the Contract subject to his or their providing such guarantee as may be required by the Purchaser but not exceeding the value of the work for the time being remaining unexecuted. In the event of stoppage of the work period of the option under this clause shall be fourteen days only Provided that should the above option not be exercised the Contractor may be determined by the Purchaser by

notice in writing to the Contractor and the Purchaser may exercise the same power which he could have under the proceeding clause if the work had been taken out of Contractor's hands under that clause.

Inspection:

15. The Engineer and his duly authorised representatives shall have and testing at all reasonable times the 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 authorised representatives permission to inspect it as the plant was manufactured on the Contractor's own premises.

The Engineer shall on giving seven day's 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 part 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 whatever Provided that if such notice be not sent to the Contractor within reasonable time after the grounds upon which such notice is based have come to the knowledge of Engineer he shall not be entitled to reject the said plant or workmanship on such grounds Unless specifically provided otherwise all tests shall be made at the Contractor's works before shipment.

#### Test at Contractor's Premises:

The Contractor shall, if required give the Engineer notice of any materials being ready for testing and the Engineer or his said representatives if so desires shall on giving twenty four hours 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 tests which shall be deemed to have been made in the Engineers presence, and he shall forth with forward to the Engineer duly certified copies of ten tests in duplicate.

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 charges such labour, materials, electricity, fuel water stores, apparatus and instruments as may reasonably be demanded to carry out efficiently such tests of the plant in accordance with the contract and shall give facilities to the Engineer or to his authorised representative to accomplish such testing.

#### Test on site:

If special tests other than those specified in the contract are required they shall be paid for by the Purchaser as Variations" under clauser 12.

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

#### Delivery of plant :

In all cases where the contract provide for test on the site the purchaser except where otherwise specified shall provide free of charges, such labour, material, electricity, fuel, water, stores apparatus and instruments as may be required from to time and as may reasonably be demanded efficiently to carry out such test of the plant or workmanship in accordance with contract. In the case of the contractor requiring electricity for test on site such electricity shall be supplied to the Contractor in the most convenient form available.

#### Access to site and work on site:

16. No plant shall be forwarded until shipping instruction 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 period 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 fully in the packing account and full details of the contents of packages and quantity of materials shall be given to enable the consignee to check the stores on arrival at destination.

#### Only applicable to complete Election Contract:

17. The suitable access to and possession of the site shall be afforded to the contractor by the purchaser in reasonable time and the purchaser shall have any foundations to be provided by him ready when required by the contractor where a crane is available for free use of the contractor until the plant is taken over.

The work, so far as it is carried out on the Purchaser's premises, shall be carried out at such time as the Purchaser may approve and so as not to inter unnecessarily with the conduct of the Purchaser's business but the purchaser shall give the contractor all reasonable facilities for carrying out the work.

No person other than Contractor sub-contractor and workmen and the contractor's duly authorised agent shall, except with the special permission in writing of the Engineer or his representative, be allowed to do any work on the site in connection with the erection of his work out access to the work shall at all times be accorded to the Engineer and his representative and other authorised officials or representatives of the Purchaser.

#### Engineer's supervision:

The contractor shall permit the execution of work by other contractors or tradesmen whose names shall have been previously communicated in writing to the contractor by the Engineer, and afforded them every facility for the execution of their several works simultaneously with his own.

The Purchaser shall provide all the unskilled labour and facilities necessary for the execution of work included in the contract unless otherwise specified.

# Engineer's decision:

18. All the work shall be carried out under the direction and to the reasonable satisfaction of the Engineer. If supervision of the erection for complete erection is included in the contract the contractor shall be responsible for the correctness of the positions levels and dimensions of the work according to the drawings, not withstanding that he may have been assisted by the Engineer in setting out the same.

Contractor's representative and workmen:

19. In respect of all matters which are left to the decision of the Engineer, including the granting or withholding of certificate, 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 will, at the request of the Contractor, be referred to arbitration under the provision for arbitration hereinafter contained but subject to this right of reference to arbitration such decision shall be final and binding on the contractor.

