



**ODISHA POWER TRANSMISSION CORPORATION LTD
OFFICE OF THE CHIEF GENERAL MANAGER,
TELECOMMUNICATION, TECHNICAL BUILDING
JANPATH, BHUBANESWAR - 751022
TENDER SPECIFICATION**

NOTICE INVITING TENDER-NIT –NO- CGM(Tel)-02/2023-24.

**TENDER SPECIFICATION No: CGM(Tel)_ e-TENDER_NTPC_Dulanga_02/2023-24
FOR**

**Supply, Erection, Testing and Commissioning of equipment for data
communication through GPRS Modem From 33 KV DULANGA COAL
MINES of NTPC TO SLDC, BBSR
On turnkey contract basis**

(e-tendering mode only)

PART-I

- SECTION-I- INSTRUCTION TO TENDERERS
SECTION-II- GENERAL TERMS AND CONDITIONS OF CONTRACT
SECTION-III- LIST OF ANNEXURE
SECTION-IV- TECHNICAL SPECIFICATION.
SECTION-V- COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT**

PART-II

PRICE BID

1	Request for online tender documents	From Date 21.07.2023 (12.45 Hrs) To Date 11.08.2023 (12.45 Hrs)
2	Last date of submission of online tender	Dated 11.08.2023 (15.00 Hrs)
4	Date of opening of Tender	Dated 14.08.2023 (15.00 Hrs)



ODISHA POWER TRANSMISSION CORPORATION LTD.

REGD. OFFICE: JANPATH, BHUBANESWAR – 751 022,

ODISHA

e-TENDER NOTICE NO- CGM(Tel)-02/2023-24

For and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD, C.G.M. (Telecom) invites Tenders from reputed EPC/Turnkey contractors for **Supply, Erection, Testing and Commissioning of equipment for data communication through GPRS Modem From 33 KV DULANGA COAL MINES of NTPC TO SLDC, BBSR on “Turnkey CONTRACT BASIS”** as per the following details.

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 Dt. **21.07.2023 at 12.45 HRS to 11.08.2023 at 12.45 HRS** Interested bidders may visit OPTCL’s official web site <http://www.optcl.co.in> and www.tenderwizard.com/OPTCL for detail specification.

N.B:-All subsequent addendums / corrigendum to the tender shall be hosted in the www.tenderwizard.com/OPTCL only.

CHIEF GENERAL MANAGER [TEL]



NOTICE INVITING TENDER
ODISHA POWER TRANSMISSION CORPORATION LTD.,
REGD. OFFICE: JANPATH, BHUBANESWAR – 751 022,
ODISHA, INDIA.

e-TENDER NOTICE NO- CGM(Tel)-02/2023-24

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

Sl. No	Tender Specification No.	Description of work	Unit /Quantity	EMD (In Rs.)	Cost of Tender document (in Rs.)	Tender Processing Fee (Rs)	Last date of receipt & opening of tender
1.	CGM(Tel)_e-TENDER_NTPC_Dulang_a_02/2023-24	Supply, Erection, Testing and Commissioning of equipment for data communication through GPRS Modem From 33 KV DULANGA COAL MINES of NTPC TO SLDC, BBSR	1 Job	20879/-	6,000/- + GST @18%= 7,080/-	2,948/- + GST @18%= 3,479/-	Dated 11.08.2023 (15.00 Hrs) & Dated 14.08.2023 (15.00 Hrs)

The bidders can view the tender documents from Tender Portal free of cost.

TENDER COST:

The bidders who want to submit bids shall have to pay non-refundable amount Rs. 7,080/- (Rupees Seven Thousand Eighty) Only towards the tender cost **online** through e-payment

gateway link provided in e-tender portal (by using Net Banking, Debit Card or Credit Card). They have to also submit notarized hard copy of GST registration certificate on or before the date & time of opening of techno-commercial bid (Part-I). The bidders can also submit Tender Cost as per tender notice. The online payment can be made prior to last date & time of submission of online tender.

TENDER PROCESSING FEE:

The bidders shall have to submit non-refundable amount of Rs.3, 479.00 (Rupees Three Thousand Four Hundred Seventy Nine) 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.

SUBMISSION OF TENDER COST & TENDER PROCESSING FEE & EMD:

The bidder shall deposit the tender cost, tender processing fee & EMD BG prior to last date & time of opening of bid(Part-I) as notified in tender notice.

The bidders shall scan and upload the same in the prescribed form in .gif or .jpg format in addition to sending the original as stated above. The bidder(s) shall submit Proof of payment of Tender Cost, Tender Processing fees and shall upload the same in the prescribed attachment in .gif or .jpg format in addition to submitting the original to the undersigned on or before the scheduled date and time for opening of Technical Bid.

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 confirmed from the undersigned during office hours.

Minimum qualification criteria of bidders: AS STIPULATED IN SECTION-II, PART-I (G.T.C.C) OF THE TENDER SPECIFICATION. Any clarifications regarding the scope of work and technical features of the project can be had from the undersigned during office hours.

Chief General Manager(Tel)

OPTCL, Bhubaneswar

TELEPHONE NO.:0674 - 2542403

ODISHA POWER TRANSMISSION CORPORATION LTD.

OFFICE OF THE CHIEF GENERAL MANAGER

TELECOMMUNICATION

JANAPATH, BHUBANESWAR – 751022

TENDER SPECIFICATION

NO - CGM(Tel)_ e-TENDER_ NTPC_Dulanga_02/2023-24

CONTAINING

PART – I

- SECTION – I : INSTRUCTION TO TENDERERS**
- SECTION – II : GENERAL TERMS AND CONDITIONS OF
CONTRACT (G.T.C.C.) (COMMERCIAL)**
- SECTION – III : LIST OF ANNEXURES (COMMERCIAL)**
- SECTION – IV : TECHNICAL SPECIFICATION
Technical Specification of all equipment**
- SECTION – V : Comprehensive AMC of RTU**

PART – II PRICE BID.

PART – I.
SECTION – I.
INSTRUCTIONS TO TENDERERS

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COMMERCIAL SPECIFICATION.

P A R T - I

S E C T I O N - I

INSTRUCTIONS TO TENDERER

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.

- i. For all the users it is mandatory to procure the Digital Signatures of Class-III.
- ii. 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/DD in favour of K S E D C Ltd Payable at Bangalore.
 - c. Send the acknowledgment copy for verification.
 - d. As soon as the verification is being done the e-tender user id will be enabled.
- iii. 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.
- iv. 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
- v. 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.
- vi. 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.
- vii. 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
- viii. Tender Opening event can be viewed online.
- ix. Competitors bid sheets are available in the website for all.
- x. **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. Division of Specification.

The specification is mainly divided into two parts viz. Part-I & Part-II.

Part-I Consists of

[i] Section-I	Instruction to Tenderers.
[ii] Section-II	General Terms & conditions of contract.
[iii] Section-III	Schedules and forms etc.
[iv] Section-IV	Technical Specification.
[v] Section-V	Comprehensive AMC of RTU .

Part-II Consists of

Schedule of prices as per Annexure-V

3. Tenders shall be in Two Parts.

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

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

4. Opening of Bids.

- [a] 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 Tenderers or their authorized representatives [limited to one person only] on the due date of opening of tender who opt remain present. After scrutiny of the technical particulars and other commercial terms, clarifications, if required, shall be sought for from the bidders. The Tenderers 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 Tenderers, 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 technically and commercially acceptable Tenderers.
- [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] 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 tenderer 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 Chief General Manager [Tel] on the specified date and time in presence of the Tenderers 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. Bidder's Liberty to deviate from Specification.

The Tenderer 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 bidders 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.

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] **Telegraphic or FAX tenders** shall not be accepted under any circumstances.

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 at **Annexure-VIII** will be rejected out rightly.

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) **Cash:-** Payable to drawing & disbursing Officer, OPTCL (Hd.qrs. Office), Bhubaneswar - 751022

(b) **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 240 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) E.M.D. in shape of cash may be submitted up to Rs. 25,000/- (Rupees Twenty-five Thousand) only. Above Rs. 25,000/- (Rupees Twenty-five thousand) the Earnest Money Deposit shall be furnished in any one of the forms indicated above (i.e. Through Bank Draft, Bank Guarantee/ National Savings Certificate).
- (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 Tenderers of different categories is placed at **Annexure-VIII.**
- (vi) In the case of un- successful tenderer, the EMD will be refunded after the tender is decided. In the case of successful Tenderer, this will be refunded only after furnishing of security money referred to at clause-19of Section-II.
- (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 tenderer 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 **180** days from the date of opening of the tender, failing which the tenders will be rejected.

13. PRICE: -

i)Tenderers 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 tenderer 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 tender 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. Tenderers to be fully conversant with the clauses of the Specification: -

Tenderers 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 tenderer may seek clarification in writing from the Chief General Manager (Telecommunication) OPTCL. This, however, does not entitle the Tenderer to ask for time beyond due date, fixed for receipt of tender.

16. Documents to Accompany Bids.

Tenderers 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], Tender Cost.

- [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/equipment 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 works during the period as against "minimum qualification requirement", 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/notary.

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

- (a) Part – II of the tender shall consist of the following
 - (i) Schedule of prices in the prescribed proforma

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 Tenderer.
- (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) Tenderer 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 tenderer 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.

20.0 Expenses in respect of OPTCL's representative for witnessing the inspection & testing of the offered equipment/materials at the inspection and testing site.

The testing and inspection of the equipment/ materials at manufacturer works are in the scope of work of the Contractor/Supplier.

OPTCL inspecting officer, on receipt of offer for inspection from the contractor/supplier, proceeds to the manufacturer works to witness the Type/Acceptance/Routine test.

Important:

It is hereby informed to all the bidders that the relevant clauses of the contract specification, pertaining to inspection and testing of equipment/materials, are hereby supplemented with following additional terms and conditions.

