

ODISHA POWER TRANSMISSION CORPORATION LTD. OFFICE OF THE GENERAL MANAGER: ELECT. EHT (O&M) CIRCLE: CHAINPAL

AT/PO: CHAINPAL COLONY, PIN-759104, and DIST: ANGUL (ODISHA)

Email: ehtm.cle.chp@optcl.co.in CIN:U401020R2004SGC007553

TENDER SPECIFICATION NO.02/2015-2016

FOR

REPAIR/OVERHAULING OF ONE NUMBER OF 33/.4KV, 1 MVA OTPL MAKE STATION TRANSFORMER AT GRID SUBSTATION MERAMUNDALI UNDER EHT (0&M) CIRCLE CHAINPAL

SALE OF TENDER SPECIFICATION:

LAST DATE SALE OF TENDER SPECIFICATION:

DT. 09-04-2015

DT. 27-04-2015

DT. 28-04-2015

DT. 28-04-2015

DT. 28-04-2015

DT. 28-04-2015

DT. 28-04-2015

NO.EF	HT (O&M)/CPL/	/DT	
ISSUED TO	,		
	M/S		

Lifeline of Odisha

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SECTION-1



ODISHA POWER TRANSMISSION CORPORATION LTD.

(A Government of ODISHA Under Taking) Regd. Office: Janpath, Bhubaneswar-751022, Odisha

OFFICE OF THE GENERAL MANAGER: ELECT. EHT (O&M) CIRCLE: CHAINPAL, AT/PO: CHAINPAL COLONY,

DIST: ANGUL (ODISHA), Pin-759104, Email-ehtm.cle.chp@optcl.co.in CIN:U401020R2004SGC007553

TENDER CALL NOTICE NO. 02/2015-16

The General Manager (Elect.), E.H.T. (O&M) Circle, Chainpal invites sealed Tenders in duplicate from reputed manufacturers/repairers for repair/overhauling of one number of 33/.4KV, 1 MVA OTPL make Station Transformer at Grid Substation Meramundali under EHT (O&M) Circle, Chainpal.

The tender specification can be obtained from the office of The GM EHT (O&M) CIRCLE, CHAINPAL on payment of **Rs. 4000/-(Four Thousand only)**+VAT @ 5%(Non Refundable) in shape of Cash/Bank Draft in favor of EHT (O&M) CIRCLE, CHAINPAL payable at , TTPS, Talcher on any working day upto **01.00PM** from **Dt.09-04-2015 to Dt.27-04-2015**. In case the B.D made any other nationalized bank payable at any clearing branch at Talcher/Angul will be allowed, But the bidders have to deposit the collection fee(Bank transaction fee) along with the paper cost. The collection fee & Paper cost is Nonrefundable. Additional amount of Rs.100/-(One Hundred only) may be paid extra for postal delivery of the tender specification. The undersigned shall not be held responsible for any postal delay.

The Tender shall be received Up to 01.00 PM of dated 28.04.2015 & will be opened at 03.30 Hours of same day in the Office of the undersigned in the presence of the Bidders (or) their Authorized Representatives present if any. If any of the above date happens to be a holiday, the next working day will be the corresponding effective date. One Tender paper shall be issued to one Bidder. E.M.D @ 1% of the total quoted value should be deposited in shape of Demand Draft / Cash in favour of E.H.T. (O&M) Circle, Chainpal & payable at "UCO Bank", TTPS Branch along with Self Attested Copy of PAN and Service Tax Registration Certificate failing which the tender will be liable for rejection.

The bidder should superscribe only the "Tender Call Notice No. & Date of Opening of the tender on the body of the Sealed Envelope". Bidder should not write their name or any other information on the body of the sealed envelope. Super scribing any other information on the body of the envelop, Conditional tender, Incomplete tender, Telegraphic / Fax / E-mail (etc.) Tenders & Tenders not accompanied with requisite amount of E.M.D. will be rejected. The authority reserves all rights to reject any, all or part of the Tender, alter/modify the requirement/ delete any part of the tender without assigning any reason thereof.

N.B:- Tender Paper must be purchased from this office only within stipulated period. No other mode like downloaded paper from website will be accepted.