Liability for accidents and damage:

20. If the supervision of erection or complete erection is also included in the contract the contractor shall employ at least one competent representatives and whose name or names shall have previously been communicated in writing to the Engineer by the contractor to superintendent the erection of the plant and the carrying out of the works. The said representative, or if more than one shall be employed then one of

such representative shall be present on the site during working hours, and any written orders or instruction which the Engineer or his duly authorised representative whose name shall have been previously communicated in writing to the contractor may give to the said representative of the Contractor shall be deemed to have been given to the Contractor.

The Engineer shall be at liberty to object to any representative or person employed by the Contractor in the execution of or otherwise about the works who shall in his opinion misconduct himself or be in competent or negligent and the Contractor shall remove the person so objected to upon receipt from the Engineer of notice in writing requiring him to do so and shall provide in his place a competent representative at the Contractor's expense

The purchaser shall provide suitable living accommodation on the site for the use of contractor's representative unless the contractor exempts him from this liability.

Only applicable complete erection contract Insurance :

21. The Contractor shall be responsible for loss, damage or depreciation of the plant until the same is taken over under clause 35 or is deemed under that clause to have been taken over Provided always that the contractor shall not be responsible for any such loss, damage depreciation occurring during such period that the plant is operated by the Purchaser's staff prior to being taken over in accordance with clause 35.

Until the plant is taken over is deemed to have been taken over as aforesaid, the contractor shall also be liable for and shall indemnify the purchaser in respect of all injury to person or damage to property resulting from the negligence, of the Contractor or his workmen or sub-contractors or from defective designs, or work, but not from other cause.

Provided that the contractor shall not be liable for any losses of profit or loss or contract or any other claim made against the Purchaser not already provided for in the contract not for any injury or damage caused by or arising from the acts of the Purchaser or of any other person or due to circumstances over which the contractor has no control or shall his total liability for loss, damage, or injury in this clause exceed the total value of contract.

The contractor will indemnify and save harmless the Purchaser against all actions suits, claims demands costs or expenses arising in connection with injuries (other than such as may attributable to the Purchaser or his employees) suffered period to the date when the plant shall have been taken over under clause 35 hereof by persons employed by the contractor or his sub-contractor on the work, whether at common law or under the Workmen's compensation Act, 1923 or any other statute in force at the date of contract relating to the question of the liability of employers for injuries suffered by employees and will if called upon to do so take out the necessary policy of insurance to cover such indemnity.

In the event of any claim being made, or action brought against the Purchaser involving the contractor and arising out of the matters referred to and in respect of which the contractor is liable under this clause the Contractor shall be immediately notified thereof and he shall with assistance, if he so requires, of the Purchaser but at the sole expense of the Contractor conduct, all negotiations for the settlement of the same or any litigation that may arise thereof. In such case, the Purchaser shall at the request and expense of the

Contractor afford all reasonable and available assistance for any such purpose.

Replacement of defective work or materials.

22. The contractor shall insure the Plant and shall keep it insured against loss by theft, destruction or damage by fire, flood under exposure to the weather or through riot, civil commotion war or rebellion for the full value of the plant from the time of delivery of f.o.b. British Port until the plant is taken over under clause 35. This insurance shall also cover loss by theft on site in the case of contracts where the contractor, is responsible for complete erection but not in other cases,

Deductions from contract price:

23. If during the progress of the work the Engineer shall decide and notify in writing to the contractor that the contractor has executed any unsound or imperfect work or has supplied any plant inferior in quality to the specified the contractor on receiving details of such defects or deficiency shall, at his own expense, within such time as may be reasonably necessary for making it good proceed to alter reconstruct or remove such work, or supply fresh materials up to the standard of the specification and in case the Contractor shall fail so to do the Purchaser may, on giving the contractor seven days, notice in writing of his indenting so to do, proceed to remove the work complained of and at the cost of the contractor perform all such work or supply all such material provided that nothing in this clause shall be deemed to deprive the Purchaser of or affect any right under the contract, which he may otherwise have in respect of such defects of deficiencies.

#### Terms of Payment:

24. All costs, damages, or expenses 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 the 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 of 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 Purchaser.

25.