The expenses under the following heads, in respect of OPTCL's representative for witnessing the inspection & testing of the offered equipment/materials at the inspection and testing site, shall be borne by the contractor / supplier.

a) Hotel Accommodation:

- I. Single room accommodation in 4 star hotel for the OPTCL inspecting officer of the rank of Assistant General Manager (Grade E-6) and above.
- II. Single room accommodation in 3 star hotel for the OPTCL inspecting officer of the rank below Assistant General Manager (Grade E-6).

N.B.: It is the responsibility of the contractor to arrange the hotel accommodation matching with their inspection and testing schedule, so that the inspecting officer can check-in the hotel one day prior to the date of inspection and check out after the completion of the inspection, subject to availability of the return travel ticket. In case of extended duration of inspection or non-availability of the return travel ticket, Contractor/supplier/manufacturer shall arrange for the extended stay of the inspecting officer in the Hotel accordingly. In case there is no hotel with prescribed standard in and around the place of inspection, the contractor/supplier/manufacturer shall suggest alternative suitable arrangement at the time of offer for inspection, which is subjected to acceptability of OPTCL inspecting officer.

b) Journey of the inspecting officer:

- (i) To and fro travel expenditure from the Head Quarters of the inspecting officer to the place of inspection/testing shall be borne by the contractor/supplier/manufacturer. Journey from the Head Quarters of the inspecting officer to the nearest Air Port by train (Ist/IIInd A.C) & A/C Taxi then by Air to the place of inspection/testing or to the nearest place of inspection/testing and then by train (Ist/IIInd A.C) & A/C taxi to the place of inspection/testing shall be arranged by the contractor/supplier/manufacturer.
- (ii) For train journey, inspecting officer of the rank Assistant General Manager and above shall be provided with 1st class AC ticket and inspecting officer below the rank of Assistant General Manager shall be provided with 2nd class AC ticket.
- (iii) The Air-ticket / train-ticket booking/cancellation is the responsibility of the contractor / supplier.
- (iv) Moreover, if during the journey there is an unavoidable necessity for intermediate travel by road/ waterway/sea-route, the contractor/supplier shall provide suitable conveyance to the inspecting officer for travel this stretch of journey or bear the cost towards this. Any

such possibilities shall be duly intimated to OPTCL at the time of their offer for inspection.

c) Local Conveyance:

At the place of the inspection/testing, for local journey of the inspecting officer between Hotel and inspection/testing site and or any other places, Air-conditioned four wheeler vehicle in good condition shall be provided by the contractor/supplier/manufacturer.

d) Following points are also to be considered:

- (i) All the above expenses shall be deemed to be included in the bidder's quoted price for that supply item. Bidder shall not be eligible to raise any extra claim in this regard.
- (ii) Contractor/supplier/manufacturer may assume that only in 40% of the inspection and testing offer cases, OPTCL inspecting officer, not below the rank of Assistant General Manager will witness the inspection and testing.
- (iii) In case of inspection and testing of some critical equipment/materials like Power transformers, OPTCL may depute more than one inspecting officer.
- (iv) Contractor/supplier/manufacturer shall judiciously plan the inspection/testing schedule and place of inspection/testing, so that optimum number of inspection/testing and minimum time shall be required to cover all the equipment/materials of the relevant contract package.
- (v) It shall be the responsibility of the Contractor/Supplier to organize the above tour related matters of OPTCL inspecting officer including the matters related to overseas inspection/testing, if any.

21. 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 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.

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SECTION – II.

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

<u>Clause.</u>	<u>Title.</u>
1.	Scope of the contract.
2.	Definition of terms.
3.	Manner of execution.
4.	Inspection and testing.
5.	Training facilities.
6.	Rejection of materials.
7.	Experience of bidders.
8.	Language and measures.
9.	Deviation from Specification.
10.	Right to reject/accept any tender.
11.	Supplier to inform himself fully.
12.	Patent rights etc.
13.	Delivery.
14.	Dispatch Instructions.
15.	Supplier's Default Liability.
16.	Force Majeure.
17.	Extension of Time.
18.	Guarantee Period.
19.	Bank Guarantee towards Security Deposit, Payment and Performance.
20.	Import License.
21.	Terms of Payment.
22.	Price Reduction for Delay in Completion of Contract
23.	Insurance.
24.	Payment Due from the Supplier.
25.	Sales Tax clearance & GST rating, Audited Accounts
26.	Certificate of exemption from Goods & Services Tax.
27.	Supplier's Responsibility.
28.	Validity.
29.	Evaluation.
30.	Minimum qualification criteria of Bidders.
31.	Jurisdiction of High Court of ODISHA.
32.	Correspondences.
33.	Official Address of the Parties to the Contract.
34.	Outright rejection of Tenders.

35. Documents to be treated as confidential.
36. Scheme/Projects.

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 engineering, supply and installation of equipment as per the specification, and rendering services in accordance with the enclosed technical specification and bill of quantity.

1.1 The scope also covers engineering, assembly, inspection and testing, packing and delivery F.O.R. (destination) and complete commissioning of the (i) RTU (Configured with required MFT, CMR, OLTC transducer, etc. along with supply & laying of associated cables in all respect for all the above equipment as detailed in the technical Specification and as per the BOQ specified.

1.2 The contractor has to carry out a survey after award of contract and submit the survey report jointly signed by the site in-charge to the employer for approval and for subsequent amendment to the work order if there is a change in the BOQ.

1.3 The RTU at NTPC, Dulanga premises shall be installed and commissioned along with all the cabling work for the connection and shall be tested locally. The integration of the RTU with the central SCADA is not within the scope of this contract. However the contractor shall extend full cooperation at the scheduled time of such integration with the SCADA OEM.

1.4 All the above equipment shall be properly earthed with the supply of required earth flat. Cables for the equipment shall be properly dressed before termination with the supply of required cable tray where ever necessary.

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 CHIEF GENERAL MANAGER(TEL) for and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD., Bhubaneswar.

2.1 "The Engineer" shall mean the Engineer appointed by the Purchaser for the purpose of this contract.

2.2 "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.
- 2.7 "General Condition" shall mean these General Terms and Conditions of Contract.
- 2.8 "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.
- 2.11 "Basic Price (Taxable value for Goods & Services) at the point of destination" shall mean the price quoted by the bidder for equipment, material & services 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/SAC code of the material/service 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 Odisha General Clauses Act.

3. **Manner of execution:**

All equipment supplied under the contract shall be manufactured in the manner, set out in the specification or where not set out, to the reasonable satisfaction of the Purchaser's representative.

4. **Inspection and Testing:**

- [i] The purchaser's representative shall be entitled at all reasonable times during manufacture to inspect, examine and test at the supplier's premises, the materials and workmanship of all equipment/materials to be supplied under this contract and if part of the said equipment/material is being manufactured in other premises, the supplier shall obtain for the purchaser's representative permission to inspect, examine and test as if the equipment/material were being manufactured in the contractor's premises. Such inspection, examination and testing shall not relieve the supplier from his obligations under the contract.

- [ii] The Supplier shall give to the purchaser adequate time/notice (at least clear 15 days for inside the state suppliers and 20 days for outside the state suppliers) in writing for inspection of materials indicating the place at which the equipment/material is ready for testing and inspection and shall also furnish the shop Routine Test Certificate, Calibration certificates of Testing instruments, calibrated in Govt. approved laboratory with authenticity letter of that laboratory along with the offer for inspection. A packing list along with the offer, indicating the quantity which can be delivered in full truck load/Mini truck load to facilitate issue of dispatch instruction shall also be furnished.
- [iii] Where the contract provides for test at the Premises of the supplier or any of his sub-vendors, the supplier shall provide such assistance, labour, materials, electricity, fuel and instruments, as may be required or as may be reasonably demanded by the Purchaser's representative to carry out such tests efficiently. The supplier is required to produce shop routine test Certificate, calibration certificates of Testing Instruments before offering their materials/equipment for inspection & testing. 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.
- [iv] After completion of the tests, the Purchaser's representative shall forward the test results to the Purchaser. If the test results conform to the specific standard and specification, the Purchaser shall approve the test results and communicate the same to the supplier in writing. The supplier shall provide at least five copies of the test certificates to the Purchaser.
- [v] 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.
- [vi] If the firm fails to present the offered items for inspection/testing as per their inspection call due to any reason(s) during the visit of inspecting officer at the testing site, the firm shall have to bear all expenses towards repetition of inspection and testing of the total offered quantity or part thereof.

5. **Training facilities.**

The supplier shall provide all possible facilities for training of Purchaser's Technical personnel, when deputed by the Purchaser for acquiring firsthand knowledge in assembly of the equipment, its erection, commissioning and for its proper operation & maintenance in service, wherein it is thought necessary by the purchaser.

6. **Rejection of Materials.**

In the event any of the equipment /material / services supplied / provided 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/material or ask the supplier in writing to rectify or replace the defective equipment/material free of cost to the purchaser. The Supplier on receipt of such notification shall either rectify or replace the defective equipment/material free of cost to the purchaser

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 equipment /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 un-delivered 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 bidder:
- [ii] Standing of the firm and experience in executing similar nature of work tendered:
- [iii] Description of the work to that quoted with the details of supply and commissioning during the last five years with the name(s) of the Organization's for which work has been executed 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 for the major supply items.
- [vi] ~~If the manufacturer is having collaboration with another firm [s], details regarding the same.~~
- [vii] A list of work orders of identical work, offered as per technical specification executed during the last five 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 one year 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 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 tenderers to study the specification, specified in the tender schedule thoroughly before tendering so that, if any deviations are made by the Tenderers, (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 tenderer has accepted all the conditions, stipulated in the tender specification, notwithstanding 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. The purchaser has exclusive right to alter the quantities of materials/ equipment / services . After placing of the order, the purchaser may defer the delivery of the materials. It may be clearly understood by the Tenderer 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 tenderers, 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 (Work Completion):**

- [a] Time being the essence of the contract; the work shall be completed within the scheduled period, specified in the contract. The Purchaser, however, reserves the right to reschedule 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/Work order.
- [b] The desired delivery/ work Completion period shall be as indicated at **APPENDIX-I** of Section-IV (Technical Specification).