GENERAL MANAGER EHT (O&M) Circle, Chainpal

Energy is precious. Save it.

SECTION-II

INSTRUCTIONS TO BIDDER

- 1. The contract shall be valid only for a period of 06 (Six) months from the date of opening of tender. The department reserves the right also to terminate the contract at any time during the contract period without assigning the reasons thereof.
- 2. The authority reserves the right to award the contract among any responsive bidders against this tender. Besides this, the authority reserves the right to accept or reject any or all tenders without assigning any reason thereof.
- 3. The bidder has to submit all the documents as mentioned in Clause No.11 of SECTION-III. Also the documents must valid on the date of opening of tender should be submitted along with tenders, failing which the tender will be rejected. The bidder or their authorized representatives should produce the original documents mentioned in Clause No.11 of SECTION-III for verification at the time of opening of the tender. Those who fail to produce the same and found not to be valid on the date of opening of tender not matching with the Xerox copy submitted by the bidder; their tenders will be out rightly rejected. In case if only one bidder participate in the tender process or nature of urgency of work (decided by this office), then undersigned may consider the case (*but not mandatory) & he will be given a chance to produce original documents in this office within one week from the date of opening of the tender.
- **4.** In case of any dispute arising either in supply of material or any clause of agreement/ work order, the decision of the Unit Head, will be final and binding on the Bidder.
- 5. Tender with over writing, erased, illegible rates or rates not shown in figures and words in English will be liable for rejection. In case of discrepancy between words and figures noted against each item of the tender and between unit rates and total amount, the decision of the Competent Authority (Committee or Unit Head) accepting the tender will be final and binding on the bidders. Total of item and grand total of whole tender be clearly written. Correction in the tender, if un-avoidable, should be made by re-writing with dated initial of the bidder after scoring out wrong entries, clerical and arithmetical mistakes may result in the rejection of the tender.
- **6.** The bidders shall sign on all pages of the tender document as a token of acceptance of all terms and conditions thereof and submit his quotations therein.
- **7.** 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.
- **8.** Request from the bidder in respect of additions alternations, modifications, corrections of either terms or conditions or rates after opening of the tender will not be considered.
- 9. All correspondence relating to the tender shall be made with General Manager (El.), E.H.T. (O&M) Circle, OPTCL, Chainpal.

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SECTION-III

GENERAL TERMS & CONDITIONS OF CONTRACT

Sealed tenders are invited in duplicate from reputed manufacturers/repairers for repair/overhauling of one number of 33/.4KV, 1 MVA OTPL make Station Transformer at Grid Substation Meramundali under EHT (O&M) Circle, Chainpal.

1. SUBMISSION & OPENING OF TENDER:-

Tender shall be submitted with other documents in duly sealed envelope super scribed on the body of envelope "Tender for Repair/overhauling of one number of 33/.4KV, 1 MVA OTPL make Station Transformer at Grid Substation Meramundali". The bidder should write only Tender Specification No, the name of work and date of opening of the tender on the body of the sealed envelope. Bidder should not write their name or Agency name on the body of the sealed envelope which may make the offer liable for rejection.

- **2.** <u>RIGHT & AUTHORITY FOR REJECTION:-</u> Tenders received after due date and time will be summarily rejected. The General Manager (Electrical), E.H.T. (O&M) Circle, Chainpal reserves the right to reject any or all of the tenders without assigning any reason thereof.
- **3.** <u>VALIDITY OF OFFER:</u> The offer should be firm and valid for a period of at least 120 days from the date of opening of tenders, Unless the tender will be rejected.
- **4. EARNEST MONEY DEPOSIT:-** The tender should be accompanied with 1% of the total quoted amount towards Earnest Money Deposit (EMD) in shape of **Cash/ Bank Draft** in favour of EHT (O&M) CIRCLE, CHAINPAL payable at UCO Bank, TTPS, Talcher otherwise tender will be out rightly rejected. In case the B.D made any other nationalized bank payable at any clearing branch at Talcher/Angul will be allowed, But the bidders have to deposit the collection fee (Bank transaction fee) along with the EMD. The collection fee is Nonrefundable & It can't be taken into account of EMD deposit. The EMD of the unsuccessful bidders will be returned after finalization of tender. The EMD of the successful bidders will be returned only after the Security money deposited as per the clause No.(6) in Section (III). In case of successful bidder fails to execute the order satisfying all terms & conditions or also fails to commencement of work within stipulated date mentioned in the date of order, the Earnest Money Deposit will be forfeited. No interest will be paid on the EMD to any participator. No other mode than above for EMD Deposit will be accepted & bidder will be out rightly rejected.
- **5.** <u>PRICE:-</u> The bidders are advised to quote their rate as per the price schedule in Section-V with break up prices including of all Taxes & Duties and shall remain upto the validity of tenders.
- **6. SECURITY DEPOSIT:-** The bidders whose offer qualifies for acceptance will be awarded work order for execution of the works and the bidder shall have to deposit security amount equal to 10% (ten percent) of contract value in shape of cash/bank draft drawn in favour of respective paying officer, of OPTCL, The security deposit shall be released after two months of expire of the guarantee period as stated under clause-10 of SECTION-III on receipt of application for this purpose. No Interest shall be paid to the bidder towards the security deposit so deposited by the Bidder. The security deposit shall be deposited with the respective paying officer of OPTCL prior to commencement of work. In case of Non fulfillment of contractual obligation by the supplier, the same so deposited shall be forfeited.
- 7. <u>COMMENCEMENT & COMPLETION OF WORK:</u> The works awarded should be commenced from 15 days of the award of the contract and completed within 60 days. If the work could not be completed within scheduled date due to any valid reason, then completion period may be extended on written request by the Bidder. If the work will not commence & complete within the stipulated period, then the penalty should be imposed as per clause No.08 of SECTION-III.

- **8.** <u>PENALTY: -</u> Penalty @ ½% (half per cent) per week up to a maximum of 5% of the total value of the work order will be imposed and recovered from dues admissible if the work will not completed within the specified date in SECTION –III, clasue-7. However imposition of penalty clause is subject to force majeure condition.
- **9. TERMS OF PAYMENT:** 100 % (one hundred percent) payment along-with full taxes and duties (if any) shall be made after successful completion of the work in all respect and verification reports based on JMC thereof by respective consignee and Paying Officer and on receipt of funds from Head Office in this regard. After complete execution of work, the bidder shall produce the printed bills to the respective consignee/Paying Officer for effecting payment.
- **10. GUARANTEE PERIOD:** The work done by the contractor as per contract specification should be guaranteed for satisfactory operation and against any defects, in materials & the workmanship for a period of 18 months from the date of completion of the work or 12 months from the date on which transmission lines/Substations equipment has been put to service, whichever is earlier. The above guarantee certificate shall be furnished in triplicate to the undersigned for approval along with work completion certificate of consignee. Any defects noticed during the period shall be rectified by the bidders at its own cost, without any financial burden to OPTCL.
- 11. <u>DOCUMENTS & QUALIFICATION:</u> The following Xerox copy should be submitted with the tender paper & the same will be verified with original documents at the time of opening of tender. Also the below qualification is required, (Relaxation may be given in experience in situation like unavailability of experienced Firm).
- i) Manufacturer/Electrical Registration/License Copy.
- ii) Service Tax Registration Certificate from the Central Excise Deptt.
- iii) Valid PAN/TIN.
- iv) VAT Regtd. & VAT CC as applicable
- v) Experience Certificate (priority will be given in tie condition)

Minimum qualification criteria of bidders:

- 1. The bidder who will quote for repair of 1MVA, 33/.4KV OTPL make Station transformer shall be a **manufacturer/repairer** of the similar or higher rating & voltage class of the transformer which should have been in satisfactory operation for at least **last 2(two) years** prior to the date of opening of the tender.
- 2. The bidder who is a manufacturer/repairer & under the process of manufacturing & supplying similar type or higher rating transformers can also offer their bids but their bid may be considered by the purchaser only after detail scrutiny of their technical capability in manufacturing, designing, repairing, testing of the above rated transformers as well as performance of their manufactured/repaired transformers in Govt. Utilities.
- **12.** ADDITION OR DELETION OF CONTRACT: The Contract may be altered in quantum as per exigencies of work. The bidder shall accordingly provide services as may be required by the Officer- in -Charge on being given a notice of 15 days
- 13. ARBITRATION:- In the event of any dispute arising out his contract. The same shall be referred for arbitration to the Director (HRD) OPTCL, Bhubaneswar or any arbitrator appointed by the Chairman-Cum-Managing Director, OPTCL after due notice of claim and such appointment and the award of the arbitrator shall be final and binding arbitration and conciliation Act. 1996 shall apply. The venue of arbitration will be Bhubaneswar.

- **14. CONSIGNEE:-** The AGM, Grid S/S Meramundali is the consignee for the contract..
- **15.** <u>VERIFYING OFFICER:</u> The DGM, EHT(O&M) Division, Meramundali is the Verifying Officer for contract.
- **16.** PAYING OFFICER:- The DGM, EHT(O&M) Division, Chainpal is the paying Officer for contract.
- **17. JURISDICTION OF COURT:** Suits if any, arising against the work order to be issued to the Bidder shall be filled by either party in any court of law to which the jurisdiction of Odisha High Court extends.
- **18.** <u>SAFETY PRACTICE:</u> The Bidder must be followed the OPTCL safety Rule while performing the work. The workmen must provided Safety equipment by the contractor while performing the works .No deviation will be allowed and the Divisional head has got any power to stop the work at any time on the breach of safety practice after getting intimation from consignee.



SECTION-IV SCOPE OF WORK & PRICE SCHEDULE

The Scope of Work-The scope of works must cover the followings:-

1. The Scope of work :-

The work covers repair of 33/0.4KV, 1 MVA Station Transformers. The details of work to be executed as per the joint inspection report by a team comprising members of the contractor & OPTCL. The contractor has to supply all the required materials/T&P and labour for the above mentioned work. The material to be used for repair shall confirm by this undersign office

2. Manner of execution :-

The work is to be executed by the following standard procedure of transformer manufacturing.

Loading & Unloading, dragging, transportation from OPTCL,'s site(transformer's plinth) to repairer's workshop, repair, inspection & testing & sending back after due repairs to the OPTCL's sites (transformer's plinth), it's supervision of erection, testing & commissioning. All equipments supplied under the contract shall be manufactured/repaired in the manner, set out in the Specification or where not set out, to the reasonable satisfaction of the Purchaser's representative.

After receipt of the defective transformer at repairer's workshop, the repairer shall offer for initial inspection & the representative of OPTCL shall inspect & estimate to asses the extent of repair to be executed.

After approval of estimate, OPTCL will issue the **final work order** basing on which the repairer shall start the repairing work & will give the offer for stage inspection. Representative of OPTCL will conduct the stage inspection at the work's of the repairer & will submit the report to GM EHT (O&M) Circle, chainpal for approval. After approval of stage inspection report, OPTCL will issue the clearance for "GO AHEAD" for further repair. On completion of repair works, the repairer shall call for final inspection & testing of repaired transformer. After successful final inspection & testing, OPTCL will approve the test results & issue dispatch clearance & the repairer shall send the repaired transformer to OPTCL's desired destination. The repairer shall supervise the erection, testing & commissioning of repaired transformer at OPTCL's desired grid sub-station. Repair of transformer involves dismantling of cores & winding, cleaning of core laminations, tank, tap changer, conservator, radiators, breather & all other parts fitted with the transformer. Reassembly of core & winding with old healthy/reinsulated /rewound copper conductor, providing new phase barriers, spacer's & etc. Complete spray painting of transformer externally with two coats of high glossy heat resistible gray paint & painting of transformer tank internally with two coats of oil resisting paint.

3. Tender schedule:-

Schedule of different items of the works to be executed is given in the price schedule. The bidders are required to quote their unit rates which should be inclusive of supply of all required materials at site including cost of materials, royalty and transportation to site and cost of all labour to execute the work. Taxes if any should be indicated separately.

4. All material, T&P and labour are to be supplied by the contractor. The material to be used for this work shall confirm by the undersigned office.

5. Inspection and Testing:

[i] The purchaser's representative shall be entitled at all reasonable times during dismantling & repair to inspect, examine and test at the manufacturer/Repairer's premises, the materials and workmanship of all equipments to be repaired & supplied under this contract and if part of the said equipment is being repaired in other premises, the manufacturer/Repairer shall obtain for the purchaser's representative permission to inspect, examine and test as if the equipment were being repaired in the Repairer's premises. Such inspection, examination and testing shall not release the manufacturer/Repairer from his obligations under the contract.

- [ii] The Repairer/ repairer shall give to the purchaser(owner) adequate time/notice (at least clear 15 days for inside the state manufacturer/Repairers and 20 days for outside the state manufacturer/Repairers) in writing for inspection of materials indicating the place at which the equipment 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 manufacturer/repairer or any of his subvendors, the manufacturer/Repairer 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 carryout such tests efficiently. The manufacturer/Repairer 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 shall 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 manufacturer/Repairer in writing. The manufacturer/Repairer shall provide at least five copies of the test certificate to the Purchaser.
- [v] The following tests should be carried-out by the repairers/Bidders
- [A] Type Test:- The temperature rise/heat-run test shall be carried out for each ratings of the transformer on the tap giving the worst combination of loading on the transformer windings, as per upto-date IS 2026 & IEC Publ.76.2 in the presence of OPTCL's representative. The temperature rise of the windings and oil shall not exceed the value as indicated in the name plate. Where name plate is not available or where name plate do not show the above value, then values indicated in the latest IS-2026 for transformers will be followed. During temperature rise test WTI, OTI, radiator top, radiator bottom, three watt meter readings, three voltmeter & three ammeter readings are to be recorded in addition to other usual readings.
- **[B] Routine Test:-** Following routine tests shall be carried out on repaired transformer as per IS:2026 and this Technical specification in presence of OPTCL's representative.
- [i]. Measurement of DC resistance of windings at principal and extreme taps.
- [ii]. Measurement of voltage ratio and check of voltage vector relationship.
- [iii]. Measurement of Insulation Resistance at 60 & 600 second intervals before & after all the tests.
- [iv]. Dielectric Tests,
- [a]. Power frequency over-voltage tests.
- [b]. Induced over voltage Tests.
- [v]. Operation and dielectric testing of Tap changer.
- [vi]. Measurement of no load loss and no load current by 3 watt meter method.
- [vii]. Measurement of load loss and Impedance voltage at principal tapping and extreme [viii]. Oil BDV Test.
- [ix]. Measurement of capacitance and tan-delta to determine capacitance between winding and earth. This measurement shall be carried out before and after series of dielectric tests (as per requirement)
- [x]. Determination P.I. value:- Polarization Index shall be measured in respect of all windings by taking insulation resistance for 10 mins & 1 min. This should not be less than 1.5 or more than 5 . P.I. shall be measured before and after all the tests.
- [xi]. Measurement of Neutral current during load loss test which should not exceeds 2% of the rated current.

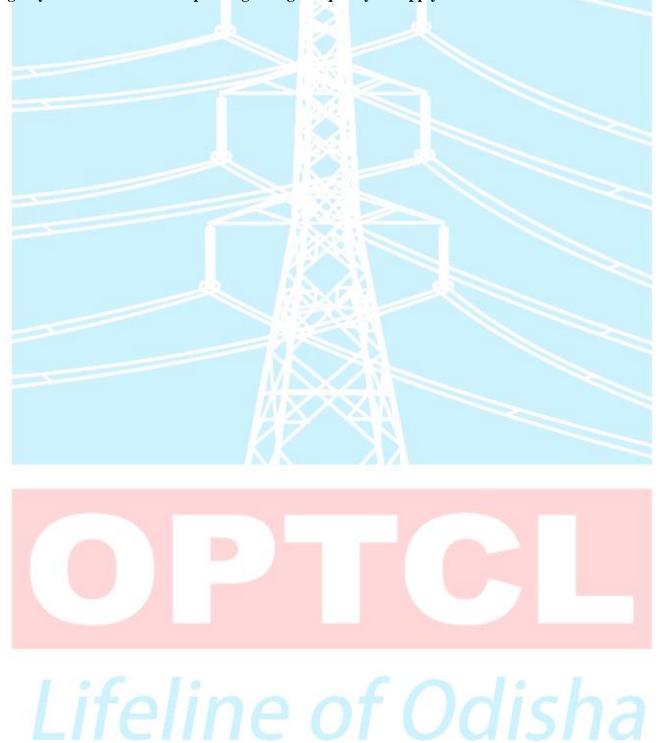
[xii]. Magnetic Balance test.

[xiii]. DGA test of oil before and after all the tests.(as per requirement)

[xiv]. Measurement of harmonic level on no load current.

[xv]. Oil leakage test: All tanks and oil filled compartments shall be tested for oil tightness by completely filling with oil of a viscosity not greater than that of insulating oil at the ambient temperature and pressure test as per IS standard. The pressure shall be maintained for a period of not less than 12 hours during which time no leakage shall occur.

N.B.- 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.



PRICE SCHEDULE

N.B:- The Firm may inspect the area to be cleaned at Grid S/S before quoting the price.

Sl No	Description of the work	Unit	Qty	Unit cost In Rs.	Total unit Cost in Rs.	
A	Supply of Materials					
1	H.V bushing	Nos.	3			
2	LV Bushing	Nos.	4			
3	Brass stud with cap for HV bushing	Nos.	3			
4	Brass stud with cap for LV bushing	Nos.	4			
5	Breather	Nos.	1			
6	Gasket	Set	1			
7	Nuts, Bolts, washers	LS	1			
8	Tap switch	Nos.	1			
9	Oil temperature indicator	Nos.	1			
10	Buchholtz relay	Nos.	1			
11	Repair of HV winding with new conductor & insulation	Limb	3			
12	Repair of LV winding with new conductor & insulation	Limb	3			
13	Transformer Oil	Ltrs	1000			
14	Valve	LS				
	Total PART-A	11:11				
В	Labour & Service Charges					
1	Labour charges for repair of the transformer	LS				
2	Spray painting of transformer with supply of materials	LS	-			
3	Filtration charges	LS	-			
	Total PART-B					
C	Credit for parts, components to be retained by repairer					
1	Copper wire	Kg	300			
2	Other components	LS	1/4			
	Total PART-C					
D	Total PART=A+B-C					
E	Service Tax @14% on 70% of contract value (D)					
F	Grand Total (PART-D+ PART-E)					

N.B.:1)The weight of oil, damaged core and new coils (HV, LV) shall be assessed after opening of the transformer during joint inspection at your works and credit shall be taken by us for all the materials to be retained by you as per your offer of price.

2) All type of Test as requirement for above TFR included in Labour charges, accordingly price may be quoted.

In words: (
	0 6	<u>@</u>) Only

Signature of the Bidder with date

SECTION-V

DECLARATION BY THE BIDDER

1.	D : 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
2.	Earnest money deposited vide Cash receipt/ Bank Draft No Amount in Rs(Rupees			
3.	Tender Paper Purchased vide Cash receipt/ Bank Draft No Amount in Rs(Rupees			
4.	Xerox copy of PAN/TIN:	Furnished/ not furnished		
5.	Manufacturers/repairers License	Furnished/ not furnished		
6.	Xerox copy of VAT Registration certificate:	Furnished/ not furnished		
7.	Xerox copy of VAT clearance certificate:	Furnished/ not furnished		
8.	Xerox copy of Service Tax Registration No.	Furnished/ not furnished		
9.	Agreed to furnish & accept Contract Security deposit clause	e: Yes/ No.		
10.	. Agreed to accept payment terms as per Tender Specification	n. Yes/ No.		
11.	. Agreed to adhere time period as per the contract:	Yes/ No.		
12.	. Agreed to accept penalty clause as per the tender:	Yes/ No.		
13.	Attach past experience certificate for the similar jobs in OSEB/ GRIDCO or any other agencies.	Yes/ No.		
14. Agreed to keep validity of the offer for one year from the Date of tender opening without any variations in tender clause: Yes/ No.				
	Agreed to obtain labour contract license on event of work order from the competent authority (if required):	Yes/ No.		

Date: Signature of the Bidder Place: with seal