- 1. Subject to any deduction which the Purchaser may be authorised to make under the contract, to any additions of deduction provided for under clause 12 the contractor shall be entitled to payments as follows:
  - a. Eighty percent of the f.o.r. contract value of the plant in rupee 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 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 of the plant on satisfactory completion of test and taking over of the plant.
  - c. Ten percent of the f.o.r. contract value of the plant at the end of twelve month from the date of taking over.
  - d. For the erection of the plant in proportion of the progress of the work on the receipt by the Purchaser of monthly invoices submitted by the contractor supported by the certificates of the Engineer.
- 2. If the time at which either of the installments due under subclauses (b) and (c) of clause (1) hereof become payable there are minor defects in the plant which are not of such importance as to effect the full commercial use of the plant then the Purchaser shall be entitled to retain only such part of the

installment then due as represents the cost of making good such minor defects and any sum so retained shall subject to the provisions of clause 36 become due upon such minor defects being made good.

3. If the Purchaser desires that the plant or any portion thereof should not be dispatched by the contractor when it is due for dispatch by the contractor shall store 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 mutually agreed upon between the parties but not exceeding 5 S (Five shilling per ton per week.) payable quarterly plus interest at one per cent per annum above the current rate of the State Bank of India on 80 percent 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 become due and is ready for shipment upto the date on which it is actually shipped.

25. A. In the event of the supplier contractor/company/not being able to supply the materials or to carry out works in accordance with the terms of this contract the Government/Purchaser/Owner shall have the right to recover any sums advanced in accordance with the clause 25 from the supplier/contractor/company and from his/its assets.

# Certificate of Engineer:

26. In any case where the contractor price includes a provisional sum to be provided by the contractor for meeting the expense 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 of 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 provision, the contractor shall pay the excess. In the case of materials supplied on work done by a sub contractor the total of the net sums paid to the sub-contractor on account of such materials or work and a sum equal to 10 percent of such net sum allowed as Contractor's profit shall be deemed to be the sum used note of the works or articles to which such sum of money refer shall be done or purchased without the written order of the Engineer. The contractor shall allow the Sub Contractor 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 so to do pay the dues of such sub-contractors on account of such materials or work, PROVIDED ALWAYS that the contractor shall have no responsibility with regard to such work or articles unless he shall have previously approved the sub contractor and/or the material or plant to be supplied.

#### Due dates of Payment:

27. Every application to the Engineer for a certificate must be accompanied by a detailed invoice (in duplicate) setting forth in the order of the schedule of prices, particulars of the work executed and the certificate as to such plant or work as in the reasonable operation of engineer in accordance with the contract shall be issued within fourteen days if possible or for other than the first payment within such time of application for the same as is reasonably necessary for communication with the site.

The Engineer may by any certificate make any correction or modification in any previous certificate which shall have been issued by him and payments shall be regulated and adjusted accordingly.

Certificates not to affect rights of the Purchaser or Contractor:

28. Payment shall be due payable by the Purchaser in accordance with the provisions of clause 25 hereto at the end of the month following that in which invoice for the amounts due together with necessary documents are received by the Purchaser, provided that the Purchaser shall not be bound to make any payment at least 8 percent of the total contract value of the plant.

Suspension of Works:

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- No certificate of the engineer on account not any sum paid on account by the parches, no any action of time granted under clause 31 shall effect or prejudice the rights of the Purchaser against the Contractor either under this Agreement or under the law or relieve the Contractors his obligations for the due performance of the Contract, or be interpreted as approval of the work done or of the materials supplied.
- 2. No certificate of the Engineer shall create liability in the Purchaser to pay for any alterations, amendments, variations or additional work 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 of any 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 under this Agreements or under the law.
- 30. The Purchaser shall pay to the Contractor all reasonable expenses incurred by the contractor by reasonable expenses incurred by the contractor by reason of suspension of the works of delay in shipment by order in writing of the Purchaser of the Engineer unless such suspension shall be due to some default on the part of the Contractor or sub-contractor.

#### Damage for Delay in:

31. The time given to the contractor for dispatch delivery erection of works or completion as the case may be shall be reckoned from the date of receipt by the Contractor or the order, together with all necessary information and drawings to enable in work to be put in hand.

In all cases in which progress shall be delayed by strike, fire, accident, defective, materials delay in approval of drawing or cause whatsoever beyond the reasonable control of the contractor and whether such delay or implement shall occur before or after the time or extended time for dispatch erection or completion, a reasonable, extension of time shall be granted.

- 32. 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 agrees to accept a reduction of the contract price by 1/2 (half) completion percent per week reckoned on the contract value of such portion only of the plant as can not inconsequence of the delay be used commercially and efficiently during each week between the appointed or extended times as the case may be and the actual time of acceptance under clause 35, and such reduction shall be in full satisfaction of the contractor's liability for delay but shall not in any case exceed 10 (ten) percent of the contract value of such portion of the plant.
- 33. Whenever possible all tests shall be carried out before shipment test on should however, it be necessary for the final tests as to performance and completion guarantees to be held over unit plant is erected at site they shall be carried out in the presence of the contractor's representative within one month of the completion of erection. If the result of these tests shall not come within the margin specified the tests shall if required be repeated within one month from the date the plant is ready for retest and the contractor shall repay to the Purchaser all reasonable expenses to which he may be put by such tests.

#### Rejection of Defective Plant:

34. If the completed plant or any portion thereof, before it is taken over under clause 35 be found to be defective or fail to fulfill the requirements of the contract the Engineer shall give the contractor notice setting fourth particulars of such defects or failure, and the contractor shall forth with make the defect good, or alter the same to make it comply, with the requirements of contract. If the Contractor fail to do so with 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 out by the Purchaser within a reasonable time and at a reasonable price and where reasonable possible to the same specification and under competitive conditions. In case of such replacement by the Purchaser the Contractor shall be liable to pay to the Purchaser extra cost if any of such replacement delivered and or erected as provided for the original contract, such extra cost being the ascertained difference between the price paid by the Purchaser under this 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 time, the contractor shall be liable only to the Purchaser all money paid by the Purchaser to him in respect of such plant.

#### Taking over:

In the event of such rejection the Purchaser shall be entitled to the use of the plant in 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 an reasonable sum as payment for such use.

35. Where the specification calls for performance tests before shipment and these have been successfully carried out, the plant shall be accepted and taken over when it has been satisfactory put into operation on site or within one month of its being ready to be put into operation whichever shall be the earlier and the Engineer shall forthwith issue a taking over certificate.

In the event of final or any outstanding tests being held over until the plant is erected such taking over certificate shall be issued subject to the results of such final or outstanding test shall be carried out in accordance with clause 33.

When the specification calls for tests on site the plant shall be taken over and the Taking over Certificate issued immediately after such tests have been satisfactorily carried out.

If for any reason other than the default of the Contractor such test mentioned test on site shall not be carried out within one month of notice by the contractor to the Purchaser of the Plant being ready for test the plant shall be deemed to have been taken over as on the last day of the such period and payments due to the contractor shall if called upon so to do by the Purchaser, but at the Purchaser's expenses, make the said tests during the maintenance period and accept as aforesaid under the same obligations as specified in clause 33.

The Engineer shall not delay the issue of any taking over certificate contemplated by this clause on account of minor deficiencies of material of defects in the plant which do not materially affect the commercial use thereof provided that the contractor shall undertake to make good the same in due course.

#### Maintenance:

36. For a period of 12 calendar months commencing from the date on which the plant is taken over is deemed to have been taken over under clause 25 (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 in the clause 6 under the conditions provided for by the contract under proper use and arising solely from faulty design, materials or workmanship provided always that such defective parts are not repairable at side and are not essential in the meantime to the maintenance in commercial use of the plant are promptly returned to the contractor's works at the expenses 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 the parts of the plant so replaced or renewed until the expiration of six months from the date of such replacement of 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 reasonable time the Purchaser may proceed to do the work at the contractor's risk and Page 48 of 55

expense but without prejudice to other rights 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.

#### Regulations of Local Authorities:

37. The purchaser shall throughout the continuance of the contract and in respect of all matters arising in the performance thereof, serve all notices and obtain all consent, way leaves approvals and permission required in connection with the regulations and by laws of any local or other authority which shall be applicable to the works.

All work shall be executed in accordance with the Indian Electricity Rules 1956 and any statutory modification thereof, wherever are applicable under otherwise agreed to in writing by the Engineer.