14. **Despatch instructions.**

- I] The equipment / materials should be securely packed and dispatched directly to the specified site at the supplier's risk.

II] **Loading & unloading of Ordered Materials.**

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 judgment 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 judgment of the Purchaser, the supplier fails to comply with any of the provisions of this contract.
- [ii] 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.
- [iii] In the event the Purchaser does not terminate the contract as provided in clause 15[I] of this Section, supplier shall be liable to the Purchaser for penalty for delay as set out in Clause-22 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 contractor 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 contractor shall within Ten (10) days 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 execution of the work in complete shape is delayed due to reasons beyond the control of the contractor, the contractor 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: - (As per Clause-K of the technical specification).

- [i] The work covered by this specification should be guaranteed for satisfactory

operation and against defects in design, materials and workmanship for a period of 12 months from the date of complete commissioning of the work. The above guarantee certificate shall be furnished in triplicate to the purchaser for his approval. Any defect noticed during this period should be rectified 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 Clause 22 (ii) of this section shall apply.

- [ii] Equipment/material /services failed or found defective during the guarantee period shall have to be guaranteed after repair/replacement for a further period of 12 months from the date of commissioning. The Bank Guarantee is to be extended accordingly. Date of delivery as used in this clause shall mean the date on which the materials are received & installed/commissioned in OPTCL'S site in full & good condition which are released for Despatch by the purchaser after due inspection.

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

- [i] For manufacturers/system integrators situated Inside & outside the state of Odisha.

A Composite Bank Guarantee as per the Proforma enclosed at Annexure-XXI of the specification for 10% [ten percent] of the Total Landing cost (Taxable Value plus GST thereon) of the purchase order, shall be furnished from any nationalized/scheduled bank having a place of business at Bhubaneswar, to the office of Chief General Manager [Tel] 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.29.00 [Rupees twenty nine] only or as per the prevalent rules, valid for a period of 2 months from the last date of delivery and commissioning 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. Terms of Payment.

Being a works contract under GST Laws, the on-account payments shall be made as below.

Payments

(A) 90% taxable 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
(a) Contract cum Performance Bank Guarantee at the rate of 10%(ten percent) of Taxable Value plus GST thereon.

(b) i) Guarantee certificate, Test certificate by the Purchaser.

ii) TDS under Income Tax Act and GST Laws shall be deducted as applicable.

iii) 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) Balance 10% of the taxable value of the supplies made along with 'commissioning charges with GST', shall be paid after successful erection & commissioning of the complete work at the required site, on issuance of taking over certificate by the concerned site-in-charge

22 Price Reduction Schedule for Delay in Completion of Contract

(i) If the contractor fails to deliver the materials/equipment /complete installation & commissioning within the work completion schedule, specified in the Purchase Order/Contract including delivery time extension, if any, granted with waiver of Price Reduction Schedule, the Purchaser shall recover from the contractor a sum of half per cent (0.5 per cent) of the Taxable Value of the un-delivered equipment /materials and incomplete portion of works 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 Schedule shall not exceed five per cent (5%) of the Taxable Value of the un-delivered equipment/ materials/ service. Equipment will be deemed to have been delivered only when all its components, accessories and spares as per technical Specification are also delivered. If certain components, accessories and spares are not delivered in time, the equipment/ materials will be considered delayed until such time as the missing components, accessories and spares are delivered.

(ii) During the guarantee period, if the Contractor fails to rectify/replace the equipment/material / installations within 30 days from 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 Contractor 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 contractor. The Contractor shall undertake free replacement of 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 Contractor

All costs and damages, for which the Contractor 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:

The following documents are to be submitted at the time of Tender Submission:

- i. Compliance rating under Goods and Services Tax for immediate preceding financial year.
- ii. Audited Balance Sheet and Profit & Loss Account of the bidder for the previous three years to assess the financial soundness of the bidder(s).
- iii. GST registration certificate and PAN Card Copy.
- iv. Tax holiday/exemption certificate under GST or any other Act.
- v. TDS exemption certificate under the Income Tax Act or any other act.

26. Certificate of Exemption from Goods and Services Tax.

Offers with exemption from Goods and Services Tax shall be accompanied with authenticated attested Photostat copy of exemption certificate. Any claim towards Goods and Services Tax shall be paid on actual basis subject to payment of GST by the Contractor. In case Outward supply details of the supplier of Goods in GSTR-1 do not match with GSTR -2 of OPTCL on GSTN portal, the same will be adjusted through debit/credit advice issued by OPTCL under intimation to the Contractor after allowing cooling period of 3 months after the date of supply.

27. Contractor's Responsibility.

Notwithstanding 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 Tenderers. The Contractor(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 **180** 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) 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.

(II) e-Reverse Auction is hereby incorporated in the referred tender as follows.

STRATEGY FOR E-REVERSE AUCTION	
1	Bidders are required to go through the guide lines given below and submit their acceptance to the same.
2	e-Reverse Auction (RA) will be conducted in e-tender portal of OPTCL on specified date and time, while bidders shall quote from their own offices/places of their choice. Internet connectivity shall be ensured by the respective agencies/bidders themselves.
3	Demonstration/ training (if not trained earlier) of bidder's nominated person(s), shall be done to explain all the rules related to e-Reverse Auction/ Business Rule document to be adopted.
4	The strategy to be used for reverse auction shall be "DYNAMIC TEMPLATE BIDDING"
Procedure for electronic Reverse Auctioning (e-RA):	
5	<p>a. The e-RA shall be conducted on www.tenderwizard/OPTCL.com only.</p> <p>b. Bidder has to submit letter towards agreement to the Process related Terms & Conditions for e-Reverse Auction, as per (Reverse Auction Process Compliance Form at Annexure-IB). In non-receipt of the same, vendors will not be allowed to participate in e-RA.</p> <p>c. e-RA shall be carried out after opening of Price bids and completion of Price bid evaluation, which will be intimated only to the techno-commercially qualified bidders by OPTCL as per procedure given below.</p>

	<p>d. OPTCL reserves the right to conduct e-RA and it is obligatory on part of bidder(s) invited to participate in e-RA process once they have responded to the techno-commercial bid.</p>
6	<p>Prior intimation/ Notice for RA invitation will be given to techno-commercially qualified bidders regarding the date & time of opening of the e-RA.</p> <p>The start bid price (SBP) for e-Reverse Auction of each bidder under a particular package shall be the L1 evaluated price for the subject package including Taxes & Duties for the total scope for subject Package. Taking the above discovered L1 price as the upper limit e-RA will be conducted to determine the lowest possible price.</p> <p>Reverse Auction will be conducted amongst first 50% of the technically qualified bidders arranged in order of prices from lowest to highest, as L1, L2,L3-----Ln, and L1 price will be discovered. Minimum of 3 bidders shall be eligible for e RA. (eg. If 4 bidders are financially evaluated then the L1, L2 and L3 bidders shall be eligible for e-RA). Number of bidders eligible for participating in RA would be rounded off to next higher integer value if number of technically qualified bidders is odd (e.g. if 7 bids are technically qualified, then RA will be conducted amongst L1 to L4).</p> <p>However, in case only two bidders are found to be responsive, e-RA would be carried out with both the parties without any elimination. However, OPTCL reserves the right to invite the evaluated L1 bidder for negotiation without conducting the e-RA.</p> <p>In case of price submitted by any bidder is found to be abnormal, OPTCL reserves the right to reject the bid of the bidder(s) .</p> <p>Rank of bidders would be displayed as per the total cost to OPTCL, i.e including Taxes and Duties payable by OPTCL as per the provisions of the bidding document & after e-RA process is over.</p>
7	<p>Names of bidders/ vendors shall not be disclosed during the e-RA process. Names of bidders/ vendors shall be anonymously masked in the e-RA process.</p> <p>(i) In case of RA, start/ reference price and step value of decrement shall be indicated to the bidders at the start of the auction. Any participating bidder can bid one or multiple step decrement lower than the prevailing lowest bid at that time. The Bidder shall be able to view Bid Start Price, Bid Decrement Value, Prevailing Lowest Bid value, last Bid Placed by him and time left for bidding.</p> <p>(ii) The step value of decrement in a package to be offered by bidder (the minimum amount of reduction in the total bid price including all taxes & duties during auction) , shall be kept at 0.15% of L1 bidder's final evaluated price (or) at approved amount as decided by OPTCL.</p> <p>(iii) Bidders can only quote any value lower than their previous quoted price. However, at no stage, increase in Price will be permissible.</p> <p>(iv) At any point during Reverse Auction, bidding Price field shall remain enabled for the bidders. The reverse auction period shall be unlimited and the initial auction period (1st slot) will be of thirty (30) minutes with provision of auto extension by (10) ten minutes from the schedule/ extended closing time. If any fresh lower bid is received in last ten minutes of initial auction period or extended auction period, the auction shall get extended automatically for another 10 minutes. In case, there is</p>

	<p>no bid received during schedule/extended slot, the auction shall get closed automatically without further extension.</p> <p>(v) However, bidders are advised not to wait till the last minute or last few seconds to enter their bid during the period of e-reverse auction to avoid complication related with internet connectivity, network problem, system crash down, power failure etc.</p>
8	<p>After conclusion of e-Reverse Auction i.e (Closing Price in Reverse Auction will be taken as offered price by the L1 bidder), decrease in price of individual head of the template shall be considered proportionately on all individual line items of the respective head of the price schedule of the successful L1 bidder .</p> <p>Any bid received at the tender wizard server end subsequent to closure of the e-RA shall be summarily rejected and shall not be considered as a valid bid under whatsoever circumstances. For this purpose, tender wizard server log shall prevail.</p> <p>The bidder shall not involve himself or any of his representatives in price manipulation of any kind directly or indirectly by communicating with other bidders.</p> <p>During Reverse Auction, If no bid is received within the specified time, OPTCL, at its discretion, may decide to close the reverse auction process/ proceed with conventional mode of tendering [Evaluation of Part-II (price bid) submitted by bidders earlier].</p>
9	<p>Consequent upon completion of e-Reverse Auction, OPTCL's decision on award of contract shall be final and binding on the bidders.</p> <p>OPTCL shall be at liberty to call the L1 bidder for further process/ negotiation and also at liberty to cancel the e-reverse auction process/ re-tender at any time, without assigning any reason thereof. OPTCL can decide to reschedule or cancel any reverse auction: the bidders shall be informed accordingly.</p> <p>OPTCL/ Service Provider shall not have any liability to bidders for any interruption or delay in access to the e-Tender site/ Reverse Auction link irrespective of the cause.</p>

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 clause-34 of this tender, relative quality, adaptability of Supplies or services, experience, financial soundness, record of integrity in dealings, performance of materials/equipment 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 organization.

30. Minimum Qualification Criteria of Bidders.

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

- i. The bidder should have minimum 3 years of experience in executing similar type of work as on the date of opening of the techno-commercial bid. (*Joint venture/Tie ups with other firm is not allowed for consideration of experience*)

ii. The bidder, must have successfully executed similar type of projects comprising of the following work given below in a single project on EPC Contract/Turnkey Contract basis in India during last five years as on the date of opening of the techno-commercial bid.

1. Installation & commissioning of RTU

iii. The above work should have been under successful operation for a minimum period of one year reckoned from the date of opening of Bid(s). One of such performance certificate against satisfactory operation should have been issued by any Transmission/Generation Utility State Govt./Central Govt./any PSU/ any associated Transmission system for IPPs (Independent Power Producers) having installed capacity of 500MW or above/ CGP (Captive Generating Plant) in India/ any Agency awarded in a tariff based competitive Bidding (TBCB) by any State Govt./Central Govt./PSU in India.

iv. The type tests on the equipment offered against the tender should have been conducted in NABL laboratory within last five years from the date of opening of the tender (pt-I).

(v) Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority as per the requirement of Govt. of India.

(vi) "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated herein before, including any agency branch or office controlled by such person, participating in a procurement process.

(vii) "Bidder from a country which shares a land border with India" for the purpose of this Order means :-

(viii)

- a. An entity incorporated, established or registered in such a country ; or
- b. A subsidiary of an entity incorporated, established or registered in such a country
' or
- c. An entity substantially controlled through entities incorporated , established or registered in such a country ; or
- d. An entity whose beneficial owner is situated in such a country ; or
- e. An Indian (or other) agent of such an entity ; or
- f. A natural person who is a citizen of such a country ; or
- g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

(ix) The beneficial owner for the purpose of (viii)(d) above will be as under :

In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting along or together, or through one or more

juridical person, has a controlling ownership interest or who exercises control through other means.

- (x) An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

[A] Certificate (to be furnished in bidder's letter head)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evident of valid registration by the Competent Authority shall be attached.]

32. BIDDER'S FINANCIAL QUALIFICATION:

32.1 MINIMUM AVERAGE ANNUAL TURNOVER:

The Minimum Average Annual Turnover (MAAT) requirement of the bidder during last Three Financial Years as indicated in the following Table, shall not be less than **Rs.1.88 crore**. In case the Bidder is in existence for less than three financial years, the average annual turnover shall be sum of turnover in the completed no of financial years divided by three for the purpose of meeting the above criteria. Turnover of the bidding company on standalone basis only (excluding its associate companies on Standalone Basis) shall be considered for arriving at Annual Turnover. While calculating the turnover, only project related turnover shall be taken into consideration.

MAAT Schedule

Sl. No	Financial Year	Project Related Annual Turnover (excluding associate companies on Standalone Basis) of the Bidder (in INR Crores)
1	2021-22 (Amount in RS.)	
2	2020-21 (Amount in RS.)	
3	2019-20 (Amount in RS.)	
A. Total of 3FY Project related Annual Turnover		
B. = (A/3) Average of project related Annual Turnover for 3FY		

Note:

1. The bidder has to furnish the certificate from the Chartered Accountant (CA) certifying the Project related Annual Turnover of the company only (excluding its Associated Companies on Standalone Basis) based on audited accounts of the last Five Financial Years. In case the bidder has executed any project in Joint Venture/ Consortium, the project related turnover certified the Chartered Accountant (CA) should reflect his share of the project related turnover only.

33. Solving Right of Way.

i) The responsibilities of acquiring Right of Way (ROW) lies with contractor at his risk and cost. Similarly, responsibilities of getting clearance from Railway, NHAI, Forest, Water and other Statutory/Govt. bodies lie with the contractor at his risk and cost(except payment of statutory fees) . However, OPTCL will facilitate the process for getting clearance and reimburse the Statutory Fee.

ii) The responsibilities of acquiring Right of Way (ROW) lies with contractor at his risk and cost. However, OPTCL will make all endeavors to facilitate process of securing the ROW. OPTCL shall assist the Contractor for getting clearances from Railway, NHAI, Forest, Water, and other Govt./Statutory bodies, if any. All statutory fees for getting clearance shall be to OPTCL's account.

34. REJECTION OF MATERIALS/EQUIPMENT

The equipment shall be supplied as per the GTP specified by OPTCL and from **approved manufacturer Vendors list of OPTCL**(enclosed) for this tender. For equipment for which GTP or selected Vendors is not specified by OPTCL, the same shall be supplied only after obtaining approval from OPTCL. In the event, any of the materials supplied by the Contractor 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 materials / equipment or ask the Contractor in writing to rectify the same. The Contractor on receipt of such notification shall either rectify or replace the defective materials free of cost to OPTCL. If the Contractor fails to do so, OPTCL may :

- i. At its option replace or rectify such defective materials/equipment and recover the extra costs so involved from the Contractor plus fifteen percent and / or.
- ii. Terminate the contract for balance work / supplies with enforcement of Price Reduction Schedule Clause as per contract for the un-delivered materials and with forfeiture of Contract Performance Bank Guarantee.
- iii. Acquire the defective equipment / materials at reduced price considered equitable under the circumstances.

35. Jurisdiction of the High Court of Odisha.

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.

36. Correspondences.

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

37. Official Address of the Parties to the Contract

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

- [i] **Purchaser:** Chief General Manager (Telecom)
ODISHA POWER TRANSMISSION CORPORATION LIMITED,
Bhubaneswar-751022, Odisha.
Telephone No. 0674 - 2542403
- [ii] **Contractor:** Address

Telephone No.

Fax No.

38. 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 opening of technical bid (part-I).
- [ii] The tenderer shall submit the bid in electronic mode only.
- [iii] The Tender shall not be submitted telegraphically or by FAX.
- [iv] The prescribed EMD shall be submitted on or before the date and time of opening of technical bid (Part-I).
- [v] The Tender shall be kept valid for a minimum period of 180 days from the date of opening of tender.
- [vi] The Tender shall be submitted in single stage two part as specified.
- [vii] The tenderer shall upload the scanned copy of latest type test certificates (for the tests, carried out on the tendered equipment, being offered). Such type tests should have been conducted within last five years from the date of opening of this tender in a Government approved laboratory/CPRI in presence of any Government Organization's representative(s).
- [viii] 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.
- [ix] The Tenderer should quote 'FIRM' price only and the price should be kept valid for a minimum period of 180 days from the date of opening of the tender.
- (x) Guaranteed Technical particulars & Abstract of terms and Conditions should be filled in completely.
- (xi) (a) 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.
- (xi) (b) 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/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.

39. Documents to be treated as confidential.

The Contractor 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.

40. Scheme/Projects

The materials/equipment covered in this specification shall come under deposit works of OPTCL.

PART-I

SECTION - III

LIST OF ANNEXURES (I TO XVI)

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(A)
2	Reverse Auction Process Compliance Form	ANNEXURE-I(B)
3	Abstract of terms and conditions to accompany Section-II of Part-I	ANNEXURE-II
4	Schedule of Quantity and Delivery	ANNEXURE-III
5	Abstract of price component [to accompany Part-II of this specification]	ANNEXURE-IV
6	Schedule of prices to accompany Part-II	ANNEXURE-V
7	Bank Guarantee form for earnest money deposit	ANNEXURE-VI
8	Composite Bank Guarantee form for security deposit, payment and performance	ANNEXURE-VII
9	Chart showing particulars of E.M.D.	ANNEXURE – VIII
10	Data on Experience.	ANNEXURE – IX
11	Schedule of spare parts.	ANNEXURE-X
12	Schedule of Installations.	ANNEXURE-XI
13	Schedule of deviations (Technical)	ANNEXURE-XII (A)
14	Schedule of deviations (Commercial)	ANNEXURE-XII (B)
15	Litigation history	ANNEXURE-XIII
16	Format for extension of Bank guarantee	ANNEXURE-XIV
17	Tender specific authorization from the manufacturer of the offered equipment.	ANNEXURE-XV
18	DPIIT Certificate	ANNEXURE-XVI

(Annexure-IB)

(Reverse Auction Process Compliance Form)

(To be submitted on letter head of the bidding company with sign and stamp and along with Technical bid)

To,

The Chief General Manager (Tel)
OPTCL Head Qrs.BBSR,751022

Sub: Agreement to the Process related Terms & Conditions for e-Reverse Auction.

Dear Sir,

This letter is to confirm that:

- The undersigned is authorized representative of the company.
- We have studied the Commercial Terms and the Business rules governing the Reverse Auction as mentioned in your tender and confirm our agreement to that.
- We also confirm that we have gone through the auction manual and have understood the functionality of the same thoroughly.
- We, hereby, confirm that we will honour the Bids placed by us during the tendering/ e- Reverse auction process as called as e-RA.
- We also confirm that we will accept our Rank / Position that will be displayed when the Bidding Time for the Online Reverse Auction is over.

With regards,

Signature with Designation with company seal Name & Address

(Person having power of attorney for the subject package)

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 for “Abstract of price component & other commercial terms”)

ANNEXURE-III

**SCHEDULE OF QUANTITY AND DELIVERY ALONG WITH
INSTALLATION & COMMISSIONING**

Sl. No.	Description of the Item	Quantity	UOM	Desired delivery, Installation & commissioning
1	<p>Dual Reporting , Remote Terminal Unit (RTU) with AI cards -2nos+ 1 spare, DI card-3 nos+ 1spare , CPU card- 1 spare Power supply card- 1 spare 110V DC secure make MFM having dual RS-232 ports - 12 nos, OLTC Xducer-3nos, 110V DC CMR-20 Nos . Laptop-1 no cat-6 cable = 100 mtr , 4 core 2.5 SQMM for OLTC= 100mtr 2.5 sq.mm single core flexible control cable(MFT PT supply R,Y,B,N)= 2000 mtr 4 sq. mm single core flexible control cable(MFT CT supply R,Y,B,N)= 300mtr 1.5sq. mm 10 core control cable(Digital Input) = 300 mtr 2 pair 0.5 sqmm screened armoured twisted pair data cable for MFM O/P = 150 mtr. 2.5 sq. mm 3 core control cable AC supply=60 mtr, 2.5 sq. mm 2 core control cable DC supply to MFM =100 mtr 4 sqmm 2 core control cable for wiring of 110V DCDB and DC to DC converter= 60 Mtr</p>	1	no	2 months
2	110 V DC to 48 V DC converter(I/P= 110V DC, O/P-48V DC, 12.5A)	2	no	2 months

Signature of Tenderer
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 installation, testing & commissioning charges, if any. All the above prices will be taken during bid price evaluation.

ANNEXURE-V.

SCHEDULE OF PRICES _____ **TENDER SPECIFICATION No.**

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

1. The tenderer should fill up the price schedule properly in excel file in e-tender mode. The tender will be rejected, if the price bid is not submitted in accordance with the price schedule. No post tender correspondence will be entertained on break-up of prices. Also, the Contractor should agree for delivery at the desired site.
2. The Tenderer shall give an undertaking in part-I of the bid that, entire 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.

Signature of Tenderer

Name, Designation and Seal

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)

- a) **Ref No:**
- b) **Bank Guarantee No.**
- Date:**.....
- BG Amount:**.....
- Validity Period:**.....

This Guarantee Bond is executed this..... day of by us the..... Bank at , P.O..... , Dist....., State..... and Code No.....

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..... Dated..... for the purpose of work under Package(s) No...../ purchase of ----- .

1. Now, therefore, in accordance with Notice Inviting Tender (e-NIT) No..... Dated of OPTCL, Ms/Shri.....Address..... Wish / wishes to participate in the said tender and as a Bank Guarantee for the sum of Rs..... [Rupees in **words**-----] valid for a period ofdays is required to be submitted by the bidder, as per Tender Specification, we the _____) [indicate the name, Address & Code of the bank] [hereinafter referred to as “Bank”] at the request of Ms/Shri..... [hereinafter referred to as “Bidder”] do hereby unequivocally and unconditionally guarantee and undertake to pay during the above said period on written request by the <Tender Issuing Authority, Dept. of Telecom ODISHA POWER TRANSMISSION CORPORATION Ltd. , Bhubaneswar an amount not exceeding

Rs..... to OPTCL., without any reservation. The guarantee would remain valid up to [Date] and if any further extension to this is required, the same will be extended on receiving instruction from ----- on whose behalf this Bank Guarantee has been issued.

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 notwithstanding 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.
- 6 This guarantee will not be discharged due to the change in the name, style and constitution of the Bank and/or of the Bidder.
- 7 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 .
8. We, the _____ Bank (Name, Address & Code) further agree that this guarantee shall also be invocable 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 -----.

c) 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

The Bank Guarantee is issued in paper form and Advice transmitted through SFMS with required details to the beneficiary’s advising bank (ICICI Bank Bhubaneswar, IFSC Code ICIC0000061).

Dated, the _____ Day of _____

For _____ [Indicate name of Bank]

Signature
Full name
Designation
Power of Attorney No.
Date.....
Seal of the Bank.....

WITNESS: (SIGNATURE WITH NAME AND ADDRESS)

(1)
Signature
Full name
(2)
Signature
Full name

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.

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 IFSC Code	Mandatory	ICICI Bank Ltd IFSC Code-ICIC0000061

12	Beneficiary's Bank/Branch name and address	Mandatory	ICICI Bank Ltd Bhubaneswar Main Branch, Bhubaneswar
13	Sender to receiver information	Mandatory	
14	Purpose of Guarantee	Mandatory	EMD
15	Reference/Description of the underlined tender/contract	Mandatory	NIT No

[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.)

- c) Ref No:-
- d) Bank Guarantee No.
- Date:
- BG Amount:.....
- Validity Period:.....

This Guarantee Bond is executed this..... day of by us the..... Bank at , P.O..... , Dist....., State..... and Code No.....

Whereas the ODISHA POWER TRANSMISSION CORPORATION Limited, Janpath, Bhubaneswar, a company constituted 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 , Address..... (herein after called the “Contractor”) for supply, erection, installation & commissioning and associated civil works under the above LoA and whereas OPTCL has agreed (1) to exempt demand of security deposit under the terms and conditions of the LOA (2) to release payment of the cost of the Contract Price to the Contractor on furnishing by the Contractor to OPTCL a Contract Performance Bank Guarantee (CPBG) of the value of 10% of the Contract Price of the said Agreement.

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 _____) only, we the bank _____ [Indicate bank Name , Address & Code] (hereinafter referred to as “the Bank”) at the request of M/s/Shri _____ contractor do hereby undertake to pay to OPTCL, an amount not exceeding Rs. _____ (Rupees _____) 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. 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, the Bank also undertake to pay to OPTCL any money so demanded not withstanding any dispute or disputes raised by the Contractor in any suit or proceeding instituted / pending before any court or tribunal relating thereto, our liability under this present

being absolute and irrevocable. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor 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 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 till OPTCL certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the 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 Name, Address & Code of the Branch Office at Bhubaneswar of issuing Bank> in writing on or before (Date), we shall be discharged from all liability under this guarantee thereafter.

5. We, the _____ 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.

8. We, the _____ Bank (Name, Address & Code) further agree that this guarantee shall also be invocable 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 -----.

c) 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

The Bank Guarantee is issued in paper form and Advice transmitted through SFMS with required details to the beneficiary’s advising bank (**ICICI Bank Bhubaneswar**, IFSC Code ICIC0000061).

Dated, the _____ Day of _____
For _____ [Indicate name of Bank]

Signature.....

Full Name.....

Designation.....

Power Of Attorney.....

Dated.....

Seal of the Bank.....

WITNESS: (SIGNATURE WITH NAME AND ADDRESS)

1. Signature.....

Full Name.....

2. Signature.....

Full Name.....

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. 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 IFSC Code	Mandatory	ICICI Bank Ltd IFSC Code-ICIC0000061
12	Beneficiary's Bank/Branch name and address	Mandatory	ICICI Bank Ltd Bhubaneswar Main Branch, Bhubaneswar
13	Sender to receiver information	Mandatory	
14	Purpose of Guarantee	Mandatory	Contract Performance
15	Reference/Description of the underlined tender/contract	Mandatory	LOA No----

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 five 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 equipment of specified Rating/ capacity, voltage class, Designed, manufactured, tested and commissioned which are in successful operation for at least one year from the date of commissioning with legible user's certificate. User's full complete postal address/fax/phone must be indicated. (Refer clause No.7 of the Part-I, Section-II of the specification).

Place:

Date:

Signature of tenderer

Name, Designation, Seal

ANNEXURE - X

**SCHEDULE OF SPARE PARTS FOR FIVE YEARS OF NORMAL OPERATION
& MAINTENANCE**

SL. No	Particulars	Quantity	Unit delivery rate	Total price

Place:

Date:

Signature of Tenderer

Name, Designation, Seal

ANNEXURE-XI

SCHEDULE OF INSTALLATIONS.

Voltage Class, Rating/Capacity	Rated Voltage	Place of installation and complete postal address	Year of commissioning

Place: -

Date

Signature of Tenderer:

Name, Designation, Seal

ANNEXURE-XII
DEVIATION SCHEDULE.

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

TO ACCOMPANY PART-I

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

ANNEXURE-XII(A)

i. Technical deviations TO ACCOMPANY PART-I

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

ANNEXURE-XII(B)

ii. Commercial deviations.TO ACCOMPANY PART-I

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

ANNEXURE – XIII

LITIGATION HISTORY

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

Place: -

Date

Signature of Tenderer:
Name, Designation, Seal

ANNEXURE – XIV

PROFORMA OF EXTENSION OF BANK GUARANTEE

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

e) **Ref No:-** **Date:-**
.....

Sub: Extension of Bank Guarantee No.for Rs.
favouring yourselves, expiring onon account of
M/s. in respect of LOA No.
dated (hereinafter called original Bank Guarantee).

At the request of M/s., we..... Bank,
branch office atand having its Head Office at do
hereby extend our liability under the above mentioned Guarantee No. Dated
.....for a further period ofyears / months/ days from
..... to expire on,except as provided above, all other
terms and conditions of the original Bank Guarantee No. dated
shall remain unaltered and binding.

Please treat this as an integral part of the original Bank Guarantee to which it would be attached.

“ 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 -----.

c) 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
.....,

The Bank Guarantee extension is issued in paper form and Advice transmitted through SFMS
with required details to the beneficiary’s advising bank (ICICI Bank Bhubaneswar, IFSC Code
ICIC0000061).

Dated this Day of20..... at

For[Indicate name of the Bank]

Signature.....

Full Name

Designation

Power Of Attorney No.....

Seal of the Bank.....

NOTE : i) SFMS advice as per details below.

Format for SFMS details

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 IFSC Code	Mandatory	ICICI Bank Ltd IFSC Code-ICIC0000061
12	Beneficiary's Bank/Branch name and address	Mandatory	ICICI Bank Ltd Bhubaneswar Main Branch, Bhubaneswar
13	Sender to receiver information	Mandatory	
14	Purpose of Guarantee	Mandatory	Contract Performance/
15	Reference/Description of the	Mandatory	NIT No/LoA No

ANNEXURE – XV
Proforma Of Manufacturer’s Authorization

To : _____

WE M/s _____, manufacturers of equipment for
..... having production facilities at _____, do hereby
authorize M/s <Name of the Bidder> _____ to submit a bid and
subsequently sign the Contract, if he becomes successful against e-NIT No.....
and Tender Specification No.....

We hereby extend our full guarantee, warranty and latent defects liability period for the above
specified Material/ Equipment offered by the bidder, M/s
.....against the above e-NIT/ Tender Specification. We also hereby
authorize the said bidder to act on our behalf in fulfillment of these guarantee, warranty and
latent defects liability obligation. We, the Manufacturer will make our technical and
engineering staff fully available to the successful Bidder, on a reasonable and best effort
basis, in fulfilling the performance of all its obligations to OPTCL under the Contract.

For and on behalf of the Manufacturer.

Signed :

Date

Place

(Signature)

Printed Name)

(This form shall be duly filled-up, signed by the bidder & uploaded as an attachment).

Annexure-XVI

Certificate (to be furnished in bidder company's letter head)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable evidence of valid registration by the Competent Authority shall be attached.]

Authorized signatory

Company seal

PART – II
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/equipment, 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/equipment 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 equipment/materials damaged or lost which will be reported by the Consignee within 30 days of receipt of the equipment/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:

The Bidders 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.



PART-I

SECTION - IV

NOTICE INVITING TENDER-NIT -NO- CGM(Tel)-02/2023-24.

TENDER SPECIFICATION No: CGM(Tel)_ e-TENDER_NTPC_Dulanga_02/2023-24

TECHNICAL SPECIFICATION

Scope of the contract:

The scope of the contract shall be engineering, supply and installation of equipment as per the specification, and rendering services in accordance with the enclosed technical specification and bill of quantity.

- A. The scope covers engineering, assembly, inspection and testing, packing and delivery F.O.R. (destination) and complete commissioning of the RTU (Configured with required MFT, CMR, OLTC transducer, etc) along with supply & laying of associated cables in all respect for all the above equipment as detailed in the technical Specification and as per the BOQ specified.
- B. The contractor has to carry out a survey after award of contract and submit the survey report jointly signed by the site in-charge to the employer for approval and for subsequent amendment to the work order if there is a change in the BOQ.
- C. The RTU at the station shall be installed and commissioned along with all the cabling work for the connection and shall be tested locally.
- D. The equipment shall be properly earthed with the supply of required earth flat. Cables for the equipment shall be properly dressed before termination with the supply of required cable tray where ever necessary.
The price component towards such petty items like earth flat, cable tray, etc., required for earthing of the equipment under the tender and for the cable laying, which items are not reflected in the price bid sheet, should be included in the offered price of the respective equipment.

General Information.

1.1

Telemetry data is to be integrated for 33 KV Dulanga coal mines of NTPC to SLDC ,Bhubaneswar through GPRS Modem.

The broad scope of this turnkey project includes the survey, planning, design, engineering, supply, transportation, insurance, delivery at site, unloading, handling, storage, installation, splicing, termination, testing, and demonstration for acceptance, commissioning and documentation for the following as applicable:

	Remote Terminal Unit(RTU)
	All the associated cables for commissioning of the above equipment
	All remaining associated work/items described in the technical specifications

Note: The equipment shall be supplied as per the technical specification specified by OPTCL and from approved manufacturer Vendors list of OPTCL for this tender. The equipment for which GTP or selected Vendors is not specified by OPTCL, the same shall be supplied only after obtaining approval from OPTCL.

1.2. The scope of the works covers Survey, Planning, Design, Supply and commissioning of RTU for integration with existing SCADA/EMS system of SLDC as per the details as follows.

i)	Supply of Remote Terminal Unit (RTU) with required MFMs designed for Power Utility SCADA operation. RTU should report in IEC 870-5-104 protocols to both main & backup control centre. RTU should have ports for interfacing with relay control panels & MFMs. The RTU should be dual reporting i.e to SLDC , BBSR & to Back Up control Centre, Meramundali . Supply of Laptop is a part of the contract for monitoring, local data acquisition & configuration of RTU.
ii)	The RTU shall be installed and commissioned along with all the cabling work and earthing for the purpose and shall be tested locally. The integration of the RTU with the central SCADA is not within the scope of this contract. However the contractor shall extend full cooperation at the scheduled time of such integration with the SCADA OEM.
iii)	Providing engineering data and drawings, as per specified format, for employer's review, approval and records.
iv)	Complete documentation regarding manufacturing including Type, Acceptance & Routine testing, as specified.
v)	Packaging and transportation to the site including transit insurance & customs clearance/ port clearance (if required), port handling, clearance for imported goods and further loading (if applicable)" As delivered at site basis"
vi)	Receipt, Unloading, Storage, Insurance and Preservation of materials and equipment at site as required.
vii)	Erection, testing, commissioning of RTU and handing over of the all equipment and to the satisfaction of the Employer including statutory inspection if any.

Handing over of the completed system to the Owner.

1.3- RTU (Remote Terminal Unit)

1.3.1-The Remote Terminal Unit (RTU) shall be installed at Substation to acquire analog data and device status signals. RTU shall also be used for control of station devices from Master station. The supplied RTUs shall be interfaced with the Control & Relay (C&R) panels, communication equipment, power supply distribution boards; for which all the interface cables shall be supplied by the Contractor.

1.3.2- The contractor shall supply RTU, associated equipment such as 110V –DC- dual RS-232 port –secure make MFM, 110V - DC CMR, cables etc for housing of all the hardware envisaged for the RTU and system interface cubicle. The contractor shall be responsible for supplying all hardware, software, installation, cabling and field implementation for RTU as defined in this Specification. The contractor shall also provide complete documentation, training and testing to fully support the hardware and software provided. The RTU shall be used for real-time supervision and control of substation/ power plant through SCADA system. The use of contractor’s standard hardware and software may cause the contractor to conclude that there is a need for additional items specifically mentioned in this specification. The contractor shall supply all such items and provide a complete RTU design that meets all of the Employer’s functional requirements defined in this specification.

1.3.3-

- Erection of RTU panel at Ear marked place in NTPC , Dulanga control room as per site survey.
- Wiring is to be carried out between C/R panel and RTU Panel as per approved I/O list of OPTCL.
- Installation of MFM in C & R panel for measuring analog parameters like MW, MVAR, MVA, KV,HZ.
- Installation of CMR in C & R panel for monitoring Breaker and isolator status.
- Creating and loading of the RTU configuration in the RTU with approved signals and data parameters.
- Local data validation and validation with SLDC ,BBSR & BCC Meramundali.

1.3.4- RTU functions-

All functional capability described herein shall be provided by the Contractor even if a function is not initially implemented. The term master station is used to denote the SCADA systems. As a minimum, the RTUs shall be capable of performing the following functions:

(a) Collecting and processing the digital status inputs, analog inputs, accumulated values and transmitting to master station(s)

(b) Receiving and processing digital & analog control commands from the master station(s)

(c) Accepting polling messages from at least two master station(s) simultaneously using separate logical databases for each master station.

There should be provision for two separate ports on two separate NIC cards for communicating with master stations.

(d) Communication simultaneously on all Communication ports and using multiple concurrent protocols, including the 60870-5-104 & MODBUS/103 protocol.

(e) Data transmission rates from 300 to 9600 baud for serial ports (MODBUS/103) and 10/100 Mbps for TCP/IP Ethernet ports.

(f) RTU shall be compatible with protocol 61850 for communication with IEDs.

(g) RTU shall have the capability of automatic start-up and initialization following restoration of power after an outage without need of manual intervention. CPU will also resets if error is detected and status LED will the flash the error code . All restarts shall be reported to the connected master station(s).

(h) RTU shall support downloading of RTU database from the master station using Intranet

(i) RTU shall support SOE (Sequence of events) feature. *Internal battery back up to hold data in SOE buffer memory and also maintain date & time.*

(j) Acting as a data concentrator for acquiring data from Slave RTUs and exercising supervisory control on slave RTUs using IEC 60870-5-104 protocol.

(K) RTU shall support archiving facility for reporting and analysis. The archived data shall be saved to user defined file duration at user defined interval-eg. Every 5 minutes for a period of 1 week. The computation of the archived data shall also be supported – eg. Maximum, Minimum and Average.

1.3.5- Communication ports

The RTUs shall support simultaneous communications with two independent master stations (SCADA system) over Ethernet ports . The RTUs shall require number (min 2) of RS 485 ports for polling MFMs using Mod bus / 103 Protocol in multi-drop mode. Maximum 16 nos of MFM shall be connected to each port. It shall be possible to increase the no of communications ports in the RTU by addition of cards if required in future.

1.3.6- Local Configuration & Maintenance Interface

The RTUs shall include the interface to support the portable configuration and maintenance terminal (PCMT). The interface shall provide easy access to allow employer to use the maintenance terminal at the RTUs installed in the field using Ethernet, Local Configuration & Maintenance Interface

1.3.7- Communication interface between RTU & MFMs

The RTU shall acquire data from the MFMs. The MFMs will act as slave to the RTU. The RTU shall have the ability of issuing retry scan to acquire data from the MFMs in case of communication failure between RTU and MFMs. All data from the devices connected on a single port shall be acquired within 5 seconds.

1.3.8- Communication Protocol between RTU & IEDs

The RTU shall use the IEC 61850 protocol for communication with IEDs over Sub-station LAN. The RTU shall act as a Client and collect data from the IEDs.

1.3.9- Master Station Communication Protocol

The Contractor shall provide a communication protocol for communicating with SCADA master stations using IEC 60870-5-104 communication protocol standard. The communication protocol shall support all the requirements of this standard. The communication protocol shall be non-proprietary and the Contractor shall provide complete description and documentation of the protocol to Owner.

The RTU shall perform as a slave to SCADA master station when using the IEC 60870-5- protocol. All communication shall be initiated by the SCADA master stations. RTU must notify the master stations of unusual conditions at the RTU (such as a power fail/restoration or RTU malfunction), the transfer of changed data etc. All the notifications shall be accomplished within the framework of the periodic data acquisition exchanges.

1.3.10- Scan groups

Analog and digital input points (including points reported by exception) shall be assignable to scan groups using the IEC 60870-5-104 protocol profile communication protocol standard. A scan group shall be a specified set of data points within the RTU central database which will be communicated to a master station when requested by a specific (addressed) scan request. A scan group size shall only be limited by the communication protocol message length. Any RTU input point shall be assignable to any scan group. The RTUs shall support at least sixteen scan groups and all scan groups per communication port. The Contractor shall provide a convenient and flexible scheme for assigning points in the RTU to scan groups.

1.3.11- Reporting of status points

The RTU communication protocol shall be configured to report digital status changes by exception to master station using the IEC 60870-5-104 protocol profile communication protocol standard. Digital status data shall have higher priority than the Analog data. All the digital status data shall also be assigned to scan groups for integrity check by Master stations at every 10 minutes.

1.3.12- Reporting of Analog points

The analog data shall be reported periodically to update all the values at the master station within 10 to 15 seconds using IEC /104 protocol profile . Analog data shall also be reported by exception if the analog value exceeds its

previous value by more than **10%**.

1.3.13- Digital control commands

The RTU shall follow the select-and-execute sequence for operation of digital control commands from the master station using the IEC 60870-5-104 protocol profile communication protocol standard. The RTU shall reset its control logic upon any error in the sequence.

1.3.14- Data Concentrator Communication Protocol

The RTU shall act as a IEC 60870-5- and IEC 60870-5-104 protocol master and collect data and also perform supervisory control from/on the slave RTUs and communicate it to the Control Center. The Master protocol implementation shall be such that the data polling requirements mentioned at section 1.10 is at least accomplished.

RTU as a Data concentrator shall be provided with at least ten (10) IEC input ports/ cards and shall have capability to report to two master stations on IEC 104 interface. Data concentrator shall support at least 1,500 (fifteen hundred) data points. The RTU as a Data Concentrator shall be supplied with GPS receiver system with antenna, cable etc. for time stamping of Data concentrator which in turn shall synchronize the IEC protocol connected RTU/device. The RTU as a Data Concentrator shall come complete with built in monitoring mechanism to avoid loss of any data, especially the one reported by exception. The data concentrator shall have dual CPU and dual Power supply unit. The overall data update requirement from any Sub-RTU to Control centre should not affect the functionality defined elsewhere in the specification.

The Data concentrator shall have the provision for remote login from Control centre. The SLDC computer system shall be able to configure and poll health of Data concentrator from remote on 104 connected interface after due authentication of the users.

It shall support diagnostic & maintenance activities remotely. Individual RTU configuration shall be possible from Data Concentrator including accommodating devices from heterogeneous suppliers. The RTU as a Data Concentrator shall have following communication ports & support for protocols:

- i. IEC104 for SCADA control centers.
- ii. IEC 104 for local SCADA

The other requirements given for RTU elsewhere in the specification shall be applicable to RTU as a Data concentrator also

1.3.15- Analog Inputs

The RTU shall accommodate analog inputs which are unipolar or bipolar, 2-wire ungrounded differential signals. RTU shall be capable of accepting other standard analog input ranges (0 to 5V, 0 to 10mA, +/- 10 mA, 4-20 mA).

The RTU shall make all appropriate signal level conversion and conditioning

to allow full utilization of analog inputs and meaningful reasonability checking. The analog-to-digital converter shall have a minimum resolution of 2048 counts (sign plus 11 data bits). Each type of analog input shall be converted with full resolution. The RTU shall monitor the drift in characteristics of its ADC and mark the analog points with a drift quality code if a drift is detected. This drift quality code shall be sent to the master station also.

The RTU accuracy, for analog input measurement, shall be 99.8% or better at 25 degree C ambient temperature. Mean accuracy shall drift no more than 0.002% per degree C within the temperature range of -5 to +55 degree C. Determination of accuracy shall be made while the analog multiplexer is operating at rated speed.

Each input shall have suitable protection and filtering to provide protection against voltage spikes and residual current at 50 Hz, 0.1 ma (peak-to-peak) and overload. Loading upto 150% of the input value shall not sustain any failures to the RTU input. The total input impedance offered by the RTU shall not be greater than 250Ω (for +4 to +20 mA range).

All analog inputs shall be scanned by the RTU from the field at least at 1 second periodicity.

1.3.16- Status Inputs

RTU shall be capable of accepting isolated dry (potential free) contact status inputs. The RTU shall provide necessary sensing voltage, current, optical isolation and de-bounce filtering independently for each status input. The sensing voltage shall not exceed 48 VDC. The sensing voltage source shall be isolated from that of the RTUs logic power so that any noise or a short circuit across the sensing supply of a digital status input terminals would not disrupt the RTU operation other than the shorted digital status input.

The RTU shall be set to capture contact operations of 20 ms or more duration. Operations of less than 20 ms duration shall be considered no change (contact bounce condition). The RTU shall accept two types of status inputs i.e. Single point Status inputs and Double point status inputs.

Single point status input will be from a normally-open (NO) or normally-closed (NC) contact which is represented by 1-bit in the protocol message.

Double point status input will be from two complementary contacts (one NO and one NC) which is represented by 2-bits in the protocol message. A switching device status is valid only when one contact is closed and the other contact is open. Invalid states shall be reported when both contacts are open or both contacts are closed.

All status inputs shall be scanned by the RTU from the field at 1 millisecond periodicity.

1.3.17- Contact Multiplying Relay

Contact multiplying relays (CMRs) are required to multiply the auxiliary contacts of breaker/isolators etc. The contacts of these relays shall be used to provide status input to the RTUs. The relays shall be of self-reset type. The relay shall have a minimum of two changeover contacts each with minimum current carrying capacity of 5 A at 110V/220 V DC.

The CMRs shall be generally mounted in existing control & Relay panel but in case of non-availability of space, it shall be accommodated in the System Interface Cabinets (being supplied by the Contractor).

1.3.18- Sequence of Events (SOE) feature

SOE is the time-stamped digital status data. SOEs will enable Employer's personnel to determine the sequential operation of digital status input devices for their state changes. The RTU shall time-stamp the digital status data with a time resolution of one millisecond.

Initially, all breakers & protection contacts digital status input points in the RTU shall be configured as SOE points. However it shall be possible to assign any digital status input data point in the RTU as SOE point.

Each time a SOE status input point changes state, the RTU shall time-tag the change and send it to the Master station. The RTU shall maintain a SOE buffer within the RTU for communication delays and communication failure. SOE buffer shall be sized to store, as a minimum, of 1024 events. The RTU shall transmit the SOE data stored in its buffer to master station. An acknowledgement of receipt by the master station shall be made prior to the loss of any data in the RTU SOE buffer. Data not received at the master station shall be retransmitted. The RTU shall send a message to the master station to indicate the RTU SOE data buffer overflow condition.

1.3.19- Control Outputs

The RTU shall provide the capability for a master station to select and change the state of digital output points. Device control will be used by employer to control power system devices including:

- (a) Two-state Devices: Circuit breakers, motor-operated switches, auto/manual switches, relay disable/enable, and other two-state devices
- (b) Variable Output Devices: Raise/lower control of generators, transformer load-tap-changers (LTC), and other variable output devices.

The RTUs shall have the capability for control outputs as described in the following sections

1.4. 110 V DC TO 48V DC CONVERTER:-

DC to DC converter (110 V DC TO 48V DC) shall be installed in the RTU panel at NTPC, Dulanga Substation to provide 48V DC to the RTU. It should be IS/ IEC standard of any reputed make like COSEL MAKE , POWERTRON INDIA PVT LTD or equivalent .

1.5 **SAFETY**

- All equipment shall be complete with approved safety devices wherever a potential hazard to personnel exists and with provision for safe access of personnel to and around the equipment for operational and maintenance functions. The design shall include all necessary precautions and provisions for the safety of operating and maintenance personnel.
- There should be no emission of corrosive fumes or gases under normal operating condition in case of Battery.
- Special care shall be taken to make enclosed equipment proof against entry of rat, lizards and other creeping reptiles, which may create electrical short circuits inside, live equipment.
- Continuity of power supply is the first consideration and the design shall be such as to provide facilities to simplify inspection, testing maintenance, clearing and repair at site.
- The contractor has to assure 100% safety of all man & material at site during entire period of contract.
- The contractor shall adhere to normal safety procedure as per NTPC guidelines while carrying out installation / commissioning work at site.

1.6 . Desired Technical Particulars of RTU

Sl No	Item Description	Value
01	Data transmission rate	10/100 Mbps for Ethernet Port (Configurable)
02	Communication Ports	: Two Ethernet ports for connectivity to master station on IEC 60870-5-104 and IEDs/Numerical relays on IEC 61850 : One port for RTU Configuration & maintenance tool. : One port for LDMS : Four RS 485 ports for polling MFMs / Energy Meters
03	Communication protocol with Master stations	IEC 60870-5-104
04	Communication protocol with LDMS	IEC 60870-5-104

05	Communication protocol with MFMs	MODBUS/103
06	Status data transfer to Master station	By exception
07	Analog data transfer to Master station	Normally Periodic For major change -by exception
08	No. of Scan Groups supported	16
09	Separate Logical Database for each Master Station	
10	RTU shall be able to capture contact operations	Of 20 ms or more duration
11	SOE buffer size	At least 1024 events
12	Time stamping accuracy for SOE	1 ms
13	Supporting Control of Devices	Two state & OLTC capacitors
14	Down loading of RTU database from master station	Supported
15	RTU internal clock stability	At least 1 ppm
16	Nominal Power supply voltage	48V DC
17	Compliance to cl. 1.29.1 – Transducer Protection	

1.7. Desired Technical Particulars of DC to DC Converter

Sl No	Item Description	Value
01	I/P voltage	90V DC –300VDC
02	O/P Voltage	48V DC
03	O/P Current	12.5 Amp
04	Over current protection	Works over 105% of rating current and recovers automatically
05	Overvoltage protection	55.2 to 67.20 V

Quantity and delivery schedule

SI.No	Item Description	Quantity	UOM	Desired period of Supply & Commissioning
1	Dual Reporting , Remote Terminal Unit (RTU) with AI cards -2nos+ 1 spare, DI card-3 nos+ 1spare , CPU card- 1 spare Power supply card- 1 spare 110V DC secure make MFM having dual RS-232 ports - 12 nos, OLTC Xducer-3nos, 110V DC CMR-20 Nos . Laptop-1 no cat-6 cable = 100 mtr , 4 core 2.5 SQMM for OLTC= 100mtr 2.5 sq.mm single core flexible control cable(MFT PT supply R,Y,B,N)= 2000 mtr 4 sq. mm single core flexible control cable(MFT CT supply R,Y,B,N)= 300mtr 1.5sq. mm 10 core control cable(Digital Input) = 300 mtr 2 pair 0.5 sqmm screened armoured twisted pair data cable for MFM O/P = 150 mtr. 2.5 sq. mm 3 core control cable AC supply=60 mtr, 2.5 sq. mm 2 core control cable DC supply to MFM =100 mtr 4 sqmm 2 core control cable for wiring of 110V DCDB and DC to DC converter= 60 Mtr	1	No	2Months
2	110 V DC to 48V DC converter(I/P= 110V DC, O/P-48V DC, 12.5A)	2	No	2 Months

SECTION- V

TENDER SPECIFICATION NO. C.G.M -Telecom-Daunga-02 /2023-24

SPECIFICATION FOR COMPREHENSIVE AMC OF THE RTU

Sl	ITEM DESCRIPTION	UNIT	Total Qty.
1	AMC charges for RTU equipped with all functional cards fully loaded with software /application required for local RTU data display at Site.	Set	01

SCOPE OF AMC (Comprehensive) for above equipment.

(I) **Annual Maintenance Contract (Comprehensive)** for the RTU for a period of **3 (Three) years** from the date of expiry of the guarantee period shall have following scope:-

SCOPE OF AMC(Comprehensive) for above equipment.

(I) **Annual Maintenance Contract (Comprehensive)** for the RTU to be supplied and commissioned at NTPC, Dalunga, Site, for a period of **3 (Three) years** beyond the Guarantee period and shall have following scope:-

(a) **Preventive Maintenance** [Half yearly (every six months)]: Contractor to Check the equipment properly to ascertain the performance to the satisfaction of OPTCL in every six months. These inspections are to be carried out in presence of OPTCL Engineer and contractor's representative. A report on inspection & testing along with the status of the RTU is to be jointly signed for reference and record. In case any defects are noticed during Preventive Maintenance, such defects are to be rectified within 15 days of such inspection. The spare materials/equipment required to rectify the defects are to be supplied by the contractor free of cost to OPTCL. In case contractor fails to perform the Preventive maintenance within the scheduled stipulated time, the purchaser shall recover from the supplier/contractor a penalty for the delay as per the Price reduction clause indicated below (III-B).

(b) **Break down maintenance:** In case any defect is noticed, the Contractor shall be intimated by the owner, and Contractor shall attend the spot within 07 days from the date of intimation (Date of issue of Letter) positively and shall ascertain the

defects and shall rectify the same within 15 days from the date of intimation (Date of issue of Letter) to the Contractor. The spare materials/equipment required to rectify such defects are to be supplied by the contractor free of cost to OPTCL. In case Contractor fails to rectify the defects within the scheduled time, the purchaser shall recover from the supplier/ Contractor a penalty for the delay as per the price reduction clause indicated below (III-A). The date of intimation to the Contractor regarding the troubles/defects of the item(s) shall be reckoned as the base date for computing the Penalty amount

(II) **TERMS OF PAYMENT:** (For AMC Contract of RTU).

The terms of payments under this contract shall be governed as per the following:

1. Your unconditional acceptance of the order.
2. A performance Bank Guarantee as per the proforma enclosed for 10% of the total Maintenance Contract price (for 03 years) , which will remain valid for more than two months from the expiry of the contract period i.e, 38 months from the last date of the guarantee period. Initially, the BG shall remain valid for 18 months and the same to be revalidated from time to time to cover the entire guarantee period.
3. Payment will be made equally at the end of every six months, period starting from the date of contract period as per the details below:

(a) Release of payment for the 1st installment:- The payment of 1st installments of each year are to be paid to you at the end of 6(six) months. The RTU and LDMS need to be Checked Properly under Preventive Maintenance (PM) to ascertain the performance to the satisfaction of OPTCL in every six months. This inspection is to be carried out in presence of OPTCL Engineer and contractor's representative. A report on inspection & testing along with the status of RTU and LDMS should be jointly signed and furnished to the verifying authority (Concerned Telecommunication Division) for verification and onward transmission to the designated Nodal Officer.

(b) Similarly, the payment of 2nd installments of each year are to be paid to you at the end of 12(Twelve) months, during which the inspection of RTU and LDMS to keep the schemes in a healthy and functional condition, shall be carried out by the contractor, on production of documents as indicated above.

* The payment for other years of AMC shall be as indicated above.

* The Goods and Service Tax shall be payable at applicable rate.

* The statutory deduction of taxes shall be made from bill.

(III) **PERFORMANCE SECURITY:**

A performance Bank Guarantee as per the proforma enclosed for 10% of the total Maintenance Contract price (**for 03 years**) , which will remain valid for more than two months from the expiry of the contract period i.e, **38 months** from the last date of the guarantee period. Initially, the BG shall remain valid for 18 months and the same to be re-validated from time to time to cover the entire contract period. You are requested to furnish the Composite Bank Guarantee of required amount in our standard Bank Guarantee format (enclosed herewith) towards Security, Payment and Performance from any Nationalized/ Scheduled Bank on non-judicial stamp paper worth of Rs. 29.00 (Rupees Twenty Nine) only or as applicable as per prevalent rules.

The B.G. shall be furnished to Chief General Manager, (Telecom), OPTCL Bhubaneswar-751022 within 30(thirty) days from the date of issue of **NOA (Notification of Award) for AMC** and shall remain valid for a period of **18 (Eighteen)** months and the same to be validated from time to time to cover the entire AMC period. Validation of BG shall be made well before expiry of the validity of BG. The said Bank Guarantee should be accompanied by a confirmation letter from the concerned

issuing Bank & should have provision for encashment at Bhubaneswar before the B.G. is accepted and all concerned intimated. No interest is payable on the Composite Bank Guarantee.

b. In case of non-fulfillment of contractual obligation, Composite Bank Guarantee shall be en-cashed without intimation to you.

(IV) CONSIGNEE AND PAYING OFFICER:

For the purpose of this **NOA** of AMC Contract, **DGM, Telecommunication Division, OPTCL**, Sambalpur shall be the consignee and the Paying Officer.

(V) PRICE REDUCTION SCHEDULE:

(a) In the event of failure on your part to comply with the provisions of the contract regarding attending to the **Break down** of the RTU and LDMS at various grid substations / site, as indicated elsewhere, a penalty @0.5% of the total taxable value for each day of delay, or part thereof, for such delay, subject to upper limit of price reduction of 10% of the total taxable value if delay is within 30 days and up to 20% if delay exceeds one month, will be levied, without prejudice to any other remedies to which OPTCL may also be entitled, under the provisions of the contract/bid specifications.

(b) In the event of failure on your part to comply with the provisions of the contract regarding attending to the Preventive maintenance (PM) of the RTU and LDMS at various grid substations as indicated elsewhere, a price reduction @30% of the total AMC taxable value for the period shall be imposed for that quarter.

(VI) CONTRACTOR'S RESPONSIBILITY:

It will be contractor's responsibility to maintain the entire 50Volt RTU and LDMS, as described in the scope of the contract in healthy and functional manner. The repair and replacement work will be completed within 15 days from the registering of the complaints by OPTCL Engineers of the concerned Grid substations or MANAGER/ AGM/DGM/GM of the concerned Division or Circles respectively failing which the Price reduction clause as at clause-V shall be applied. The replacement of equipment will be done by using materials from the stock to be kept under contractors scope. Any equipment/spare removed from the RTU and LDMS location and taken for rectification, will be rectified and returned back to OPTCL at contractor's own risk and expense, within 15 days from the date of such removal. The date of removal will be reckoned as the date of handing over & taking over report jointly signed by OPTCL Engineer of the concerned Grid substations and contractor's representative.

(a) An indemnity bond shall be furnished before receiving materials from OPTCL

(b) In case the Bidder did not return the materials taken from the RTU and LDMS Equipment then the BG furnished towards the AMC shall be encashed without any intimation to you.

(VIII) CONTRACT AGREEMENT:

Contractor shall prepare and finalize the Contract Document for signing of the formal Contract Agreement with us, as per the proforma to be provided to you, on non-judicial stamp paper of appropriate value within fifteen days from the date of this order.

(IX) DURATION OF CONTRACT:

This AMC shall be in force for a period of 03 (Three) Years, beyond the Guarantee period as stipulated in the Specification.

Information to be furnished by the contractor:

The following information is to be provided by the contractor for attending to the faulty RTU for rectification during the guarantee period.

Persons to be contacted for the service purpose:

Names: (1)

Designation:

Mobile No.

Alternate Mobile No.

E-mail address:

Alternate e-mail address:

Name: (2)

Designation:

Mobile No.

Alternate Mobile No.

E-mail address:

Alternate e-mail address: