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ODISHA POWER TRANSMISSION CORPORATION LIMITED
(A Govt. of Odisha undertaking)
CIN – U40102OR2004SGC007553
REGD. OFFICE: JANPATH, BHUBANESWAR-751022,
OFFICE OF THE GENERAL MANAGER: ELECT
EHT (O&M) CIRCLE CHAINPAL, AT: ANADNAGAR (MATIASAHI),
PO: HAKIMPADA, DIST: ANGUL (ODISHA), Pin-759143
E-mail - ehtm.cle.chp@optcl.co.in

TENDER SPECIFICATION NO: E-TCN-CHP-02/2026-27

FOR

"SUPPLY OF 144 NOS. OF SURGE MONITORS WITH COUNTER ALONG WITH ACCESSORIES SUITABLE FOR 400 KV, 220KV, 132KV & 33 KV VOLTAGE SYSTEM REQUIRED FOR DIFFERENT GRID SUB-STATIONS UNDER EHT (O&M) CIRCLE, CHAINPAL"

(MAKE: CROMPTON GREAVES POWER/ELECTROLYTES/ LAMCO/ OBLUM OR ANY REPUTED MAKE APPROVED IN OPTCL)

Tender documents Price-Rs. 6000/- + 18 % GST = Rs. 7080/-

EMD-1 % of total quoted value

For further details, please visit the Official

Website of OPTCL **"www.optcl.co.in"** &

e-Tender Portal of OPTCL **www.tenderwizard.com/OPTCL**

Tender paper cost and EMD in the form of DD in original should be submitted to the office on or before the last date of opening of Tender

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ODISHA POWER TRANSMISSION CORPORATION LIMITED
(A Government of Odisha Undertaking)
OFFICE OF THE GENERAL MANAGER (ELECT)
EHT (O & M) CIRCLE,CHAINPAL,AT-MATIASAHI
P.O.-HAKIMPADA DIST-ANGUL (ODISHA) PIN- 759143
CIN: U40102OR2004SGC007553

E-TENDER SPECIFICATION No .CHP 02/2026-27

"SUPPLY OF 144 NOS. OF SURGE MONITORS WITH COUNTER ALONG WITH ACCESSORIES SUITABLE FOR 400 KV, 220KV, 132KV & 33 KV VOLTAGE SYSTEM REQUIRED FOR DIFFERENT GRID SUB-STATIONS UNDER EHT (O&M) CIRCLE, CHAINPAL"

(MAKE: CROMPTON GREAVES POWER/ELECTROLYTES/ LAMCO/ OBLUM OR ANY REPUTED MAKE APPROVED IN OPTCL)

PART-1

SECTION-I: INSTRUCTION TO BIDDERS.
SECTION-II: GENERAL TERMS AND CONDITIONS OF CONTRACT
SECTION-III: LIST OF ANNEXURES
SECTION-IV: TECHNICAL SPECIFICATIONS
PRICE BID & TECHNO COMMERCIAL BID (IN EXCEL FORMAT)

PART-II

REQUEST FOR ONLINE TENDER DOCUMENTS: FROM DT- 04.11.2026 (13.00 HRS) TO DT-25.11.2026 (12.30 HRS)

ISSUE OF ONLINE TENDER DOCUMENTS: FROM DT- 04.11.2026 (13.01 HRS) TO DT-25.11.2026 (12.31 HRS) (BID SHEETS)

LAST DATE OF SUBMISSION OF ONLINE TENDER: UP TO DT-25.11.2026 (15.00 HRS)

DATE OF OPENING OF TECHNO-COMMERCIAL BID: ON DT- 25.11.2026 (16.00 HRS)

DATE OF OPENING OF PRICE BID: TO BE INTIMATED LATER

Note:

1. In case the due date for opening of tender happens to be a holiday, then tenders would be received & opened on the next working day at the same time.
2. Please note that the tenders against this tender enquiry are being invited **through e-tendering mode**. In case of any clarification the prospective bidders may contact this office as mentioned above.
3. **The prospective bidders are requested to get their digital signatures (Class-3) well in time** for participation in the tender and no request for extension on this account will be entertained.
4. **Manual tenders in any form/case will not be accepted.**

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ODISHA POWER TRANSMISION CORPORATION LTD

(A Govt. of Odisha undertaking)

CIN – U40102OR2004SGC007553

REGD. OFFICE: JANPATH, BHUBANESWAR-751022

OFFICE OF THE GENERAL MANAGER: ELECT
EHT (O&M) CIRCLE CHAINPAL, AT: ANADNAGAR (MATIASAHI),
PO: HAKIMPADA, DIST: ANGUL (ODISHA), Pin-759143,
Email - ehtm.cle.chp@optcl.co.in

E-TENDER NOTICE NO. CHP-02 / 2026-27

NOTICE INVITING TENDER

For and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD, General Manager, EHT (O&M) Circle, Chainpal invites Tenders from reputed bidders fulfilling the eligibility criteria and having valid PAN & GST registration Certificate for the work of **"SUPPLY OF 144 NOS. OF SURGE MONITORS WITH COUNTER ALONG WITH ACCESSORIES SUITABLE FOR 400 KV, 220KV, 132KV & 33 KV VOLTAGE SYSTEM REQUIRED FOR DIFFERENT GRID SUB-STATIONS UNDER EHT (O&M) CIRCLE, CHAINPAL (MAKE: CROMPTON GREAVES POWER/ELECTROLYTES/ LAMCO/ OBLUM OR ANY REPUTED MAKE APPROVED IN OPTCL".** The interested bidders would be required to enroll themselves on the tender portal www.tenderwizard.com/OPTCL. Complete set of bidding documents shall be available at www.tenderwizard.com/OPTCL from **04.11.2026 (13.00 Hrs) up to 25.11.2026 (12.30 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 OPTCL's official web site http://www.optcl.co.in and www.tenderwizard.com/OPTCL **only.**

The above Tender is a Two part bidding system in **e-tendering mode** only as per the following details.