#### Arbitration:

38. If any dispute difference or controversy shall at any time arise between the contractor on the one hand and the UP Electricity Board and the Engineer of the Contract on the other had 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 payment for the same or as to the true intent, meaning interpretation, construction or effect of the clause of the contract specification or drawings or any of them or as to any thing 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 compensating 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 chairman UP Electricity Board or any other person nominated by him on this behalf and his decision in writing shall be final binding and conclusive. This mission shall be deemed to be a submission to arbitration modification thereof. The arbitration 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 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 and to whom in what manner the same shall be borne and paid.

Work under the contractor shall, if reasonable, continue, during the arbitration proceedings and no payment due or payable by the Board shall be withheld on account of such proceeding. In case of refusal/neglect by such nominee chairman UP State Electricity Board may nominate another person in his place.

#### Court of Competent Jurisdiction:

A. Any action taken or proceedings initiated on any of the terms of this agreement shall be only in the court of competent Jurisdiction under the High court of Judicature at Allahabad.

Work under the Contract shall if reasonable possible, continue during the Arbitration proceeding and no payment due or payable by the Purchaser shall be withheld on account of such proceedings.

- 39. The contract shall in all respects be constructed and operated as a construction contract as defined in the Indian Contract Act 1972, and all the payments of contract there under shall be made in the rupees unless otherwise specified.
- 40. The marginal notes to any clause of this contract shall not affect Marginal or control the construction of such clause.

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

This Agreement made on the ------ day of ------198------Between ------Between (hereinafter referred to as the Contractor) of the one part AND the KESCo (hereinafter called Purchaser) of the other part

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.

Signed (for and on behalf of the Purchaser) (Date) In the presence of (Date) (Date) Signed (Contractor) (Date) In the presence of (Date) (Date)

#### PERFORMA OF GUARANTEE BOND FOR SECURITY DEPOSIT

#### (To be used by approved Scheduled Banks)

- 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 authorised 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 there after.
- 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.

Dated the -----19

For ----- Bank Ltd.

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

WHEREAS in accordance with the contract agreement dated the ------day of ------day of ------19 (hereinafter called the said Contract) entered into between the Purchaser & Messers ------ 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

- 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 with hold payment on that account.

date of dispatch according to contract is the ------ day of ------ day of ------. If however the period of the contract's 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.
- 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 any thing 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 ------ day of ------- 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. 2. Signed by For and on behalf of the Guarantor

# 7.Price Schedule

#### SCHEDULE P-I (PART-II) SUMMARY BID PRICE SCHEDULE AGAINT E-TENDER NO. 06/IT Cell/24-25 Kanpur Electric Supply Company

S. No.	Description	Quantity	Unit	Unit price	Total Amount without GST (3x5)	GST Amount	Total Amount (Including GST) (6+7)
1	2	3	4	5	6	7	8
1	UTM/FIREWALL with capacity of 300 Users with 3 years subscription, support & service	1	Pcs				
2	Cambium Networks ePMP Force 300-25 5 GHz High Performance Radio + High-Gain Dish Antenna - Integrated Radio Solution - Wireless Subscriber Module	130	Pcs				
3	Cambium Radio (PTP force 400 C including 32 dbi antenna -120 degree and Gigabit Surge Suppressor (56))	30	Pcs				
4	Cambium Radio (ePMP 3000L with 5 GHz AP Radio with 5 GHz Sector Antenna- 90/120-degree, External GPS Antenna) With Installation	25	Pcs				
5	Self-Support Tower (Appropriate height as required based on site feasibility at the time of installation on actual basis) (for new sites as per time-to-time requirement from KESCo, division offices)	400	Mtr				
6	operationwithcomprehensiveAMCsupport for all devices	3	Year				
7	comprehensive AMC of existing self- support towers approx. 90 towers	1692	Mt				
8	Installation and commissioning including all setup	1	Job				

1. The above quantity is tentative and may vary  $\pm 50\%$ 

2. The material of above shall conform to relevant IS.

3. Bidder should refer tender technical specification for the above items detail and make of material/ item.

4. All terms and conditions including payment terms shall be provided by the bidder.

Signature: Name: Designation: Date: