

ODISHA POWER TRANSMISSION CORPORATION LTD OFFICE OF THE SENIOR GENERAL MANAGER, CENTRAL PROCUREMENT CELL, JANPATH, BHUBANESWAR - 751022 TENDER SPECIFICATION NO. SR.G.M-CPC-III-E-TENDER-PROCUREMENT-PORTABLE INFRARED THERMOVISION CAMERA-63/2018-19

E-TENDER NOTICE NO 63/2018-19 FOR PROCUREMENT OF PORTABLE HAND HELD HIGH RESOLUTION INFRARED THEROVISION CAMERA

Request for online tender documents – From dt- 20.11.2019 (11.00 AM)

to dt- 19 .12.2019 (1.00 PM)

Pre-Bid Meeting on - dt **26.11.2019 (12.00 NOON)**

Last date of submission of online tender - dt- 20.12.2019 (1.00 PM)

Date of opening of Tender - 21 .12.2019 (03.00 PM)



ODISHA POWER TRANSMISSION CORPORATION LTD. REGD. OFFICE: JANPATH, BHUBANESWAR - 751 022, ODISHA e-TENDER NOTICE NO. CPC-63/ 2018-19

For and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD, Sr.G.M. [C.P.C.] invites Tenders from reputed manufacturers (OEM)/ Channel Partner of OEM (Indian Agent for the foreign made testing equipment) in two part bidding system for supply of **PORTABLE HAND HELD HIGH RESOLUTION INFRARED THERMOVISION CAMERA**. The interested bidders would be required to enroll themselves on the tender portal www.tenderwizard.com/OPTCL. Complete set of bidding documents are available at www.tenderwizard.com/OPTCL From 20.11.2019 (11.00 Hrs) up to 19.11.2019 (13.00 HRS). Interested manufacturers may visit OPTCL's official web site http://www.optcl.co.in and www.tenderwizard.com/OPTCL for detail specification.

N.B: All subsequent addendum / corrigendum to the tender shall be hosted in the OPTCL's official website http://www.optcl.co.in, www.tenderwizard.com /OPTCL only.

SENIOR GENERAL MANAGER [C.P.C.]



NOTICE INVITING TENDER ODISHA POWER TRANSMISSION CORPORATION LTD., REGD. OFFICE: JANPATH, Bhubaneswar.

e-TENDER NOTICE NO- CPC- 63/2018-19

For and on behalf of the ODISHA POWER TRANSMISSION CORPORATION LTD., the undersigned invites bids under two-part bidding system in e- tendering mode only as per the following details.

Tender specification No	Descripti on of equipmen t / materials	Qua ntit y (Nos	Earnest money deposit (in INR)	Cost of Tender specification documents	Tender Processin g fee (in INR)	Last date of receipt of bids.	Last date opening of tender
SR.G.M-CPC-III-E-TENDER-PROCUREMENT-PORTABLEINFRAREDTHERMOVISIONCAMERA-63/2018-19	Portable Hand Held High Resolutio n Infrared Thermo- vision Camera	8	1,52,000/	12,000/- (INR) + GST@12%= 13,440/-	Rs 5,000/ + GST@ 18% Rs 5,900/-	Dt 20.12. 2019 up to 13.00hr	Dt 21.12. 2019 at 15.00 hrs

The bidders who want to submit bids shall have to pay non-refundable amount of Rs. 13,440/- (Rupees Thirteen thousand four hundred fourty) only including GST @ 12%) towards the tender cost, in the form of Demand draft/Pay order/Cash only, drawn in favour of the D.D.O Head Qrs, OPTCL, Bhubaneswar. They have to also submit notarized hard copy of GST registration certificate on or before the date & time of submission of techno-commercial bid.

The bidders shall have to submit non-refundable amount of Rs.5,900/- (Rupees Five thousand & nine hundred) only including GST @ 18%) towards the

tender processing fee to K.S.E.D.C.Ltd, in e-payment mode. The e-payment of above amount is to be made to enable the bidder to down load the bid proposal sheets & bid document in electronic mode.

The bidder shall deposit the tender cost, tender processing fee & EMD Bank draft/BG prior to last date & time for submission of bid as notified in tender notice. Local micro & small enterprisers (MSEs) (In the state of Odisha) based in Odisha and registered with respective DICs, Khadi, Village, Cottage & Handicrafts Industries, OSIC and NSIC can participate without payment of the cost of tender specification.

The demand draft/pay order for tender cost, processing fees are to be submitted along with the EMD at the office of the undersigned on or before the last date & time of submission of tender.

The bidders shall scan the Demand Draft/Pay order/ Bank guarantee and upload the same in the prescribed form in .gif or .jpg format in addition to sending the original as stated above.

The prospective bidders are advised to register their user ID, Password, company ID from website www.tenderwizard.com/OPTCL by clicking on hyper link "Register Me".

Any clarifications regarding the scope of work and technical features of the tender can be had from the undersigned during office hours.

Minimum qualification criteria of bidders: AS STIPULATED IN SECTION-II, (G.T.C.C) OF THE TENDER SPECIFICATION.

SENIOR GENERAL MANAGER, CENTRAL PROCUREMENT CEL

ODISHA POWER TRANSMISSION CORPORATION LTD. OFFICE OF THE SR. GENERAL MANAGER CENTRAL PROCUREMENT CELL FAX NO.:0674 - 2542964 TELEPHONE NO.:0674 - 2541801

JANAPATH, BHUBANESWAR - 751022

TENDER SPECIFICATION NO. SR.G.M-CPC-III-E-TENDER-PROCUREMENT-PORTABLE INFRARED THERMOVISION CAMERA-63/2018-19

CONTAINING

PART – I

SECTION – I : INSTRUCTION TO BIDDERS

SECTION – II : GENERAL TERMS AND CONDITIONS OF

CONTRACT (G.T.C.C.) (COMMERCIAL)

SECTION - III : LIST OF ANNEXURES (COMMERCIAL)

SECTION - IV : TECHNICAL SPECIFICATION

 $\underline{PART - II}$: PRICE BID.

PART-I SECTION - I.

INSTRUCTIONS TO BIDDERS

Clause.	<u>Title.</u>	Page.
1.	Submission of Bids.	07
2.	Division of Specification.	08
3.	Tenders shall be in two parts.	09
4.	Opening of Bids .	09
5.	Purchaser's right regarding alteration in	10
	Quantities, Tendered.	
6.	Procedure and opening time of tenders.	11
7.	Bidder's liberty to deviate from specification.	11
8.	Eligibility for submission of bids.	11
9.	Purchaser's right to accept/reject bids.	11
10.	Mode of submission of tenders.	11
11.	Earnest money deposit.	11
12.	Validity of the bids.	13
13.	Price.	13
14.	Revision of Tender Price by Bidders.	13
15.	Bidders to be fully conversant with	13
	the clauses of the Specification.	
16.	Documents to accompany Bids.	13
17.	Documents/Papers to Accompany PART – II Bid	. 15
18.	Conditional Offer.	15
19.	General.	15
20.	Pre-Bid Meeting	15
21.	Expenses in respect of OPTCL's representative	15
	for witnessing the inspection & testing of the offe	ered
	equipment/materials at the inspection and testi	ng site.
22.	Litigation/Arbitration	16

COMMERCIAL SPECIFICATION.

PART-I SECTION-I INSTRUCTIONS TO BIDDER

1. Submission of Bids: -

The bidder shall submit the bid in Electronic Mode only i.e. www.tenderwizard.com/OPTCL. The bidder must ensure that the bids are received in the specified website of the OPTCL by the date and time indicated in the Tender notice. Bids submitted by telex/telegram will not be accepted. No request from any bidder to the OPTCL to collect the Bids in physical form will be entertained by the OPTCL.

The OPTCL reserves the right to reject any bid, which is not deposited according to the instruction, stipulated above. The participants to the tender should be registered under GST Laws.

- 1. For all the users it is mandatory to procure the Digital Signatures of Class-III.
- 2. Contractors / Vendors / Bidders / Suppliers are requested to follow the below steps for Registration:
- a. Click "Register", fill the online registration form.
- b. Pay the amount of Rs. 2360/- through e payment mode only.
- c. Send the acknowledgment copy for verification.
- d. As soon as the verification is being done the e-tender user id will be enabled.
- 3. After viewing Tender Notification, if bidder intends to participate in tender, he has to use his e-tendering User Id and Password which has been received after registration and acquisition of DSCs.
- 4. If any Bidder wants to participate in the tender he will have to follow the instructions given below:
- a. Insert the PKI (which consist of your Digital Signature Certificate) in your System.
 - (Note: Make sure that necessary software of PKI be installed in your system).
- b. Click / Double Click to open the Microsoft Internet Explorer (This icon will be located on the Desktop of the computer).
- c. Go to Start > Programs > Internet Explorer.

- d. Type **www.tenderwizard.com/OPTCL** in the address bar, to access the Login Screen.
 - e. Enter e-tender User Id and Password, click on "Go".
 - f. Click on "Click here to login" for selecting the Digital Signature Certificate.
 - g. Select the Certificate and enter DSC Password.
 - h. Re-enter the e-Procurement User Id Password
 - To make a request for Tender Document Bidders will have to follow below mentioned steps.
 - Click "Un Applied" to view / apply for new tenders.
 - Click on Request icon for online request.
 - 6. After making the request Bidders will receive the Tender Documents which can be checked and downloaded by following the below steps:
 - Click to view the tender documents which are received by the user.
 - Tender document screen appears.
 - Click "Click here to download" to download the documents.
- 7. After completing all the formalities Bidders will have to submit the tender and they must take care of following instructions.
 - Prior to submission, verify whether all the required documents have been attached and uploaded to the particular tender or not.
 - Note down / take a print of bid control number once it displayed on the screen
 - 8. Tender Opening event can be viewed online.
 - 9. Competitors bid sheets are available in the website for all.
 - 10. For any e-tendering assistant contact help desk number mentioned below.
 - Bangalore 080- 40482000.
 The participants to the tender should be registered under GST Laws.
- **2.** <u>Division of Specification.</u> The specification is mainly divided into two parts viz. Part-I & Part-II

Part-I Consists of

[i] Section-I Instruction to Bidders.

[ii] Section-II General Terms & conditions of contract.

[iii] Section-III Schedules and forms etc.

CPC-E-Tender-Procurement of Portable Hand Held Infrared Thermo-vision Camera-63/2018-19 Page 8

Part-II Consists of

Schedule of prices as per Annexure-V

3. Tenders shall be in Two Parts.

The Bidders are required to submit the tenders in two parts viz. Part-I (Techno commercial) & Part-II (Price bid).

The Bidders are required to submit the tenders in two parts Part-I, technical and commercial and Part-II "Price Bid".

4. Opening of Bids.

- The part-I shall be opened on the date and time fixed by the OPTCL for opening of bids in Electronic mode in presence of such of the bidders or their authorized representatives [limited to one person only] on the due date of opening of tender who opt to remain present. After scrutiny of the technical particulars and other commercial terms, clarifications, if required, shall be sought for from the bidders. The bidders shall be allowed 15 days' time for such activity.
- **[b]** On receipt of technical clarification, the bids shall be reviewed, evaluated and those not in conformity with the technical Specification / qualifying experience, shall be rejected. If any of the technical proposal requires modification to make them comparable, discussion will be held with the participating bidders.

All the responsive bidders shall be given opportunity to submit the revised technical and revised price proposals as a follow up to the clarification (modification if any) on the technical proposals. The qualified bidders shall be given opportunity to submit revised price proposals within 15 days from the date of such discussion or within time frame mutually agreed, whichever is earlier.

[c] When the revised price proposals are received, the original price proposals will be returned to the bidders unopened along with their original technical proposals. Only the revised technical and price proposals will be considered for bid evaluation. The price bids [Part-II] of such of the Bidders, whose tenders have been found to be technically and commercially acceptable, including those supplementary revised price bids, submitted subsequently, shall be opened in

the presence of the bidder's representative on a date and time which will be intimated to all bidders whose bids will be technically and commercially acceptable.

- [d] The bidders are required to furnish sufficient information to the Purchaser to establish their qualification, capacity to manufacture and/or supply the materials/perform the work. Such information shall include details of bidder's experience, its financial, managerial and technical capabilities.
- **[e]** The bidders are also required to furnish details of availability of appropriate technical staff and capability to perform after sales services. The above information shall be considered during scrutiny and evaluation of bids and any bid which does not satisfactorily meet these requirements, shall not be considered for price bid evaluation.
- [f] There will be demonstration of the equipment which is to be done at OPTCL Site before opening of the Price Bid. Those Bidders, fulfilling techno commercial criteria of the tender will be asked for demonstration of their equipments at suitable sites of OPTCL.

Accordingly, the bidders at their own cost will have to demonstrate their equipment within 1 (one) month of issue of intimation for the same from OPTCL & as per the place & date scheduled by OPTCL at their cost or else, the bidder will be out of race.

<u>Suitability Check</u>: A group of technical persons of OPTCL will evaluate the suitability of the equipment after field demonstration. Those bidders who are fulfilling other techno commercial specifications & found suitable during the field demonstration, their price bid will be opened.

[g] The price bids of the technically and otherwise acceptable bids shall only be evaluated as per the norms applicable in terms of this Specification.

5. Purchaser's Right Regarding Alteration of Quantities Tendered.

The Purchaser may alter the quantities of materials/equipment at the time of placing orders. Initially the purchaser may place orders for lesser quantity with full freedom to place extension orders for further quantity under similar terms and conditions of the original orders. Orders may also be split among more than one

CPC-E-Tender-Procurement of Portable Hand Held Infrared Thermo-vision Camera-63/2018-19 Page 10 Bidder for any particular item, if considered necessary in the interest of the Purchaser to get the goods/equipment earlier.

6. Procedure and opening time of tenders.

Tenders will be opened in the office of the Senior General Manager [C.P.C.] on the specified date and time in presence of the bidders or their authorized representatives [limited to one person only] in case of each bidder who may desire to be present, at the time of opening the bids.

7. <u>Bidder's Liberty to deviate from Specification.</u>

The Bidder may deviate from the specification while quoting, if in his opinion, such deviation is in line with the manufacturer's standard practice and conducive to a better and more economical offer. All such deviations should however be clearly indicated giving full justifications for such deviation. [Read with Clause-9, Section-II of the Specification].

8. Eligibility for submission of bids.

Only those manufacturers (OEM)/ Channel Partner of OEM (Indian Agent for the foreign made testing equipment) who have deposited the cost of tender specification are eligible to participate in the tender. They should submit the money receipt as a proof of such payment. The local Micro and small Enterprises (MSEs) (In the state of Odisha) based in Odisha and registered with respective DICs, Khadi, Village, Cottage & Handicrafts Industries, OSIC and NSIC can participate without payment of the cost of tender specification

9. Purchaser's right to accept/reject bids:

The purchaser reserves the right to reject any or all the tenders without assigning any reasons what so ever if it is in the interest of OPTCL, under the existing circumstances. [Read with clause-10, Section-II of the specification].

10. Mode of submission of Tenders.

- [A] Tenders shall be submitted in electronic mode only. (www.tenderwizard.com/OPTCL)
- [B] <u>Telegraphic or FAX tenders</u> shall not be accepted under any circumstances.

CPC-E-Tender-Procurement of Portable Hand Held Infrared Thermo-vision Camera-63/2018-19 Page 11

11. Earnest money deposit:

The tender shall be accompanied by Earnest Money deposit of value specified in the notice inviting tenders against each lot / bid. Tenders without the required EMD as indicated below and at **Annexure-VIII** will be rejected outrightly. The local Micro and small Enterprises(MSEs) (In the state of Odisha) based in Odisha and registered with respective DICs, Khadi, Village, Cottage & Handicrafts Industries, OSIC and NSIC can participate by submitting Earnest Money Deposit @ fifty percent of the amount indicated in the Notice Inviting Tender.

The earnest money deposit shall be furnished in one of the following forms subject to the conditions mentioned below:

- (a) Bank Draft: -To be drawn in favour of Drawing & Disbursing Officer, OPTCL [H.Qrs.Office], Bhubaneswar-751 022.
- (c) Bank Guarantee from any Nationalized/Scheduled Bank strictly as per enclosed proforma vide **Annexure-VI** to be executed on non-judicial stamp paper worth Rs.29.00 or as applicable, as per prevailing laws in force and also to be accompanied by the confirmation letter of the issuing Bank Branch.

NOTE:

- (i). The validity of the EMD in the form of Bank Guarantee shall be at least for 300 days from the date of opening of tender failing which the tender will be liable for rejection.
- (ii) No interest shall be paid on the Earnest Money Deposit.
- (iii) The Earnest Money Deposit shall be furnished in any one of the forms indicated above (i.e. Through Bank Draft, Bank Guarantee)
- (iv) No adjustment towards EMD shall be permitted against any outstanding amount with the **ODISHA POWER TRANSMISSION CORPORATION LTD**.
- (v) The chart showing particulars of EMD to be furnished by Bidders of different categories is placed at **Annexure-VIII.**
- (vi) In the case of un-successful Bidder, the EMD will be refunded after the tender is decided. In the case of successful Bidder, this will be refunded only after furnishing of security money referred to at <u>clause-19 of Section-II</u>.

- (vii) Suits, if any, arising out of this clause shall be filed in a Court of law to which the jurisdiction of High Court of ODISHA extends.
- (vii) EMD will be forfeited if the Bidder fails to accept the letter of intent and/or purchase order issued in his favour or to execute the order, placed on them.
- (viii) Tenders not accompanied by Earnest Money shall be disqualified.

12. Validity of the Bids: -

The tenders should be kept valid for a period of **240** days from the date of opening of the tender, failing which the tenders will be rejected.

13. PRICE: -

Bidders are requested to quote-'FIRM' Price. No deviation from **FIRM PRICE** will be entertained irrespective of deviation clause No.7 of this part of the specification.

14. Revision of tender price by Bidders: -

- [a] After opening of tenders and within the validity of period, no reduction or enhancement in price will be entertained. If there is any change in price, the tender shall stand rejected and the EMD deposited shall be forfeited.
- **[b]** After opening of price bid if the validity period is not sufficient to place purchase order, the Bidder may be asked by the purchaser to extend the validity period of the bid under the same terms and condition as per the original tender.

However, the bidder are free to change any or all conditions including price except delivery period of their bids at their own risk, if they are asked by the purchaser to extend the validity period of the bid prior to opening of price bid.

15. Bidders to be fully conversant with the clauses of the Specification:

Bidders are expected to be fully conversant with the meaning of all the clauses of the specification before submitting their tenders. In case of doubt regarding the meaning of any clause, the Bidder may seek clarification in writing from the Senior General Manager (Central Procurement Cell) OPTCL. This, however, does not entitle the Bidder to ask for time beyond due date, fixed for receipt of tender.

CPC-E-Tender-Procurement of Portable Hand Held Infrared Thermo-vision Camera-63/2018-19 Page 13

16. Documents to Accompany Bids.

Bidders are required to submit tenders in the following manner:

Part-I of the Tender shall Contain the following documents.

- [i] Declaration Form. [As per Annexure-I]
- [ii] Earnest Money. [As per **Annexure-VIII**]
- **[iii]** Technical specification and Guaranteed Technical Particulars conforming to the Purchaser's Specification along with drawings, literatures and all other required Annexures, duly filled in.
- [iv] Photostat copies of type test certificates of materials/equipments offered as stipulated in the Technical Specification.
- [v] Abstract of Terms & conditions in prescribed proforma as per **Annexure-II.**
- **[vi]** General Terms & Conditions of supply offer as per Section-II of the Specification.
- **[vii]** List of orders executed for similar materials/equipments during preceding 2 (two) years indicating the customer's name, Purchase Order No. & Date, date of supply and date of commissioning etc.
- [viii] Data on past experience as per Clause-7 of Section-II of the Specification.
- [ix] GST Compliance Rating. The GST Identification Number(GSTIN) under GST Laws and permanent account number [PAN] of the firm under Income tax Act are required.
- [x] Audited Balance sheet & profit loss accounts of the bidder, for past (3) three years.
- [xi] Schedule of quantity and delivery in the prescribed Proforma vide Annexure, as appended.
- [xii] List of Orders in hand to be executed.
- [xiii] Deviation schedule.
- [xiv] Local micro & small enterprisers (MSEs) (In the state of Odisha) based in Odisha and registered with respective DICs, Khadi, Village, Cottage & Handicrafts Industries, OSIC and NSIC have to submit notarized hard copy of valid registration as local MSE (In the state of Odisha) as above on or before the date & time of submission of techno-commercial bid and upload the scan/soft copy of the same in e-tender portal.

[xv] The bidder should not have any pending litigation or arbitration with OPTCL with regard to any project or related activity. The bidder should certify/declare the same in unequivocal terms by way of an affidavit duly sworn before a magistrate or a Notary.

[17. Documents/Papers to accompany Part-II Bid.

(a) Part – II of the tender shall consist of the following

Schedule of prices in the prescribed proforma as per Annexure-V

18. Conditional Offer:

Conditional offer shall not be accepted.

19. General: -

- (i) In the event of discrepancy or arithmetical error in the schedule of price, the decision of the purchaser shall be final and binding on the Bidder.
- (ii) For evaluation, the price mentioned in words shall be taken if there is any difference in figures and words in the price bid.
- (iii) Notice inviting tender shall form part of this specification.
- (iv) The price bids of the technically and otherwise acceptable bids shall only be evaluated. The EMD of others, if any, shall be returned to the bidders.
- (v) Bidder can offer any lot or all the lots of the tender, if there are more than one lots. But the tender (bid) must be furnished separately for each lot. For each lot, the Bidder has to submit PART-I & PART-II of the bids separately.
- (vi) It should be distinctly understood that the part-II of the bid shall contain only details/documents relating to price, as outlined in clause-17 mentioned herein above. Inclusion of any of the documents/information etc. shall render the bid liable for rejection.

20. PRE-Bid Discussion;

A pre-bid discussion shall be held prior to opening of the Techno-Commercial bid (First Part).

21. Expenses in respect of OPTCL's representative

(i) There will be no pre-dispatch inspection of testing equipment at manufacturer's/supplier's site.

(ii) There will be demonstration of the equipment which is to be done at OPTCL Site before opening of the Price Bid. Those Bidders, fulfilling techno commercial criteria of the tender will be asked for demonstration of their equipments at suitable sites of OPTCL.

Accordingly, the bidders at their own cost will have to demonstrate their equipment within 1(one) month of issue of intimation for the same from OPTCL & as per the place & date scheduled by OPTCL or else, the bidder will be out of race.

Suitability Check: A group of technical persons of OPTCL will evaluate the suitability of the equipment after field demonstration. Those bidders who are fulfilling other techno commercial specifications & found suitable during the field demonstration, their price bid will be opened.

(iii) Acceptability Check: After delivery, the Firm at their own cost shall demonstrate their equipment again for two consecutive days at site of OPTCL and the test results of the equipment for both the days shall be similar. In case, the variation of test results found to be not within the limit, the equipment shall not be accepted by OPTCL and the Firm shall take back the instrument & no compensation in this regard shall be paid to the Firm by OPTCL. Moreover in such case, other clauses of the tender specification shall be applicable.

22. Litigation/Arbitration

- (i)- Bidder has to furnish detailed information on any litigation or arbitration arising out of contracts completed or under execution by it over the last five years. A consistent history of litigation by or against the bidder may result in rejection of bid.
- (ii) The bidder should not have any pending litigation or arbitration with OPTCL with regard to any project or related activity. The bidder should certify/declare the same in unequivocal terms by way of an affidavit duly sworn before a magistrate or a notary. Bid furnished by the bidder shall not be eligible for consideration if it is not accompanied by the affidavit. Further, the bid/LOA/LOI shall liable for outright rejection/cancellation at any stage if any information contrary to the affidavit/declaration is detected.

PART-I

SECTION - II.

GENERAL TERMS AND CONDITIONS OF CONTRACT [G.T.C.C.]

TABLE OF CONTENTS

Clause.	<u>Title.</u>	Page.
1.	Scope of the contract.	19
2.	Definition of terms.	19
3.	Manner of execution.	20
4.	Inspection and testing.	20
5.	Training facilities.	20
6.	Rejection of materials.	20
7.	Experience of bidders.	21
8.	Language and measures.	21
9.	Deviation from Specification.	21
10.	Right to reject/accept any tender.	22
11.	Supplier to inform himself fully.	22
12.	Patent rights etc.	22
13.	Delivery.	22
14.	Despatch Instructions.	23
15.	Supplier's Default Liability.	23
16.	Force Majeure.	23
17.	Extension of Time.	24
18.	Guarantee Period.	24
19.	Bank Guarantee towards Security Deposit,	24
	Payment and Performance Guarantee.	
20.	Import License	
21.	Terms of Payment.	25
22.	Penalty for Delay in Completion of Contract.	25
23.	Insurance.	26
24.	Payment Due from the Supplier.	26
25.	Rating under GST, Balance Sheet and P/L Account.	27
26.	Certificate of exemption from GST.	27
27.	contractor's Responsibility.	27

28.	Validity.	27
29.	Basis & Weightage in evaluation & Compar. of Bids.	27
30.	Minimum qualification criteria of Bidders.	28
31.	Jurisdiction of High Court of Orissa.	29
32.	Correspondences.	30
33.	Official Address of the Parties to the Contract.	30
34.	Outright rejection of Tenders.	30
35.	Documents to be treated as confidential.	31
36.	Scheme/Projects.	31
37.	Empanelment of bidders	31
38.	Contacting the purchaser	31

PART-I SECTION-II GENERAL TERMS AND CONDITIONS OF CONTRACT [G.T.C.C.]

1. Scope of the contract:

The scope of the contract shall be to design, manufacture, supply of equipments/ materials as per the specification at the consignee's site, and rendering services in accordance with the enclosed technical specification with yearly calibration of equipments for a guarantee period of 05 years for smooth & reliable operation of the equipments.

2.0 Definition of terms:

For the purpose of this specification and General Terms and Conditions of contract [GTCC], the following words shall have the meanings hereby indicated, except where otherwise described or defined.

- 2.1 "The Purchaser" shall mean the Senior General Manager[Central Procurement Cell] for and on behalf of ORISSA POWER TRANSMISSION CORPORATION LTD., Bhubaneswar.
- 2.2 "The Engineer" shall mean the Engineer appointed by the Purchaser for the purpose of this contract.
- 2.3 "Purchaser's Representative" shall mean any person or persons or consulting firm appointed and remunerated by the Purchaser to supervise, inspect, test and examine workmanship and materials of the equipment to be supplied.
- 2.4 "The supplier" shall mean the bidder whose bid has been accepted by the purchaser and shall include the bidder's executives, administrators, successors and permitted assignees.
- 2.5 "Equipment" shall mean and include all machinery, apparatus, materials, and articles to be provided under the contract by the suppliers.
- 2.6 "Contract Price" shall mean the sum named in or calculated the bid.
- 2.8 "General Condition" shall mean these General Terms and Conditions of Contract. The Specification" shall mean both the technical as well as commercial parts of the specification annexed to or issued with GTCC and shall include the schedules and drawings, attached thereto as well as all samples and pattern, if any.
- 2.9 "Month" shall mean "Calendar month".
- 2.10 Writing" shall include any manuscript, type written, printed or other statement

reproduction in any visible form and whether under seal or under hand.

2.1 Lans [All Basic Price (Taxable value for Goods) at the point of destination" shall mean the price quoted by the bidder for equipment and material at the consignee's store/site. The cost is inclusive of packing, forwarding, freight, insurance and all expenses and taxes & duties at the end of the

supplier excluding Goods & Service Tax. The Goods & Service Tax shall be shown in a separate column item wise alongside the Basic Price quoted at the applicable rate in the Tax Invoice. The applicable rate of GST shall refer to the HSN code of the material supplied. The Basic Price and GST thereon shall be the "FOR Destination Price" as quoted by the bidder.

- 2.12 The term "Contract document" shall mean and include GTCC, specifications, schedules, drawings, form of tender, Notice Inviting Tender, covering letter, schedule of prices or the final General Conditions, any special conditions, applicable to the particular contract.
- 2.13 Terms and conditions not herein defined shall have the same meaning as are assigned to them in the Indian Contract Act, failing that in the Orissa General Clauses Act.

3. Manner of execution:

- (i) The supplier is required to produce shop routine test Certificate, calibration certificates of Testing Instruments at the time of offering their materials/equipment for inspection, testing & acceptance. The test house/laboratory where tests are to be carried out must be approved by the Govt. A letter pertaining to Govt. approved laboratory must be furnished to the purchaser along with the offer for inspection.
 - (ii) The Purchaser has the right to have the tests carried out at his own cost by an independent agency whenever there is dispute regarding the quality of supply.

5. Training facilities.

The supplier shall provide all possible facilities for training of Purchaser's Technical personnel at premises of the consignee & when deputed by the Purchaser for acquiring first hand knowledge for it's proper operation, maintenance in service, Troubleshooting, analysis, report generation, hands on gas collection, extraction and detection with interactive session etc. wherein it is thought necessary by the purchaser.

The training shall be imparted by a certified trainer by the OEM.

6. Rejection of Materials.

In the event any of the equipments/materials, supplied by the manufacturer is found defective due to faulty design, bad workmanship, bad materials used or otherwise not in conformity with the requirements of the Specification, the Purchaser shall either reject the equipment or ask the supplier in writing to rectify or replace the defective equipment free of cost to the purchaser. The contractor on receipt of such notification shall either rectify or replace the defective equipment free of cost to the purchase within 15 days from the date of issue of such notification by the purchaser. If the supplier fails to do so, the Purchaser may:-

- [a] At its option replace or rectify such defective equipments/materials and recover the extra costs so involved from the supplier plus fifteen percent and/or.
- [b] Terminate the contract for balance work/supplies, with enforcement of penalty Clause as per contract for the undelivered goods and with forfeiture of Performance Guarantee/Composite Bank guarantee.
- [c] Acquire the defective equipment/materials at reduced price, considered equitable under the circumstances.

7. Experience of Bidders:

The bidders should furnish information regarding experience particularly on the following points:

- [i] Name of the manufacturer:
- [ii] Standing of the firm and experience in manufacture of equipment/ material quoted:
- [iii] Description of equipment/material similar to that quoted, supplied and installed during the last three years with the name(s) of the Organisations to whom supplies were made wherein, at least one (1) certificate shall be from a state/central P.S.U.
- [iv] Details as to where installed etc.
- [v] Testing facilities at manufacturer's works.
- [vi] If the manufacturer is having collaboration with another firm [s], details regarding the same.
- [vii] A list of purchase orders of identical material/equipments/materials offered as per technical specification executed during the last two years along with users certificate. User's certificate shall be legible and must indicate, user's name, address, designation, place of use, and satisfactory performance of the equipment/materials for at least two years from the date of commissioning. Wherein at least one (1) certificate shall be from a State/Central or P.S.U. Bids will not be considered if the past manufacturing experience is found to be un-satisfactory or is of less than 3 (three) years on the date of opening of the bid and bids not accompanying user's certificate will be rejected.

8. Language and measures:

All documents pertaining to the contract including specifications, schedule, notices, correspondence, operating and maintenance instructions., drawings or any other writing shall be written in English language. The metric system of measurement shall be used exclusively in this contract.

9. Deviation from specification:

It is in the interest of the BIDDER to study the specification, specified in the tender schedule

thoroughly before tendering so that, if any deviations are made by the BIDDER, (both commercial and Technical), the same are prominently brought out on a separate sheet under heading "Deviations Commercial" and "Deviations Technical".

A list of deviations shall be enclosed with the tender. Unless deviations in scope, technical and commercial stipulations are specifically mentioned in the list of deviations, it shall be presumed that the BIDDER has accepted all the conditions, stipulated in the tender specification, not withstanding any exemptions mentioned therein.

10. Right to reject/accept any tender:

The purchaser reserves the right either to reject or to accept any or all tenders if the situation so warrants in the interest of the purchaser. Orders may also be split up between different BIDDER on individual merits of the BIDDER. The purchaser has exclusive right to alter the quantities of materials/ equipment at the time of placing final purchase order. After placing of the order, the purchaser may defer the delivery of the materials. It may be clearly understood by the BIDDER that the purchaser need not assign any reason for any of the above action [s]

11. Supplier to inform himself fully:

The supplier shall examine the instructions to BIDDER, general conditions of contract, specification and the schedules of quantity and delivery to satisfy himself as to all terms and conditions and circumstances affecting the contract price. He shall quote price [s] according to his own views on these matters and understand that no additional allowances except as otherwise provided there in will be admissible. The purchaser shall not be responsible for any misunderstanding or incorrect information, obtained by the supplier other than the information given to the supplier in writing by the purchaser.

12. Patent rights Etc.

The supplier shall indemnify the Purchaser against all claims, actions, suits and proceedings for the infringement of any patent design or copy right protected either in the country of origin or in India by the use of any equipment supplied by the manufacturer. Such indemnity shall also cover any use of the equipment, other than for the purpose indicated by or reasonably to be inferred from the specification.

13. Delivery:-

[a] Time being the essence of the contract; the equipment shall be supplied within the delivery period, specified in the contract. The Purchaser, however, reserves the right to reschedule the delivery and change the destination if required. The delivery period shall be reckoned from the date

of placing the Letter of Intent/Purchase order, as may be specified in LOI/Purchase order.

[b] The desired delivery period shall be as indicated at <u>Annexure-III (Quantity & Delivery</u> Schedule) of Section-IV (Technical Specification) & Apendix-I.

14. <u>Despatch instructions</u>.

- I] The equipments/materials/ materials should be securely packed and dispatched directly to the specified site at the supplier's risk by Road Transport only.
- II] <u>Loading & unloading of Ordered Materials.</u>

It will be the sole responsibility of the supplier for loading and unloading of materials both at the factory site and at the destination site/store.

The Purchaser shall have no responsibility on this account

15. Supplier's Default Liability.

- [i] The Purchaser may, upon written notice of default to the supplier, terminate the contract in circumstances detailed hereunder.
- [a] If in the judgement of the Purchaser, the supplier fails to make delivery of equipment/material within the time specified in the contract or within the period for which if extension has been granted by the Purchaser in writing in response to written request of the supplier.
- [b] If in the judgement of the Purchaser, the supplier fails to comply with any of the provisions of this contract. In the event, Purchaser terminates the contract in whole or in part as provided in Clause-15 (i) of this section, the Purchaser reserves the right to purchase upon such terms and in such a manner as he may deem appropriate in relation to the equipment/material similar to that terminated and the supplier will be liable to the Purchaser for any additional costs for such similar equipment/material and/or for penalty for delay as defined in clause-22 of this section until such reasonable time as may be required for the final supply of equipment.
- [ii] In the event the Purchaser does not terminate the contract as provided in <u>clause 15(I)</u> of this Section, supplier shall be liable to the Purchaser for penalty for delay as set out in <u>Clause-22</u> of this section until the equipment is accepted. This shall be

based only on written request of the supplier and written willingness of the Purchaser.

16. Force Majeure:

The supplier shall not be liable for any penalty for delay or for failure to perform the contract for reasons of force majeure such as acts of god, acts of the public enemy, acts of Govt., Fires, floods, epidemics, Quarantine restrictions, strikes, Freight Embargo and provided that the supplier shall within <u>Ten (10)days</u> from the beginning of delay on such account notify the purchaser in writing of

the cause of delay. The purchaser shall verify the facts and grant such extension, if facts justify.

17. Extension of time:-

If the delivery of equipment/material is delayed due to reasons beyond the control of the supplier, the supplier shall without delay give notice to the purchaser in writing of his claim

for an extension of time. The purchaser on receipt of such notice may or may not agree to extend the contract delivery date as may be reasonable but without prejudice to other terms and conditions of the contract.

18. Guarantee period: -

[i] The stores (Equipment/materials with its accessories including battery/ Inverter) covered by the specification for procurement of Testing Equipments should be guaranteed for trouble free & satisfactory operation against defects in design, materials, workmanship and for any abnormal behaviour for a period of 5(five) years from the last date of demonstration after receipt of equipment/material. The guarantee certificate shall be furnished in triplicate to the purchaser for his approval. Any defect noticed during this period should be rectified/replaced by the supplier free of cost to the purchaser provided such defects are due to faulty design, bad workmanship or bad materials used, within one month upon written notice from the purchaser failing which provision of (Penalty/ B.G. forfeiture) shall apply.

In addition to the above, the supplier has to conduct calibration test of the equipments at OPTCL site without any extra cost annually within one month from the date of completion of each year. However, in between the two successive test for calibration if any defect is noticed, the same has also to be attended by the supplier without any price implication on OPTCL as the equipment is under coverage of guarantee period.

The supplier will have to bear the cost of spares, software, transportation, transit insurance (to & fro), etc of kit for repair at test lab/works. Equipment after repairs, need to be returned within thirty days from the date of despatch from the owners site for rectification/repair.

All the expenses for maintaining supplied equipment "Healthy and in working condition" to be borne by Successful bidder during the period of guarantee. No extra claim for repairing & calibration of the equipment shall be made by the supplier.

19. B.G. towards security deposit, 100% payment and performance guarantee:

[i] For manufacturers situated Inside & out side the state of Orissa.

The Composite Bank Guarantee as per the prescribed Proforma for 10% [ten percent] of the total FORD destination cost of the purchase order, (In case of successful bidder who is a local Micro and

small Enterprise(MSEs) (In the state of Odisha), based in Odisha & registered with respective DICs, Khadi, Village, Cottage & Handicrafts Industries, OSIC and NSIC 5% (five percent), shall be furnished from any nationalized/scheduled bank having a place of business at Bhubaneswar, to the office of Sr. General Manager [Central Procurement Cell] OPTCL within 15 days from the date of issue of the purchase order,. The BG shall be executed on non judicial stamp paper worth of Rs.100.00 [Rupees One Hundred] only or as per the prevalent rules, valid for a period of 62 (Sixty two) months from the last date of delivery period, for scrutiny and acceptance, failing which the supply order will be liable for cancellation without any further written notices. The BG should be accompanied by a confirmation letter from the concerned bank and should have provision for encashment at Bhubaneswar, before the Bank Guarantee is accepted and all concerned intimated. The B.G should be revalidated as and when intimated to you to cover the entire guarantee period.

- (ii) No interest is payable on any kind of Bank Guarantee.
- [iii] In case of non-fulfillment of contractual obligation, as required in the detailed purchase order/Specification, the composite Bank guarantee shall be forfeited.

20. Import License

In case imported materials are offered, no assistance will be given for release of Foreign Exchange. The firm should arrange to import materials from their own quota. Equipment of indigenous origin will be preferred.

21. (A) Terms of Payment.

- i) 100% value of each consignment with 100% Goods and Services Tax in full as applicable will be paid on receipt of materials in good condition at stores/desired site and verification thereof, subject to furnishing and approval of Composite Bank Guarantee at the rate of 10% (Ten percent) or 5%(Five percent), of the cost of supplied materials, as stipulated under clause-19 of this specification & on prior approval of guarantee certificate & Test certificate by the Purchaser.
- ii) TDS under GST Laws shall be deducted, as applicable.
- Any imposition of new tax or revision of tax shall be paid/reimbursed at the time of dispatch, scheduled or actual whichever is lower (i.e. If delivery is within schedule period, tax variation as applicable shall be paid, and if delivery is made beyond schedule date, any additional financial implication due to statutory variation in tax shall be to bidder's account)
 - **[B]** The supplier shall furnish Composite Bank Guarantee of appropriate amount to OPTCL covering 10% or 5 % as applicable of F.O.R. Destination cost of the purchase order

well in advance (within 15 days from the date of issue of the purchase order) before despatch of materials.

22. Price Reduction Schedule for Delay in Completion of Contract

I) If the Supplier fails to deliver the materials/equipments within the delivery schedule, specified in the contract including delivery time extension, if any, granted thereto, the Purchaser shall recover from the Supplier, price reduction for a sum of half percent (0.5 percent) of the Taxable Value at Destination of the un-delivered equipment for each calendar week of delay or part thereof. For this purpose, the date of receipted challan shall be reckoned as the date of delivery. The total amount of price reduction shall not exceed five percent (5%) of the Taxable Value at Destination of the unit or units so delayed. Equipment will be deemed to have been delivered only when all its components and accessories as per technical Specification are also delivered. If certain components & accessories are not delivered in time, the equipment will be considered delayed until such time as the missing parts are delivered.

II) During the guarantee period, if the Supplier fails to rectify/replace the equipment/material within 30 daysfrom the date of intimation of defect by the purchaser, then the Price Reduction Schedule at the rate of half percent (0.5%) of the Total Taxable Value for each calendar week of delay or part thereof shall be recovered by the purchaser. For this purpose, Price Reduction Schedule shall be reckoned from the 30th day from the date of issue of letter on defectiveness of equipment/material. The total amount of Price Reduction Schedule in this case shall not exceed 10% (TEN PERCENT) of the Purchase Order/Contract amount except GST (i.e.Total Taxable Value). If the defects, so intimated are not rectified or equipment/materials not replaced by the supplier within the guarantee period, then whole of the C.P.B.G. will be forfeited by the purchaser, without any intimation to the supplier.

23. Insurance

The Supplier shall undertake insurance of stores covered by this Specification unless otherwise stated. The responsibility of delivery of the stores at destination in good condition rests with the Supplier. Any claim with the Insurance Company or transport agency arising due to loss or damage in transit has to be settled by the supplier. The Supplier shall undertake free replacement materials damaged or lost, which will be reported by the consignee within 30 days of receipt of the materials at destination without awaiting for the settlement of their claims with the carriers and underwriters.

24. Payment Due from the Supplier.

All costs and damages, for which the supplier is liable to the purchaser, will be deducted by

the purchaser from any money, due to the supplier, under any of the contract (s), executed with OPTCL.

25. Rating under Goods and Services Tax and Balance sheet and profit & Loss Account:

- i. Rating under Goods and Services Tax shall be enclosed with the tender.
- ii. Audited Balance Sheet and Profit & Loss Account of the bidder for the previous three years shall be enclosed to assess the financial soundness of the bidder(s).

26. Certificate of Exemption from Goods and Services Tax.

Offers with exemption from Goods and Services Tax shall be accompanied with authenticated proof of such exemption. Authenticated proof for this clause shall mean attested Photostat copy of exemption certificate. Any claim towards Goods and Services Tax shall be paid on actual basis subject to production of authenticated documentary evidence.

27. Supplier's Responsibility.

Not withstanding anything mentioned in the Specification or subsequent approval or acceptance by the Purchaser, the ultimate responsibility for design, manufacture, materials used and satisfactory performance shall rest with the BIDDER. The Supplier(s) shall be responsible for any discrepancy noticed in the documents, submitted by them along with the bid(s

28. Validity

Prices and conditions contained in the offer should be kept valid for a minimum period of **240 (Two hundred forty) days** from the date of opening of the tender, failing which the tender shall be rejected.

29. EVALUATION.

- (i) Evaluation of bids will be on the basis of the FOR DESTINATION PRICE (By Road Transport) including Goods and Services Tax & other levies as may be applicable. The FORD PRICE shall consist of the following components
 - a) Taxable value of equipment/materials
 - b) Goods and Services Tax
 - c) Other levies.
 - d) Mandatory spares, if any for maintenance of equipment. (At the discretion of the purchaser)
 - e) Test charges, if any.
 - f) Supervision of erection, testing and commissioning charges, if any.
 - g) Any other items, as deemed proper for evaluation by the purchaser.

- h) Loading factors will be taken in to account during evaluation if the prices of some of the items, not quoted.
- i) Any imposition of new tax or revision of tax shall be considered at the time of price bid evaluation.

j)

(II) Weightage shall be given to the Following factors in the Evaluation & Comparison of Bids.

In comparing bids and in making awards, the Purchaser will consider other factors such as compliance with Specification, minimum qualification criteria as per clause-30, outright rejection of tenders <u>clause-34</u> of this tender, relative quality, adaptability of Supplies or services, experience, financial soundness, record of integrity in dealings, performance of materials/equipments/materials earlier supplied, ability to furnish repairs and maintenance services, the time of delivery, capability to perform including available facilities such as adequate shops, plants, equipment and technical organisation.

(III) The local MSE (In the state of Odisha) bidders, based in Odisha, shall be required to furnish their willingness to match their bid price with that of the lowest evaluated bidder without any price preference and in case they agree, they shall be eligible to get up to 20% of the tendered quantity to be distributed suitably among the willing MSE bidders failing which the said 20% of the tendered quantity be awarded to the lowest evaluated bidder.

30. Minimum Qualification Criteria of Bidders.

All the prospective bidders are requested to note that their bids for tendered equipment can only be considered for evaluation if:

- (a) The firm must be an Original Equipment manufacturer (OEM) or Channel Partner of OEM (Indian Agent for the foreign made testing equipment) of above rated or higher specification/capacity equipment/materials for a minimum period of 3 (three) years as on the date of opening of the tender.
- **(b)** The firm must have supplied at least 50% of tendered quantity of testing equipment or kits for which tendering have been done to reputed Indian utilities like PGCIL, NTPC, State Electricity Boards/utilities.
- **(c)** The BIDDER should have adequate infrastructural facility for "After sales service" in India. After sale service should be rendered by the Bidder beyond the Guarantee period of 60 (Sixty) months.
 - (d) The firms must agree to demonstrate their product to OPTCL at their cost at any point of OPTCL.

• There will be demonstration of the equipment which is to be done at OPTCL Site before opening of the Price Bid. Those Bidders, fulfilling techno-commercial criteria of the tender will be asked for demonstration of their equipments at suitable sites of OPTCL.

Accordingly, the bidders will have to demonstrate their equipment within 1(one) month of issue of intimation for the same from OPTCL & as per the place & date scheduled by OPTCL or else, the bidder will be out of race.

- Again, the Firm shall demonstrate their equipment at OPTCL field for two consecutive days
 against the order and the test results shall be similar for both the days test. In case the
 variation of test results found to be not within the limit the equipment shall not be accepted
 by OPTCL and the Firm shall take back the instrument and no compensation in this regard
 shall be paid to the Firm by OPTCL.
- **(e)** The above rated or higher specification /capacity equipment/material should have at least 2 (two) years successful performance from the date of commissioning. At least one of the performance certificates shall be submitted from Govt. of India/State Govt.(s) or their undertakings or in any reputed Power utilities.
- **(f)** The bidder should have conducted type tests on the tendered equipment/materials in Government approved laboratory within five years from the date of opening of the tender.
 - **(g)** Calibration facility should be there in India & it should be done by the OEM on yearly basis.
- **(h)** Copies of documents, defining the constitution or legal status, place of registration and principal place of business of the company or firm or partnership or collaborator or parent Company etc. shall be furnished along with the bid.
- (i) Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have made misleading or false representations in the forms, statements and attachments, submitted in proof of qualification requirements and/ or record of poor performance such as not properly completing the contract, inordinate delays in completion of supply, litigation history or financial failure etc.
- (j) Not withstanding anything stated above, the purchaser reserves the right to assess the Bidder's capability and capacity to perform the contract within the scheduled time, should circumstances warrant such assessment in the overall interest of the Purchaser.

31. Jurisdiction of the High Court of Orissa.

Suits, if any, arising out of this contract shall be filed by either Party in a court of Law to which

the jurisdiction of High court of Odisha extends.

32. Correspondences.

- i) Any notice to the supplier under the terms of the contract shall be served by Registered Post or by hand at the Supplier's Principal Place of Business.
- ii) Any notice to the Purchaser shall be served at the Purchaser's Principal Office in the same manner.

33. Official Address of the Parties to the Contract

The address of the parties to the contract shall be specified:-

[i] Purchaser: Senior General Manager (Procurement)(CPC) OPTCL Bhubaneswar-751022 (Orissa)
Telephone No. 0674 - 2541801
FAX No. 0674-2542964

[ii] Supplier: Address

Telephone No. Fax No.

34. Outright Rejection of Tenders

Tenders shall be out rightly rejected if the followings are not complied with.

- [i] The tenderer shall submit the bid in electronic mode only and shall submit the tender cost on or before the date and time of submission of technical bid. In case of local Micro and small Enterprises(MSEs) (In the state of Odisha), based in Odisha & registered with respective DICs, Khadi, Village, Cottage & Handicrafts Industries, OSIC and NSIC participating in the tender they have to submit notarised hard copy of valid registration as local MSE as above on or before the date and time of submission of technical bid.
- [ii] The Bidder shall submit the bid in electronic mode only.
- [iii] The Tender shall not be submitted telegraphically or by FAX.
- [iv] The Bidder shall furnish the Tender cost, EMD & Tender processing fee on or before last date and time of submission of bid.
- [v] The Tender shall be kept valid for a minimum period of 240 days & EMD should be kept valid for 300 days from the date of opening of tender.
- [vi] The Tender shall be submitted in two parts as specified & as indicated in clause no 16.0 & 17.0 of Section-I (Instruction to bidder).
- [vii] The bid shall accompany relevant documents in support of Minimum Qualifying requirement as indicated in clause No 30.0 above.
- [viii] The bid shall accompany Guaranteed Technical Particulars (file named as 2.pdf) & bidder shall fill up Annexure-V (Abstract of general terms and conditions in complete

shape).

- [ix] The schedule of prices should be filled up fully to indicate the break-up of the prices including taxes and duties. Incomplete submission of this schedule will make the tender liable for rejection.
- [x] The Bidder should quote 'FIRM' price only and the price should be kept valid for a minimum period of 240 days from the date of opening of the tender.
- [xi] Detailed information on any litigation or arbitration arising out of contract completed or under execution by it over the last five years. A consistent history of litigation by or against the bidder may result in rejection of bid.
- [xii] The bidder should not have any pending litigation or arbitration with OPTCL with regard to any project or related activity. The bidder should certify / declare the same in the unequivocal terms by way of an affidavit duly sworn before a magistrate or a notary. Bid furnished by the bidder shall not be eligible for consideration if it is not accompanied by the affidavit. Further the bid / LOA/ LOI shall be liable for outright rejection/ cancellation at any stage if any information contrary to the affidavit / declaration is detected.

35. Documents to be treated as confidential.

The supplier shall treat the details of the specification and other tender documents as private and confidential and these shall not be reproduced without written authorization from the Purchaser.

36. Scheme/Projects

The materials/equipment covered in this specification shall come under "O&M WORKS"

38. CONTACTING THE PURCHASER: -

- a) Subject to Clause No.4 (opening of bids) of part-I, Section-I (Instruction to BIDDER), no bidder shall contact the purchaser on any manner, relating to its bid, from the time of bid opening to the time, the contract is awarded.
- (b) Any effort by a Bidder to influence the purchaser in the purchaser's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidder's bid.

SECTION - III. LIST OF ANNEXURES

[I TO XIII]

[PAGE 31 TO 47]

SECTION - III

[LIST OF ANNEXURES]

The following schedules and proforma are annexed to this specification and contained in Section-III as referred to in the relevant clauses.

1	Declaration form	ANNEXURE-I
2	Abstract of terms and conditions to accompany	ANNEXURE-II
	Section-II of Part-I	
3	Schedule of Quantity and Delivery	ANNEXURE-III
4	Abstract of price component [to accompany Part-II	ANNEXURE-IV
	of this specification]	
5	Schedule of prices to accompany Part-II	ANNEXURE-V
6	Bank Guarantee form for earnest money deposit	ANNEXURE-VI
7	Composite Bank Guarantee form for security	ANNEXURE-VII
	deposit, payment and performance	
8.	Chart showing particulars of E.M.D.	ANNEXURE – VIII
9.	Data on Experience.	ANNEXURE – IX
10.	Schedule of spare parts.	ANNEXURE-X
11.	Schedule of Installations.	ANNEXURE-XI
12.	Schedule of deviations(Technical)	ANNEXURE-XII(A)
13.	Schedule of deviations(Commercial)	ANNEXURE-XII(B)
14	Litigation/Arbitration	ANNEXURE-XIII
		<u>L</u>

ANNEXURE - I

DECLARATION FORM

-	-
•	

The Sr. General Manager (CPC) OPTCL Head Qrs.BBSR,751022 Sub:- Tender Specification No-_

Sir,

- Having examined the above specification together with terms & conditions referred to therein 1. * I/We the undersigned hereby offer to supply the materials/equipments covered therein complete in all respects as per the specification and General conditions, at the rates, entered in the attached contract schedule of prices in the Tender.
- 2. * I/We hereby undertake to have the materials/equipments delivered within the time specified in the Tender.
- * I/We hereby guarantee the technical particulars given in the Tender supported with 3. necessary reports from concerned authorities.
- * I/We certify to have submitted the bid electronically by remitting *cash/money 4. order/D.D./ remitting the cost of tender, herewith and this has been acknowledged by your letter/ money receipt No. Dated,
- In the event of Tender, being decided in *my/our favour, * I/We agree to furnish the 5. Composite B.G. in the manner, acceptable to ORISSA POWER TRANSMISSION CORPORATION LTD., and for the sum as applicable to *me/us as per clause-19 of section-II of this specification within 15 days of issue of letter of intent/purchase order failing which *I/We clearly understand that the said letter of Intent/Purchase order will be liable to be withdrawn by the purchaser, and the EMD deposited by us shall be forfeited by OPTCL.

2014 Signed this day of

Yours faithfully

Signature of the Bidder with seal of the company

This form should be dully filled up by the Bidder and uploaded at the time of submission of tender.]

* (Strikeout whichever is not applicable)

ANNEXURE-II

ABSTRACT OF GENERAL TERMS AND CONDITIONS OF CONTRACT [COMMERCIAL] TO ACCOMPANY PART-I

(To be filled up by the tenderer as indicated in the excel sheet)

ANNEXURE-III SCHEDULE OF QUANTITY AND DELIVERY

(To be filled up by the Bidder)

SL	Description of materials	Quantity	Desired	Destination	Remarks.
No		required	Delivery		
1	2	3	4	5	6

Place:	
Date:	Signature of Bidder
	with seal of Company.

ANNEXURE-IV

(To be filled up by the tenderer as indicated in the excel sheet)

NB:- Abstract of price component shall be done for equipment/material offered, for testing & commissioning charges, if any. All the above prices will be taken during bid price evaluation.

ANNEXURE-V.

(To be filled up by the tenderer as indicated in the excel sheet)

- 1. The tenderer should fill up the schedule properly and in full in Excel file of etender mode. The tenderer should fill up the schedule properly and in full. The tender will be rejected, if the schedule of price is submitted in incomplete form. No post tender correspondence will be entertained on break-up of prices. Also, the supplier should agree for delivery at sub-station site.
- 2. The Tenderer shall give an undertaking in part-I of the bid that, any implication of lower Tax and Input Tax Credit benefit have been fully passed on to the purchaser as per anti-profiteering and other provisions under GST Laws while quoting the tender price.
- 3. Conditional offers will not be acceptable.

ANNEXURE-VI

[PROFORMA FOR BANK GUARANTEE FORM FOR EARNEST MONEY DEPOSIT]

(To be Stamped in accordance with Stamp Act and the Non-Judicial Stamp Paper of appropriate value should be in the name of Issuing Bank)

Re	ef No:
Da Bo	ank Guarantee No
	This Guarantee Bond is executed this day of by us the Bank at
ı	Whereas the ODISHA POWER TRANSMISSION CORPORATION Limited, Janpath, Bhubaneswar, a company constituted under the Companies Act-1956 (hereinafter called OPTCL) has invited Tender vide e-NIT No
(1. Now, therefore, in accordance with Notice Inviting Tender (e-NIT) No
 	[indicate the name, Address & Code of the bank] [hereinafter referred to as "Bank"] at the request on Ms/Shri
2.	We, the [indicate the name of the Bank, Address, Code] do hereby further undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from OPTCL. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs (Rupees in words)
3.	We undertake to pay to OPTCL any money so demanded not withstanding any dispute or disputes so raised by the bidder in any suit or proceeding instituted/pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the bidder shall have no claim against us for making such payment.
4.	We, the Bank further agree that the guarantee herein contained shall remain in full force and effect during the aforesaid period of days [in words] (as per Tender Specification and it shall continue to be so enforceable till all the dues of OPTCL under or by virtue of the said Bid have been fully paid and its claims satisfied or discharged or till OPTCL certifies that the terms and conditions of the said Bid have

	been fully and properly carried out by the said bidder and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us or our Branch Office at Bhubaneswar < Mention Name, Address & Code of the Branch Office at Bhubaneswar of Issuing Bank> in writing on or before we shall be discharged from all liability under this guarantee thereafter.
5.	We the Bank further agree with OPTCL that OPTCL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Bid or to extend time of performance by the said Bidder from time to time or to postpone for any time or from time to time any of the powers exercisable by OPTCL against the said Bidder and to forbear or enforce any of the terms and conditions relating to the said Bid and we shall not be relieved from our liability by reason of any such variation, postponement or extension granted to the Bidder or for any forbearance, act or omission on the part of OPTCL or any indulgence by OPTCL to the said Bidder or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of so relieving us.
	This guarantee will not be discharged due to the change in the name, style and constitution of the Bank and/or the Bidder.
	We [indicate the name of Bank, Address &Code] lastly undertake not to revoke this guarantee during its currency except with the previous consent of OPTCL in writing . We, the Bank (Name, Address & Code) further agree that this guarantee shall also be invokable at our place of business at Branch of Bhubaneswar (indicate Name, Address & Code of the Branch at Bhubaneswar) in the State of Odisha."
"	Notwithstanding anything contained herein"
a)	Our liability under the bank guarantee shall not exceed Rs(Rupees in words) only.
b)	This Bank guarantee shall be valid up to
or	We or our Branch at Bhubaneswar < Mention Name, Address & Code shall be liable to pay guaranteed amount any part thereof under this guarantee only if you serve upon us at Branch of Bhubaneswar a written claim or mand on or before
be	The Bank Guarantee is issued in paper form and Advice transmitted through SFMS with required details to the neficiary's advising bank (ICICI Bank Bhubaneswar, IFSC Code ICIC0000061).
	Dated, theDay of
Fo	r [Indicate name of Bank]
Fu De Po	rnature Il namesignation
	teal of the Bank

WITNES	SS: (SIGNATURE WITH NAME AND ADDRESS)
(1)	
	ıre
	me
(2)	
	ire
-ull nai	me
N.B.:	
1.	Name of the Bidder.:
2.	BG No & Date :
3.	Amount (In Rs.):
4.	Validity up to :
5.	E-NIT No
6.	Package/Works No
7.	Name, Address & Code of Issuing Bank:
8.	Name, Address & Code Bhubaneswar Branch of the Issuing Bank:
9.	The Bank Guarantee shall be accepted after getting SFMS advice as per details below.

9.

Format for SFMS details

(The Unique Identifier for field 7037 is "OPTCL541405793")

Sl. No	PARTICULARS	TYPE	DETAILS		
1	Type of Bank Guarantee	Mandatory	EMD		
2	Currency & Amount	Mandatory			
3	Validity Period(from—to)	Mandatory			
4	Effective Date	Mandatory			
5	End date of lodgment of Claim	Mandatory			
6	Place of lodgment of claim	Mandatory	Bhubaneswar,		
			Branch Name of		
			Bhubaneswar		
			Branch code of		
			Bhubaneswar		
			Branch Address at		
			Bhubaneswar		
7	Issuing Branch IFSC Code	Mandatory			
8	Issuing Branch name & address	Mandatory			
9	Name of applicant and its details	Mandatory			
10	Name of Beneficiary and its details	Mandatory			
11	Beneficiary's Bank/Branch and	Mandatory	ICICI Bank Ltd		
	IFSC Code		IFSC Code-ICIC0000061		
12	Beneficiary's Bank/Branch name	Mandatory	ICICI Bank Ltd		
	and address		Bhubaneswar Main Branch,		
			Bhubaneswar		
13	Sender to receiver information	Mandatory			
14	Purpose of Guarantee	Mandatory	EMD		
15	Reference/Description of the	Mandatory	NIT No		
	underlined tender/contract				

ANNEXURE-VII

[PROFORMA FOR COMPOSITE BANK GUARANTEE FOR SECURITY DEPOSIT PAYMENT AND PERFORMANCE]

(To be stamped in accordance with Stamp Act and the Non-Judicial stamp paper of appropriate value should be in the name of the Issuing Bank.)

Ref No:
Bank Guarantee No
Date:BG Amount:
This Guarantee Bond is executed this day of by us the Bank at
Whereas the ODISHA POWER TRANSMISSION CORPORATION Limited, Janpath, Bhubaneswar, a company constitute under the Companies Act-1956 (hereinafter called OPTCL) has issued Letter of Award (LOA) No
Dated for the purpose of work under Package No (herein after called "the Agreement") to M/s/Shri
1. Now therefore, in accordance with the terms and conditions of LOA No dated for the due fulfillment by the said Contractor of the terms and conditions contained in the said agreement, on production of a Bank Guarantee for Rs (Rupees
request of M/s/Shri contractor do hereby undertake to pay to OPTCL, an amount no exceeding Rs) only .
2. We, the Bank [indicate the name of the Bank, Address & Code] do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from OPTCL. An such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs(Rupees
3. We, the
4. We, the Bank further agree that the guarantee herein contained shall remain in full force and effect during the aforesaid period of days and it shall continue to be so enforceable till all the dues of OPTCL under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or

said contractor and accordingly discharges this guarantee.
Unless a demand or claim under this guarantee is made on us or our Branch Office at Bhubaneswar <mention &="" address="" at="" bank="" bhubaneswar="" branch="" code="" issuing="" name,="" of="" office="" the=""> in writing on or before (Date), we shall be discharged from all liability under this guarantee thereafter.</mention>
Bank [indicate the name of the Bank, Address & Code] further agree with the Board that OPTCL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Bid or to extend time or performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by OPTCL against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Bid and we shall not be relieved from our liability by reason of any such variation postponement or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of OPTCL or any indulgence by OPTCL to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of so relieving us.
6. This guarantee will not be discharged due to the change in the name, style or constitution of the Bank and/or of the contractor(s).
7. We, the Bank [indicate the name of the bank, Address & Code] lastly undertake not to revoke this guarantee during its currency except with the previous consent of OPTCL in writing.
Bank (Name, Address & Code) further agree that this guarantee shall also be invokable at our place of business at Bhubaneswar (indicate Name, Address & Code of the Branch at Bhubaneswar) in the State of Odisha.
" Notwithstanding anything contained herein"
a) Our liability under the bank guarantee shall not exceed Rs(Rupees in words) only.
b) This Bank guarantee shall be valid up to
by We or our Branch at Bhubaneswar < Mention Name, Address & Code shall be liable to pay guaranteed amount or any part thereof under this guarantee only if you serve upon us at Branch of Bhubaneswar a written claim or demand on or before
Dated, theDay of For [Indicate name of Bank]
Signature
Full Name
Designation
Power Of Attorney
Dated

till OPTCL certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the

Seal of the Bank						
WITNES	SS: (SIGNATURE WITH NAME AND ADDRESS)					
1.Signa	ture					
Full N	ame					
2. Signa	ature					
Full N	ame					
N.B.:						
1.	Name of the Contractor.:					
2.	BG No & Date :					
3.	Amount (In Rs.):					
4.	Validity up to :					
5.	LOA No					
6.	Package No					
7.	Name, Address & Code of Issuing Bank:					
8.	Name, Address & Code of Bhubaneswar Branch of the Issuing Bank:					
10.	D. The Bank Guarantee shall be accepted after getting SFMS advice as per details below.					

Format for SFMS details

(The Unique Identifier for field 7037 is "OPTCL541405793")

Sl. No	PARTICULARS	TYPE	DETAILS
1	Type of Bank Guarantee	Mandatory	Contract Performance
2	Currency & Amount	Mandatory	
3	Validity Period(from—to)	Mandatory	
4	Effective Date	Mandatory	
5	End date of lodgment of Claim	Mandatory	
6	Place of lodgment of claim	Mandatory	Bhubaneswar,
			Branch Name of
			Bhubaneswar
			Branch code of
			Bhubaneswar
			Branch Address at
			Bhubaneswar
7	Issuing Branch IFSC Code	Mandatory	
8	Issuing Branch name & address	Mandatory	
9	Name of applicant and its details	Mandatory	
10	Name of Beneficiary and its details	Mandatory	
11	Beneficiary's Bank/Branch and	Mandatory	ICICI Bank Ltd
	IFSC Code		IFSC Code-ICIC0000061
12	Beneficiary's Bank/Branch name	Mandatory	ICICI Bank Ltd
	and address		Bhubaneswar Main Branch,
			Bhubaneswar
13	Sender to receiver information	Mandatory	
14	Purpose of Guarantee	Mandatory	Contract Performance
15	Reference/Description of the	Mandatory	LOA No
	underlined tender/contract		
	,		

ANNEXURE-VIII

[CHART SHOWING PARTICULARS OF EARNEST MONEY DEPOSIT FURNISHABLE BY TENDERERS]

1.	Central and State Government Undertakings	Exempted
2.	All other inside & outside state units.	The amount of EMD as specified in the specification /Tender Notice in shape of bank guarantee /DD.

NB: - REFUND OF E.M.D.

- [a] In case of unsuccessful tenderers, the EMD will be refunded immediately after the tender is decided. In case of successful tenderer, this will be refunded only after furnishing of Composite Bank Guarantee referred to in clause No.19 of Section-II of this specification.
 - Suits, if any, arising out of EMD shall be filed in a court of law to which the jurisdiction of High Court of ODISHA extends.
- [b] Earnest Money will be forfeited if the tenderer fails to accept the letter of intent/purchase order, issued in his favour or revises the bid price[s] within the validity period of Bid.

ANNEXURE-IX

DATA ON EXPERIENCE

- [a] Name of the manufacturer.
- [b] Standing of the firm as manufacturer of equipment quoted.
- [c] Description of equipment similar to that quoted [supplied and installed during the last two years with the name of the organizations to whom supply was made].
- [d] Details as to where installed etc.
- [e] Testing facilities at manufacturer's works.
- [f] If the manufacturer is having collaboration with another firm, details regarding the same and present status.
- [g] A list of purchase orders, executed during last three years.
- [h] A list of similar equipments of specified rating, voltage class, short circuit rating, Designed, manufactured, tested and commissioned which are in successful operation for at least two years from the date of commissioning with legible user's certificate. User's full complete postal

address/i		mus	t be	indicated.	(Refer	clause	No.7	of the	Part-I,	Section-II	of the
Place:	,										
Date:											
						Sigr	nature of	f Biddeı	r		
							ne, Desig				
					<u>ANI</u>	<u>NEXURI</u>	<u>E-X</u>				
	HEDULE		SPARE	E PARTS	FOR	FIVE	YEARS	OF I	NORMAL	OPERA?	° MOI1
S	L.	Particu	ılars	Quan	tity	Unit de	elivery ra	ate	То	tal price	
N	То										
DI											
Place:						Qi au		f D: dda			
Date:						_		re of Bidder Designation, Seal			
						Ivaii	ic, Desig	gnanon	, Scar		
				4	ANNEX	URE-XI	[
				_			- ALLATI	ONS.			
Rate	ed Voltage		Pla	ce of inst	allation	and c	omplete	postal	l Year of	commissi	oning
				dress							
		_									
Place:											
Date					Signa	ature of	Bidder				
Name, De	esignation,	, Seal									

ANNEXURE-XII

DEVIATION SCHEDULE.

Bidder shall enter below particulars of his alternative proposal for deviation from the specification, if any.

A) Technica	Į
-------------	---

	Particulars of deviations.
of	
specification	
	of

Plac	e: -	
Date	2	Signature of Bidder:
		Name, Designation, Seal

B) Commercial deviations.

S1.No	Clause No.	Particulars of deviations.
SI.NO	of	
	specification	

Place: -	
Date	Signature of Bidder:
	Name, Designation, Seal

ANNEXURE - XIII LITIGATION HISTORY

Name of the Bidder:

Bidder should provide information on any history of litigation or arbitration resulting from contracts executed in the last five years or currently under execution.

	Year.	Award for or	Name of client, cause of	Disputed amount (current
		against bidder	litigation and matter in	value in Rs.)
		C	dispute	,
Ī				

	against blader	dispute	varde III RS.)
		uispate	
		1	

Place: -	
Date	Signature of Bidder

<u>PART – II</u> PRICE BID

1. PRICE:

- (i) Bidders are required to quote their price(s) for goods offered indicating they are 'FIRM'
- (ii) The prices quoted shall be FOR Destination only at the consignee's site/store inclusive of packing, forwarding, Freight & Insurance. In addition, the break-up of FOR Destination price shall be given as per schedule of Prices in Annexure-V of Section III. The Bidders has to certify in the price bid that any implication of lower Tax and Input Tax Credit benefit as per anti-profiteering and other provisions under GST Laws, have been fully passed on to the Purchaser, while quoting the tender prices.

2. INSURANCE:

Insurance of materials/equipments, covered by the Specification should normally be done by the Suppliers with their own Insurance Company unless otherwise stated. The responsibility of delivery of the materials/equipments at destination stores/site in good condition rests with the Supplier. Any claim with the Insurance Company or Transport agency arising due to loss or damage in transit has to be settled by the Supplier. The Supplier shall undertake free replacement of equipments/materials damaged or lost which will be reported by the Consignee within 30 days of receipt of the equipments/materials at Destination without awaiting for the settlement of their claims with the carriers and underwriters.

3. CERTIFICATE FOR EXEMPTION FROM GOODS AND SERVICES TAX:

Offers with exemption from Goods and Services Tax shall be accompanied with authenticated proof of such exemption. Authenticated proof for this clause shall mean Photostat copy of exemption certificates, attested by Gazetted Officers of State or Central Government.

4. PROPER FILLING UP OF THE PRICE SCHEDULE:

- (i) In case where Freight & Insurance charges are not furnished, 5% of the Ex-works price shall be considered as the freight & Insurance charges.
- (ii) The tenderer should fill up the price schedule (Annexure-V of Section-III) properly and in full. The tender may be rejected if the schedule of price is submitted in incomplete form as per clause-34 (ix) of Section-II of the Specification.

5. NATURE OF PRICE INDICATED IN SPECIFICATION SHALL BE FINAL.

The nature of price indicated in the Clause-13, Section – I of PART –I of the Specification shall be final and binding.

SECTION-IV

Technical specification of PORTABLE HAND HELD HIGH RESOLUTION INFRARED THERMO-VISION CAMERA

Power system of OPTCL comprises of installations of EHT S/S such as 400/220/132/33KV, 220/132/33KV, 220/33KV, 132/33KV along with some switching stations & EHT lines of different voltage levels such as 400KV, 220KV, 132KV etc. For testing such as pre-commissioning tests, routine tests/monitoring tests of healthiness & emergency tests of S/S equipments such as ICTs/Autotransformers as well as two winding power transformers, CTs, IVTs, CVTs, Surge Arrestors & transmission lines of various voltage levels, OPTCL is in need of following precision type testing & measuring instruments/Kits.

Firms having better specification than that specified hereunder can also quote their bid and they must highlight their products. Manufacturers and Firms having better Technical parameters available in their kits than the above mentioned specifications can quote and highlight the advantages of their product in their technical offer for the equipment as mentioned in the tender specification. Products with better technical specification which will give benefit to OPTCL in terms of debugging / finding defects/problems in the equipment will be evaluated properly.

General Technical Specification:

The following technical specification will be common for equipment if not mentioned specifically.

- i. Power Supply : 230 V + 10% / 20%; Frequency: 50 Hz
- ii. Protection of equipment
 - a) Over load, Over Voltage, Surge Protection
- iii. Length of Test lead set : 15 meters (Minimum or as specified).
- iv. All equipment must able to perform under inductive / prevailing electrical interference in the 400 kV switchyard / Line so as not to make any effect on equipment and measurement. Such interference because of EHV voltage (up to 400 kV) shall not have any problem on the equipment during the test. (Except Laboratory equipment)

- v. All equipment must give repetitive results under charged switchyard condition. The test set shall comply with relevant National/International standards regarding EMI/EMC and Safety.
- vi. All equipment shall be supplied completely with current leads, voltage leads, grounding cable, power cord to test the product in all respect and hard carrying case which are necessary for carrying testing equipment to site. It the responsibility of supplier to see all necessary accessories required to perform all type of test to be supplied along with the kit.

3.0 Environment Service (Climatic) Conditions:

The equipment to be supplied against this specification shall be capable of performing and maintaining the required accuracy for satisfactory operation under all tropical conditions mentioned below:

a)	Maximum ambient temperature (degree C)	:	50
b)	Maximum ambient temperature in shade(degree C)	:	45
c)	Minimum temperature of air in shade(degree C)	:	35
d)	Maximum daily average temperature(degree C)	:	40
e)	Storage temperature (degree C)	:	70
f)	Maximum yearly weighted average temperature(degre	e C)	: 32
g)	Relative Humidity (in %)	:	10 to 95

Scope:

Specification covers Design, Manufacture, Supply, Delivery, Training and Demonstration of Portable Hand Held High Resolution Infrared Thermo-Vision Camera for predictive Maintenance for substations and Transmission Lines.

Technical specification:

Thermal Imaging camera with minimum of the following specifications:

Sl. No.	Features	Description	
	Temperature range	-20°C to 600°C	
2.	Accuracy	±2°C or 2% of the Measured Value	
3.	Emissivity correction	0.01 to 1.0	
4.	Detector type	640×480 Pixels Focal Plane array with cooled	
		detector.	
5.	Thermal sensitivity (NETD)	≤50mK @ 30degC temp or better	
6.	Infrared spectral	8μm to 14μm	
	Range		

7. Display		Display, preferably of LED type, if not should have backlit LCD display of min 640*480 pixels with rotation/ folding type facility.		
		Facility of de-noising, averaging and edge enhancing		
		should be there.		
8.	Level and span	Auto manual-scaling		
9.	Storage medium	Memory card min:2GB with memory card slot of 2 No.s.		
10.	Voice annotation	60 seconds maximum recording time per image; reviewable playback on imager		
11.	Focus	Manual & Auto		
12.	Batteries	Should have in-built Li-ion Chargeable battery backup for minimum 4 hours with continuous application with auto monitoring on display with massage for critically low and hours left for use. (Min 2 no.s one inside & one spare)		
13.	Full charge Battery charging facility	Less than 3 hours to full charge, with facility of auto disconnection, with sound beeping system. Built in charger & also with external charger as mandatory.		
14.	AC battery charging facility	Two-bay ac battery charger		
15.	AC operation	With include power supply(150v ac to 250v AC, 50Hz)		
16.	LENS with FOV & Spatial resolution(IFOV)	Standard infrared lens of 25mm type with 23°×17° or better & 0.63mrad or Better (May be fixed or Standalone). This should record of correct measurement as per specification with minimum distance up to 25mtrs.		
17.	Minimum focus distance	0.5m or less		
18.	Operating temperature	-15°C to +50°C or better		
19.	Storage Temperature	-30°C to +60°C or better		
20.	Relative humidity	10% to 90% non-condensing & better		
21.	Safety standard	As per IEC		
22.	Vibration	2G, IEC60068-2-6 or equivalent		
23.	Shock	25G, IEC60068-2-29 or equivalent		
24.	Assembled Weight(battery included)	Less than 2 kg		
25.	Enclose rating	IP54 (protected against dust, limited ingress; protection against water spray from all directions)		
26.	IR Resolution	400 X 300 pixels or better		
27.	Viewfinder	1280 X 960 LCOS		
28.	Image Frequency	25Hz or More		

29.	Zoom	Digital zoom facility of 1 to 4X with step of 0.1X without causing any graphical distortion.
30.	Image mode	 Facilities for Capturing both Thermal and visual image with display mode for superimposition and PIP mode. Temperature to be in deg C / deg K with Time and Date Stamping for each image. Should have Panorama image view facility. Text annotation having min 200 characters per image. Facility for background temperature correction Facility for Blending of IR & Visual images. Should have facility of brightness control. Should have the facility for selected spot, line, area analysis.
31.	Image control	Should have touch screen with facility of control by manual navigation key(Programmable buttons) Should have the facility of Remote control either wired or wireless.
32.	Built-in-Facility	Min 5MP digital camera with GPS, Microphone, loudspeaker, Digital compass, light sensor, laser pointer or any other pointing ray.
33.	Colour Palettes	Min 6
34.	File format(Image)	File image to be exported either in any of the format bmt, .png, jpg, .csv, jpeg and .xls
35.	File format(Video)	Movie file with .svx or .mpeg or .wmv or H.264 file or better with continuous recording of 60 minutes with Temp. information.
36.	Video recording	Should have the facility of radiometric infrared video recording
37.	Interface	Data transferable by USB port 2.0, WiFi system, Bluetooth, Micro HDMI port for transferable to storage device.
38.	Facilities	 Onsite viewable, labelling with analysis of the image & report generation. Further downloading facility for comparison analysis. Auto calibration facility Auto changeover from Visual to thermal image & vice versa. For the selection of GPS, the corresponding GPS code(Longitude, latitude) should be reflected in the image Camera should go to sleep mode as per

		setting adopted. 7. Facility of troubleshooting message displays.
39.	Data Operating system	Data storage of test results for data retrieval and analysis in the PC by user friendly system of window 7 or better
40.	Alarm message	Selectable pop-up message or colour coding system with temp. Beyond set limit to define the temperatures as alarming message.
41.	Temperature search facility	Facility for Max, Min, Avg & isotherm, centre point, Differential temp. Auto Hot & cold spot facility with other necessary & better feature should be there.
42.	EMC, Radiant Emission and ESD immunity	Should confirm to EMC, Radiant Emission and ESD immunity as per IEC.
43.	Protection facility	 Equipment protection facility from higher voltage Drop test should be confirmed as per IEC.
44.	Accessories	 Standard Lens as per specification decided. Hand and Neck scrap as per suitable 2 Nos Batteries and with battery charger 2 Nos of 8 GB SD card and with suitable cord as mentioned in the specification. Video Cable Copyright Software CD Power Supply cord Hard Carry Case to accommodate all accessories along with Camera & soft transport bag for Camera. Authenticated calibration Report/Certificate, user manual, type test certificates and other documents. Training CD/DVD Any other accessories for smooth functioning of the instrument.
45.	Software	The software shall have minimum of following features Complete analysis of the thermal imager Capability to add comments and remarks in the image & report analysis Automatically report generation Add visual reports as per the customized format Should have the facility of developing Histogram, Line profile, Differential Temperature, Image conversion with

		superimposing,	Multipoint	marking,	
		Isotherm, hot & cold spot etc.			
		Note: In case of up grad	lation of any, th	e company	
		shall provide the same for	r free of cost.		
46.	Telephoto Lens(Extra)	15°×10° or better & 0.5mrad or Better (Extra)			
	(The price of telephoto	suitable for fitting with th	ne camera during	g telescopic	
	lens should be	vision.			
	inclusive of	This should record of correct measurement as per			
	telephotolens)	specification with minimum distance up to			
		100mtrs.			

APPENDIX- I SCHEDULE OF QUANTITY AND DELIVERY

SL	Description of materials	Quantity	Desired	Destination	Remarks.
No		required	Delivery		
1	2	3	4	5	6
1	PORTABLE	8	Within 4	Any Store/	
	HAND HELD HIGH		months from	Site of	
	RESOLUTION		date of issue of	OPTCL in	
	INFRARED THERMO-VISION		Purchase	State of	
	CAMERA		Order	Odisha	

-----END OF TENDER DOCUMENT-----