Tender Specification No: CHP-02/2026-27

Request for online tender documents: From dt- 04.11.2026 (13.00 Hrs) to dt-25.11.2026 (12.30 Hrs)
Issue of online tender documents: From dt- 04.11.2026 (13.01 Hrs) to dt-25.11.2026 (12.31 Hrs)
(Bid sheets)
Last date of submission of online tender: Up to dt-25.11.2026 (15.00 Hrs)
Date of opening of Techno-commercial Bid: On dt- 25.11.2026 (16.00 Hrs)
Date of Opening of Price Bid: To be intimated later
Cost of Tender Spec Document : Rs.6000/ + Rs1080/- (GST@18%)= Rs 7080/-
Earnest Money Deposit: Rs. 1% of Total quoted value
Tender processing fee: Rs. 2950.00

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

ELIGIBILITY FOR SUBMISSION OF BIDS:-

Bidders should not have any legal suit against OPTCL / GRIDCO Ltd / SLDC are only eligible for submission of Bids. Firms banned / blacklisted for business dealings by any organization are not eligible to participate in the tender. Participation in the tender by suppression of the above facts shall invite penal action, whenever detected.

The bidders must have in possession of following qualifications for participation in tender:-

1. **Manufacturer approved in OPTCL/Authorized dealer / Supplier**
2. **GST Registration Certificate.**
3. **Permanent Account Number (PAN) issued by Income Tax Department.**

The bidders can view the tender documents from website free of cost. The bidders who want to participate in the tender shall have to pay **Rs.7080/- (Rupees Seven Thousand Eighty only) non-refundable** including GST @ 18%) towards the cost of tender document, in the form of Demand draft only, drawn in favour of **GM, EHT (O&M) Circle Chainpal, Payble at Union Bank Of India, Similiapada, Angul** *(In case the D.D made from 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 Non-refundable)* and the same is to be submitted to the office of the undersigned on or before the last date & time of Opening of tender.

*** NSIC/MSME registered vendors may be allowed for free of paper cost but have to deposit 50% of EMD value. The Firm has to submit the document proof regarding NSIC/MSME firm along with the DD of EMD to this office before opening of Tender, else bid will be rejected.**

*The bidders shall have to submit a non-refundable amount of **Rs.2950.00** only towards the tender processing fee through e-payment gate way.*

(NOTE: For deposit of tender processing fee to K.S.E.D.C. Ltd. Bangalore, the bidder can use various modes of e-payment facility available through Tender wizard Portal, i.e. by Credit Card, Debit Card, Net Banking)

The payment acknowledgement slip submitted along with the EMD & tender cost at the office of the undersigned on or before the last date & time of Opening of tender.

The bidders shall scan the Demand Draft towards EMD, Tender paper Cost and acknowledgement slip for tender processing fee and upload the same in the prescribed form in **.gif** or **.jpg** format in addition to sending the original as stated above.

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

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

Sd/-

GENERAL MANAGER
EHT (O&M) CIRCLE, CHAINPAL

PART-I

SECTION-I

INSTRUCTIONS TO BIDDER

1. Submission of Bids: -

The bidder shall submit the bid in Electronic Mode only i.e **www.tenderwizard.com/OPTCL**. The bidder must ensure that the bids are received in the specified website of the OPTCL by the date and time indicated in the Tender notice. Bids submitted by telex/telegram will not be accepted. No request 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 submitted with documents** according to the instruction, stipulated above. The participants to the tender should be registered under GST/IT Act.

i. **For all the users it is mandatory to procure the Class 3 Digital Signatures.**

ii. The bidders are requested to follow the below steps for Registration:

a. Click "Register", fill the online registration form.

b. Pay the amount of **Rs.2360/-** for registration fee through **e-payment gateway.**

c. This registration is valid for one year.

d. Send the acknowledgment copy for verification.

e. 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 – Class 3) 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 (DSC).

- Select the Certificate and enter DSC Password.
- 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.
- Enter the required fields including details of D.D for tender Processing fee.

vi. After making the request Bidders will receive the Bid 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
- Mr. Satyamanyu- mob: 09937140591

2. <u>Division of Specification.</u>

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

<u>Part-I Consists of</u>

SECTION-I- INSTRUCTION TO BIDDERS.

SECTION-II- GENERAL CONDITIONS OF CONTRACT

SECTION-III- LIST OF ANNEXURE

SECTION-IV- TECHNICAL SPECIFICATION.

<u>Part-II Consists of</u>

1) PRICEBID
2) TECHNO COMMERCIAL BID (excel sheet)

3. <u>Purchaser's Right Regarding Alteration of Quantities Tendered</u>. 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 bidder for any particular item, if considered necessary in the interest of the Purchaser to get the goods/equipment earlier.

4. 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.

5. 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.

6. Earnest money deposit:

i) The tenderers are required to **deposit EMD of 1% of Total Quoted value** in shape of Demand Draft in **favour of GM, EHT (O&M) Circle Chainpal, Payable at Union Bank Of India, Similiapada, Angul.** *(In case the D.D made from any other nationalized bank payable at any clearing branch at Angul is allowed, the bidders however have to deposit the collection fee (Bank transaction fee) along with the paper cost. The collection fee & Paper cost is Nonrefundable)***.**

ii) No interest shall be paid on earnest money deposit.

iii) No adjustment towards EMD shall be permitted against any outstanding amount if any remained with this Office. In case of less deposit of EMD, the tender shall be liable for rejection.

iv) The EMD of successful bidders can be refunded on written request after deposit of Security deposit.

7. 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.

8. PRICE: -

(a) The price quoted should be firm, F.O.R. the **destination 400/220/132 KV Grid Sub-Station, Meramundali /132/33KV GSS,Chainpal (as the case may be)** inclusive of freight, Insurance, Packing, Forwarding charges inclusive discount if any.

(b) Taxes, if any shall be mentioned extra. The tender may quote rate in respect of different make Materials as per scheduled

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

Bidders are expected to be fully conversant with the meaning of all the clauses of the specification before submitting their tenders. In case of doubt regarding the meaning of any clause, the bidder may seek clarification in writing from the **GM, EHT (O&M) Circle, Chainpal**. This however does not entitle the Bidder to ask for time beyond due date, fixed for receipt of tender.

9. Documents to Accompany Bids.

a) Bidders are required to submit tenders in the following manner:

b) Declaration Form as per **Annexure-I** (duly signed) to be uploaded in ***.pdf** format.

c) Earnest Money Deposit (scanned copy is to be uploaded)

d) Abstract of Terms & conditions in prescribed proforma as per **Annexure-II**. To be keyed in the bid sheets provided.

e) General Terms & Conditions of contract as per Section-II of the Specification. (All the required documents are to be uploaded.)

f) Data on past experience if any as per the Specification.(Scanned copy to be uploaded)

g) Proof of Manufacturer, Supplier, Authorised dealer, permanent account number [PAN] of the firm is required under Income tax Act., GST Certificate (Scanned copy to be uploaded).

h) Any other document required, is to be uploaded.

i) Schedule of prices in the prescribed proforma in the price bid sheet provided in ***.xls** format.

j) The tenderer shall submit the guaranteed technical particulars of the quoted item along with the descriptive literature, dimensional drawing catalogues, certificate of authenticity(approval from OPTCL authority), true copies of type test carried out in NABL accredited test laboratory.

10. Conditional Offer:

Conditional offer shall not be accepted.

11. General Instruction to the Bidders : -

i) The bidder must get him registered in tender portal by paying an amount of **mentioned in website, through e-payment gate way.** This registration is valid for one year.

ii) The tender paper cost (Form fee non refundable) for an amount of **Rs.7080/- (including GST) (Rupees Seven Thousand Eighty Only) to be deposited in shape of DD.**

iii) The tender processing fee for an amount of **Rs.2,950/- (Non-refundable) (Including GST) is to be paid to KSEDC Limited, Bangalore through e-payment gateway.**

iv) The EMD amount as specified is to be paid in shape of DD in favor of **GM, EHT (O&M) Circle Chainpal, Payable at Union Bank Of India, Similiapada, Angul** .

v) In the event of discrepancy or arithmetical error in the schedule of price, the decision of the purchaser shall be final and binding on the Bidder.

vi) Notice inviting tender shall form part of this specification.

vii) The EMD shall be returned to the unsuccessful bidders after finalization of tender on written request.

viii) It should be distinctly understood that the price bid and techno-commercial bid shall contain only details/documents relating to price and technical details, as mentioned herein above.

ix) **The Bidder must submit the EMD amount, cost of tender document in shape of draft , proof of Tender processing fee & seal and signed copy of the tender documents along with requisite supporting documents uploaded in tender portal in a sealed cover envelope super scribing the Tender Notice No & Date of opening of tender. The said envelope is to be submitted in the office of the purchaser on or before the last date and time of Opening of tender.**

x) The bidders should submit the Bank Mandate form or original Cancelled Cheque for return EMD.

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

1. SCOPE OF THE CONTRACT:

The scope of contract shall be to deliver "**SUPPLY OF 144 NOS. OF SURGE MONITORS WITH COUNTER ALONG WITH ACCESSORIES SUITABLE FOR 400 KV, 220KV, 132KV & 33 KV VOLTAGE SYSTEM REQUIRED FOR DIFFERENT GRID SUB-STATIONS UNDER EHT (O&M) CIRCLE, CHAINPAL (MAKE: CROMPTON GREAVES POWER/ELECTROLYTES/ LAMCO/ OBLUM OR ANY REPUTED MAKE APPROVED IN OPTCL)** as per technical requirement mentioned in the tender specification on Rail/Road transport at destination of OPTCL as specified in the schedule of quantity.

2. DEFINATION 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 General Manager, EHT (O&M) Circle, Chainpal for and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD., Bhubaneswar.

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

2.3 "Purchaser's Representative" shall mean any person or persons or consulting firm appointed and remunerated by the Purchaser to supervise, inspect, test and examine workmanship and materials of the equipment to be supplied.

2.4 "The supplier" shall mean the bidder whose bid has been accepted by the purchaser and shall include the bidder's executives, administrators, successors and permitted assignees.

2.5 "Equipment" shall mean and include all machinery, apparatus, materials, and articles to be provided under the contract by the suppliers.

2.6 "Contract Price" shall mean the sum named in or calculated the bid.

2.7 "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 "FOR Destination costs" shall mean the cost of equipment and material at the consignee's store/site. The cost is inclusive of all taxes, packing, forwarding and insurance and freight charges.

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. REJECTION OF MATERIALS:

The acceptance of any quantity of equipment shall in no way relieve the supplier of his responsibility for meeting all the requirements of this specification and shall not prevent subsequent rejection, if such equipment are later found to be defective.

In the event any of the equipments /material supplied by the manufacturer is found defective due to faulty design, bad workmanship, bad materials used or otherwise not in conformity with the requirements of the Specification, the Purchaser shall either reject the equipment /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.

4. 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.

5. RIGHT TO REJECT /ACCEPT ANY TENDER:

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

6. DELIVERY:-

The materials in full quantity shall be delivered within 30 days of receipt of purchase order, failing which purchase order shall be liable for cancellation with forfeiture of Earnest money/ Security Deposit. However early delivery shall be preferred.

7. DESPATCH INSTRUCTIONS: The equipment / materials should be securely packed and dispatched directly to the specified site at the supplier's risk by Road Transport only after getting dispatch clearance from the purchaser**.**

8. TERMS OF PAYMENT: -90% value of the consignment will be paid after receipt and detailed inspection / verification of the material at site/stores in good condition subject to approval of guarantee certificate, deposit of security amount and availability of funds. Balance 10% shall be paid on submission of performance Bank guarantee of equivalent amount with validity of two months more than the guarantee period.

9. PRICE REDUCTION FOR DELAY IN COMPLETION OF CONTRACT:

If the supplier shall fail to deliver the materials within the delivery period as stipulated under clause No.6 (Section-II) of this Tender document or any extension granted there to, the purchaser shall recover from the supplier penalty for a sum of half percent (i.e. 0.5 percent) of the contract price for each calendar week or part thereof of delay. However the total amount of penalty shall not exceed 5% (five percent) of the contract/ undelivered items price. Materials will be deemed to have been delivered only when all the component parts are also delivered. If certain components are not delivered in time, the supply will be treated as delayed until such time the missing/undelivered parts are delivered

10. SECURITY-CUM-PERFORMANCE DEPOSIT:

The successful tenderers will be required to deposit a Security Deposit-cum-Performance Guarantee amounting to 10% of the contract value **valid up to two months after the guarantee period** shall be deposited within 10 days (Ten) days of placement of the Work order in the shape of DD/Composite B.G. from a Nationalized Bank, drawn in favour of **GM**,**EHT (O&M) Circle, Chainpal** which will be refunded after two months of completion of the Guarantee period on written request subject to approval of guarantee certificate. The B.G. format will be issued by OPTCL during the placement of the work order. In the event of any breach or default in all or any condition of Work Order, security deposit will be forfeited. In case the security amount is not deposited, the same shall be deducted from the bill of the supplier. **Security Deposit not claimed for refund within three years from the date of expiry of Guarantee period shall be forfeited.**

11. DOCUMENTS TO BE SUBMITTED ALONG WITH SUPPLY OF MATERIALS

(a)GST Invoice in triplicate
(b) Routine Test Report
(c)Guarantee Certificate
(d)Type Test copy
(e) Make Authorization Letter
(f)Operation and maintenance manual

12. INSPECTION :

Pre Despatch inspection if required will be carried out by the purchaser and the same will be covered under the scope of the bidder .

The materials received shall be inspected thoroughly by the respective consignee for ensuring requisite quality as per the technical specification. Defects/deficiencies, if any, noticed during the time of inspection by the Consignee at site, the same shall be returned to the supplier and the Supplier shall immediately replace the defective items and supply the new items.

13. FORCE MAJEURE :

The supplier shall not be liable for any penalty for delay or for failure to perform the contract for reasons of force majeure such as acts of god, acts of the public enemy, acts of Govt., Fires, floods, epidemics, Quarantine restrictions, strikes, Freight Embargo and provided that the supplier shall within 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.

14. EXTENSION OF TIME:

If the delivery of equipment/material is delayed due to reasons beyond the control of the supplier, the supplier shall without delay give notice to the purchaser in writing of his claim for an extension of time. The purchaser on receipt of such notice may or may not agree to extend the contract delivery date as may be reasonable but without prejudice to other terms and conditions of the contract.

15. GUARANTEE:

The materials should be guaranteed for satisfactory operation and against defects in design, materials and workmanship for a period of **at least 18 [eighteen] months** from the last date of delivery or **12 [twelve] months** from the date of utilization whichever is earlier. The above guarantee certificate shall be furnished in triplicate to the purchaser for his approval. **Any defects if noticed during this period in the material, the same shall be replaced free of cost with out any financial burden to OPTCL** provided such defects are traced due to bad materials used/bad workmanship and faulty design. The replaced materials should also have similar guarantee. In the event of any breach on default in all or any condition of purchase order, Security Deposit will be forfeited.

16. GSTIN CERTIFICATION, PAN CARD & MANUFACTURER/AUTHORIZED DEALERSHIP CERTIFICATE :

Attested legible Xerox copies of Income Tax PAN Card, GSTIN Certificate & manufacturer/authorized dealership certificates valid on the date of opening of the tender should be submitted along with tenders without which tender will be rejected at the time of opening. If required, the tenders shall have to produce original documents for verification any time after the opening of tender. Those who fail to produce the same and found not to be valid on the date of opening of the tender, their tenders will be rejected.

17. SUBMISSION OF PROOF REGARDING MANUFACTURER'S CERTIFICATE/ AUTHORISED DEALERSHIP CERTIFICATE, PRICE LIST OF THE MANUFACTURER, PAST EXPERIENCE OF EXECUTION OF ORDER PERFORMANCE CERTIFICATE(IF ANY), TECHNICAL LITERATURE AND DRAWINGS: Attested legible true photocopies of valid authorized dealership certificate, manufacturers Price list, certificate of authenticity and technical literature etc. should be furnished along with the tender if applicable. If required, the firms may be requested to produce such original certificates for verification. **The tender shall be accompanied with dimensional drawings and technical literature, leaflets, manuals if any, of the quoted items**.

Proof of Past experience of execution of Purchase Orders(if any) needs to be furnished by the bidders. The bidders have to clearly state their experience, resources, engineering organization to undertake this work of supply of surge arresters/counters. The bidders shall submit the scanned copy of legibly written user's certificate to prove the satisfactory operation of the offered equipment / materials for a minimum period of 01 (one) year from the date of commissioning / use. The purchaser reserves the right to waive off the stipulation in respect of experience in case of new firms.

18. FREE REPLACEMENT: Free replacement of materials lost / damaged during transit shall be made immediately on receipt of the intimation from the consignee /Paying Officer without waiting for settlement of the claim of bidders with Railway/Lorry/Insurance Company etc.

19. INSURANCE:-

Insurance of materials is to be done by the supplier at their own cost. The responsibility of delivery of the materials at destination in good condition rests with the supplier. Any claim with the insurance company Railway authority/ Road transport authorities arising due to loss or damage in transits has to be settled by the supplier. The supplier shall undertake free replacement of materials damage or lost which will be reported by the consignee within 30 Days of the receipt of the materials at destination without waiting for the settlement of the claims with the carriers and underwriters.

20. DEVIATION IN SPECIFICATION: -

If any change in the technical parameters equivalent to the above specification may be clearly mentioned separately

21. **SUPPLIER'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 Bidders. The Supplier(s) shall be responsible for any discrepancy noticed in the documents, submitted by them along with the bid(s)

22. **QUANTITY VARIATION:** The quantity of the work may undergo revision at the time of placement of orders.

23. **CONSIGNEE: AGM (El.), 400/220/132KV Grid S/S, Meramundali/ SDO(Elect),EHT(O&M) S/D Chainpal** .

24. **ENGINEER IN CHARGE**: **DGM (Elect.), EHT (O&M) Division, Meramundali/ DGM(Elect),EHT(O&M) Division,Chainpal**

25. **PAYING OFFICER:**: **DDO, EHT (O&M) Circle, Chainpal**

26. **JURISDICTION OF 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.

27. **CORRESPONDENCES.**

i) Any notice to the supplier under the terms of the contract shall be served by Registered Post or by hand at the Supplier's Principal Place of Business.

ii) Any notice to the Purchaser shall be served at the Purchaser's Principal Office in the same manner.

Official Address of the Parties to the Contract

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

Purchaser: General Manager,
EHT (O&M) Circle, OPTCL, Chainpal,
AT: MATIASAHI Po: HAKIMPADA
DIST: ANGUL (ODISHA), Pin-759143,
Email-***ehtm.cle.chp@optcl.co.in***

Supplier: Address
Telephone No.
Fax No.

28. **Outright Rejection of Tenders**
Tenders shall be out rightly rejected if the followings are not complied with:

a) The bidder shall submit the bid in electronic mode only and shall submit the cost of tender document, EMD and Tender processing fee and **seal and signed copy of the tender documents along with requisite supporting documents uploaded in tender portal in a sealed cover envelope super scribing the Tender Notice No & Date of opening of tender** on or before the date and time of opening of the bid.
b) The Tender shall not be submitted telegraphically or by FAX.
c) The Tender shall be kept valid for a minimum period of 180 days from the date of opening of tender.
d) 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.
e) The Bidder 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.
f) The prescribed EMD shall be submitted on or before the date and time of opening of the bid.
g) The tenders not accompanied with the required test certificates.
h) The tender shall not be conditional.
i) There must not be any violation to the terms & conditions set forth and provided in the tender specification.
j) Attested copies of I.T. Pan card and GST registration certificate shall be submitted along with the tender.
k) **Authorized dealership certificate** issued by the manufacturers (**In case of authorized dealer**), valid on the date of opening of the tender shall be submitted along with the tender.
l) There must not be any deviation to the delivery schedule as specified in tender specification.
m) All the necessary excel sheets like techno-commercial bid sheet etc. attached with the tender should be duly filled up without any empty cells.

n) Bidders not fulfilling the qualifying criteria as mentioned in **ELIGIBILITY FOR SUBMISSION OF BIDS.**

29. E- REVERSE AUCTION PROCESS SHALL BE RESORTED TO IN THE TENDER AS FOLLOWS.:

Business Rule of e-Reverse Auction (e-RA)

(A) Based on "Evaluated Bid Price" determined pursuant to **ITB Sub Clause 27.6**, the Bids shall be ranked in ascending order as L1, L2, L3----------Ln,

(B) The Indicative Estimated Cost for e-RA for the package(s) is as indicated at **ITB 29.1** in BDS.

(C) The e-RA shall be conducted, if the variation of lowest evaluated bidder's price (L1) is more than +5% (+five percent) of the Indicative Estimated Cost.

(D) The Applicable Ceiling Price for e-RA for bidders shall be their "Evaluated Bid Price" determined in accordance with **ITB Sub Clause 27.6**. During e-RA, the bidders shortlisted for participation in e-RA shall be permitted to place their prices lower than their Applicable Ceiling Price.

(E) The e-RA shall be conducted on a designated electronic platform of any Application Service Provider (hereinafter referred to as "ASP"), for and on behalf of the Employer.

(F) The ASP, as and when authorized by the Employer, will intimate the bidders regarding the details of electronic platform, procedure/ modality of e-RA process and other details, prior to e-RA.

(G) Notwithstanding above, the bidder(s) who either do not submit the requisite compliances for e- RA or do not participate in e-RA, their original price bid as opened, if valid, shall be considered for evaluation.

(H) Notwithstanding the e-RA conducted as aforesaid, OPTCL reserves the right to hold negotiations with the bidder with lowest evaluated price after e-RA (L1 bidder).

(I) The Employer shall be the sole judge in this regard.

(j)Procedure for Reverse Auction (e-Reverse Auction (e-RA) shall be resorted to 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 by KEONICS 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	a. The e-RA shall be conducted on www.tenderwizard.com/OPTCL only. 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-VI). In non-receipt of the same, vendors will not be allowed to participate in e-RA. 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.

	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.
6	Prior intimation/ Notice for RA invitation will be given to techno-commercially qualified bidders regarding the date & time of opening of the e-RA. 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. 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). 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. 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). 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 biding document & after e-RA process is over.
7	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. 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. 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. Bidders can only quote any value lower than their previous quoted price. However, at no stage, increase in Price will be permissible. (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 no b id received during schedule/extended slot, the auction shall get closed automatically without further extension. (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.

8	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. 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. 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. 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].
9	Consequent upon completion of e-Reverse Auction, OPTCL's decision on award of contract shall be final and binding on the bidders. 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. 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.

SD/-
GENERAL MANAGER
EHT (O&M) CIRCLE, CHAINPAL

SECTION-III

[LIST OF ANNEXURES]

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

1	Declaration form	ANNEXURE-I
2	Abstract of terms and conditions to accompany Section-II of Part-I	ANNEXURE-II
3	Bidders information	ANNEXURE-III
4	Composite Bank Guarantee form for security deposit, payment and performance	ANNEXURE-IV
5	Reverse Auction Process Compliance Form	ANNEXURE-V
6	Schedule of Quantity	ANNEXURE-VI

ANNEXURE - I
DECLARATION FORM

To

The General Manager (Elect)
EHT O&M Circle, OPTCL, Chainpal

Sub:- Tender Specification No-_____

Sir,

1. Having examined the above specification together with terms & conditions referred to therein * I/We the undersigned hereby offer to supply the materials/equipments covered therein complete in all respects as per the specification and General conditions, at the rates, entered in the attached contract schedule of prices in the Tender.

2. * I / We hereby undertake to have the materials/equipments delivered within the time specified in the Tender.

3. * I / We hereby guarantee the technical particulars given in the Tender supported with necessary reports from concerned authorities.

4. * I/We certify to have submitted the bid electronically by remitting *online payment /D.D./ remitting the cost of tender, herewith and this has been acknowledged by your letter / receipt No. _____ Dated_____

5. In the event of Tender, being decided in *my/our favour, * I/We agree to furnish the Composite B.G. in the manner, acceptable to ODISHA POWER TRANSMISSION CORPORATION LTD., and for the sum as applicable to *me/us as per clause-11 of section-II of this specification within 15 days of issue of letter of intent/purchase order failing which *I/We clearly understand that the said letter of Intent/Purchase order will be liable to be withdrawn by the purchaser, and the EMD deposited by us shall be forfeited by OPTCL.

Signed this day of 20___

Yours faithfully

Signature of the Bidder
with seal of the company

[This form should be dully filled in by the bidder and uploaded at the time of submission of tender.]

* (Strikeout whichever is not applicable).

ANNEXURE-II

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

1(a)	Cost of Tender Document: OPTCL Money Receipt No. & Date / D.D No & Date.	
1(b)	Earnest money furnished. Bank Guarantee No. & Date / D.D No. & Date.	
1(c)	Tender Processing Fee: e-payment confirmation	
2	Manufacturer's supply experience(if any) including user's certificate furnished or not.	***Yes/No***
3	**Delivery :-** Whether agreeable to OPTCL's desired delivery period as indicated at in the specification	***Yes/No***
4	**Guarantee:-** Whether agreeable to OPTCL's terms.	Yes/No
5	Whether agreeable to furnish **Composite B.G.** in case his tender be successful	Yes/No
6.	**Terms of payment:-** Whether agreeable to OPTCL's terms or not	Yes/No.
7.	**Nature of price**:- FIRM	Yes/No
8.	**Price reduction:-** Whether agreeable to OPTCL's terms or not	Yes/No
9.	**Validity: -** Whether agreeable to OPTCL's terms or not	Yes/No
10.	Whether recent type test certificates from any NABL accredited laboratory are furnished or not.	Yes/No
11.	Furnished Manufacturer's name and its trademark.	Yes/No
12.	Whether registered under ODISHA/India GST Act	Yes/No
13.	Whether declaration form duly filled in furnished or not.	Yes/No.

Place: -

Date: -

Signature of the Bidder
with seal of the company

ANNEXURE-III

BIDDER'S INFORMATION

SL NO	The bidder shall furnish general information in the following format	
NAME OF THE BIDDER		
1	Address:-	
2	City	
3	Pin Code	
4	Contact person's Name :-	
5	Telephone No. office & Residence:-	
6	FAX No:-	
7	EMAIL:-	
9	GST REGISTRATION NO.	
10	PAN NO.	

Place: -

Date: -

Signature of the Bidder

with seal of the company

ANNEXURE-IV

PROFORMA FOR COMPOSITE BANK GUARANTEE FOR SECURITY DEPOSIT PAYMENT AND PERFORMANCE

This Guarantee Bond is executed this_____day of_____ 2026 by us the _____Bank at _____

P.O._____P.S._____

District_____State_____

1. WHEREAS the ODISHA POWER TRANSMISSION CORPORATION LTD., a body corporate constituted under the Electricity Act, 2003 [hereinafter called "the OPTCL" which shall include its successors and assigns has placed orders No. _____Date _____[hereinafter called "The Agreement"] on M/s._____

[Hereinafter called "The Contractor"] which shall include its successors & assigns for execution of the work.

AND WHERE AS the bidder has agreed to execute the work for OPTCL in terms of the said agreement AND

WHEREAS the OPTCL has agreed [1] to exempt the bidder from making payment of Security [2] to release 100% payment of the cost as per the said agreement and [3] to exempt from performance guarantee on furnishing by the bidder to OPTCL, a Composite bank Guarantee of the value of 10 % [ten percent] of the contract price of the said agreement.

NOW THEREFORE, in consideration of the OPTCL having agreed [1] to exempt the bidder from making payment of Security [2] releasing 100% payment to the bidder and [3] to exempt from furnishing performance guarantee in terms of the said agreement as aforesaid, we, the _____ [Bank][hereinafter referred to as 'the Bank'] do hereby undertake to pay to the OPTCL an amount not exceeding Rs._____ [Rupees_____against any loss or damage caused to or suffered by or would be caused to or suffered by the OPTCL by reason of any breach by the said Bidder [s] of any of the terms or conditions contained, in the said agreement.

2. We the (_____Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on demand from the OPTCL stating that the amount claimed is due by way of loss or damage caused to or suffered by the OPTCL by reason of any breach by the said Supplier [s] of any of the terms or conditions, contained in the said agreement or by reason of the bidder's failure to perform the said agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs._____

[Rupees_____]

3. We the_____ Bank} also undertake to pay to the OPTCL any money so demanded not withstanding any dispute or disputes raised by the Contractor [s] 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 there under and the Contractor [s] shall have no claim against us for making such payment.

4 We, (_____Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to do so enforceable till all the dues of the OPTCL under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Sr. General Manager, EHT (O&M) Circle, OPTCL, Chainpal certifies

that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor [s] and accordingly discharges this Guarantee.

Unless a demand or claim under this guarantee is made on us in writing on or before the [Date_____], we shall be discharged from all liability under this guarantee thereafter.

6. We,(_____Bank) further agree that the 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 agreement or to extend time of performance by the said Contractor [s] and we shall not be relieved from our liability by reason of any such variations or extension being granted to the said Contractor [s] or for any forbearance, act or omission on the part of the OPTCL or any indulgence by the OPTCL to the said Contractor [s] or by any such matter or thing whatsoever which under the law relating to sureties would but these provisions have effect of so relieving us.

7. This guarantee will not be discharged due to the change in the name, style and constitution of the Bank and Contractor [s].

8. We,[_____Bank] lastly undertake not to revoke this guarantee during its currency except with the previous consent of the OPTCL in writing.

8. We the _____ Bank further agree that this guarantee shall also be invoked at our place of business at Angul (indicate the name of the branch) in the state of ODISHA.
Not with standing anything contained herein.

1) Our liability under this bank guarantee shall not exceed Rs. _____ (Rupees_____).
2) The bank guarantee shall be valid up to dt._____
3) We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only & only if you serve upon us at _____branch at Angul written claim or demand on or before Dt._____.

Dated _____ Day of _____

For_____

[Indicate the name of Bank]

Witness(Signature, names & address)

1.

2

ANNEXURE-V

REVERSE AUCTION PROCESS COMPLIANCE FORM

To,

The General Manager (Elect)
EHT (O&M) Circle, Chainpal

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

Ref:- Tender Specification No.:_____

Dear Sir,

This letter is to confirm that:

- The under signed 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)

[**To be submitted on Letter Head of the bidding firm/company with sign & stamp and along with Technical Bid]**

ANNEXURE-VI

SCHEDULE OF QUANTITY

Sl. No	Description of Item	Unit	Quantity
1	**Supply of Surge monitors with Counter along with accessories suitable for 400 KVKV Voltage System**	**No**	**15**
2	**Supply of Surge monitors with Counter along with accessories suitable for 220 KV Voltage System**	**No**	**34**
3	**Supply of Surge monitors with Counter along with accessories suitable for 132 KV Voltage System**	**No**	**30**
4	**Supply of Surge monitors with Counter along with accessories suitable for 33 KV Voltage System**	**No**	**65**
	Freight & Insurance	**Inclusive**	

SECTION-IV
TECHNICAL SPECIFICATION

Supply of surge Monitors with Counters along with accessories for 400kV, 220kV,132kV and 33KV Surge Arrester.

1. SCOPE

Supply of surge Monitors consisting of surge counter and leakage current meters along with accessories which should be suitable to be mounted on support structure of the arrester.

2. APPLICABLE STANDARDS

IS 3070 Part-3, IEC 60099-4, IEC 60099-5, IEC 60529 for IP.

3. SYSTEM PARAMETER [OPTCL Appendix-I]

Parameter	**400kV**	**220kV**	**132kV**	**33 KV**
Nominal system voltage	400kV rms	220kV rms	132kV rms	33kV rms
Highest system voltage	420kV rms	245kV rms	145kV rms	36 kV rms
Frequency	50Hz ±5%	50Hz ±5%	50Hz ±5%	50Hz ±5%
Neutral earthing	Effectively earthed	Effectively earthed	Effectively earthed	Effectively earthed
Rated arrester voltage	336kV	216kV	120kV	30 kV
Continuous operating voltage @50°C	267kV	172kV	102kV	24 kV
Nominal discharge current 8/20µs	20kA	10kA	10kA	10kA
Thermal Energy Wth	12kJ/kV	7kJ/kV	7kJ/kV	4kJ/kV
Class	20kA, Heavy duty type.	10 KA, Medium duty type.	10 KA, Medium duty type.	10 KA, Light duty type.
Installation	Outdoor, Single column, Single phase	Outdoor, Single column, Sing phase	Outdoor, Single column, Single phase	Outdoor, Single column, Single phase
Design ambient	50°C	50°C	50°C	50°C

A. SURGE COUNTERS:

1. A self- contained Surge counter, suitably enclosed for outdoor use and requiring no auxiliary battery supply for operation shall be provided for each unit. The surge counter shall be operated by the discharge current, passed by the surge arrester and shall be suitable for mounting on the support structure of the Arrester.
2. The cyclometer counter shall be visible through an inspection window from ground level. The counter terminals shall be robust and of adequate size and shall be so located that the incoming and outgoing connections are made with minimum possible bends.
3. The Surge Counter shall be connected in the main earth lead from the arrester in such a manner that the direction of the earth lead is not changed or its surge impedance materially altered. A bolted link shall be provided so that the surge counter may be short circuited and removed without taking the arrester out of service.
4. All necessary accessories and earthing connection leads between the bottom of the Arrester and discharge counter shall be in the supplier's scope of supply.
5. For all classes of surge arresters, the surge counter shall be provided with a Potential free contact rated for 220 volt (DC) which shall close whenever a surge is recorded by the surge monitor .Necessary arrangement shall be provided for extending the contact information to Substation Automation System.

B. **LEAKAGE CURRENT METERS**:

1. Leakage current meters (suitable mili-ammeter) shall be connected in the grounding path of the surge arresters to measure the leakage current. Meters shall be designed for continuous service.
2. The ammeter shall be suitable for mounting on the support structure of the arrester.
3. Arresters shall be complete with insulating base having provision for bolting to flat Surface of the structure. The arrangement of surge monitor enclosure fixing to the structure shall be at its rear/bottom.
4. Two clamp type ground terminal connectors, suitable for G. I. Strip (50 x 6) or (50 x8) should be provided.
5. All interconnecting hard wares such as nuts, bolts, spring washers etc. shall be GI instead of MS type with 5% spares to be supplied as per requirement.
6. Other standard accessories, which are specifically not mentioned, but are usually required for installation of surge monitor to be supplied.
7. Connection between the surge arrester base and surge monitor shall be through a **2.0 meter long PVC insulated flexible copper cable of at least 25 Sqmm**.

4. DETAILED SPECIFICATION OF SURGE MONITOR - ITEM UNDER PURCHASE

4.1 Type & Rating

- Suitable for 33kV to 400kV voltage level substation/switchyard
- Self powered - operates from surge energy itself, no auxiliary AC/DC required

4.2 Functions to Display in Charged Yard

a) Total Nos. of Discharges that LA experiences
b) Direct Display of Total Leakage Current of LA

4.3 Discharge Counter

Type:	6 Digit Miniature Adding Counter, Non Resettable Type
Mechanism:	Mechanical cyclometer, visible through Inspection Glass Window
Resolution:	5 Counts/sec
Minimum Count Current:	100Ap, 8/20 microsecond wave
Maximum High Current withstand:	100kAp, 4/10 microsecond wave
Terminals:	Robust and adequate size, located for minimum bends

4.4 Leakage Current Meter

Type:	Analog moving coil mA meter with glass window
Scale:	0-5mA [also acceptable 0-10mA] with 1mA calibrated marking
Zones:	Two Zones - Green band- Normal Zone, Red band- Deterioration/ Danger Zone requiring maintenance
Accuracy:	As per relevant IS/IEC5

4.5 **Construction**

- Enclosure: Weather Proof Anti Corrosive, Powder coated Aluminium casting
- Ingress Protection: IP67
- Operating Temperature: Up to 60°C
- Mounting: On support structure of Lightning Arrestor, Between Earth Terminal of LA and Earth Mat, 2 Nos M12 bolts at rear

4.6 **Accessories Per Piece Mandatory**

- Insulating Base / Insulator
- Flexible Copper Braid Lead should be minimum 25 sq.mm, 2000mm length

- GI Mounting Hardware

4.7 **Approved Makes - As per OPTCL CPC**

Crompton Greaves, ABB, LAMCO, OBLUM or equivalent approved by OPTCL.

5. **TESTS**

5.1 **Type Tests**:- As per IEC 60099-4/IS: 15086-4, IP-67 test for surge monitor - test report from NABL accredited lab.

5.2 **Routine Tests to be submitted with each lot**:

- Visual & Dimension
- Operation test of counter at 100A

5.3 **ACCEPTANCE TESTS**:

The following tests, considered as acceptance tests, shall be conducted in the presence of purchasers representative for which no charges will be payable by OPTCL.

I. The functional (operational) test on the Surge Counter by way of checking its operation at following nominal discharge currents:

(i) 100 Amps with 8/20 micro second wave shape.

(ii) 10 KA with 8/20 micro second wave shape.

(iii) Check of calibration of leakage current meters.

(iv) Wattloss measurement at 10 KV and Uc at ambient temperature.

Note: The sampling of specimens for acceptance test shall be as per clause no.9.2.1 of IEC 60099-4.

Sd/-

GENERAL MANAGER

EHT (O&M), CIRCLE, CHAINPAL