(A Government of West BengalEnterprise)
OFFICE OF THE DIVISIONAL MANAGER
RAGHUNATHPUR DIVISION OFFICE

SEDIL JRULIA BARAKAR ROAD, RAGHUNATHPUR NEW BUS STAND, 1ST FLOOR: RAGHUNATHPUR PURULIA - 723133
TELE: 032-51256031: FAX: 032-51256030

CIN NO-U40109WB2007SGC113473, Mall ID: dm.raghunathpur@wbsedcl.in

### NOTICE INVITING TENDER

On line tender (e-Tender) in two parts (Part-I: Techno-Commercial Bid, Part-II: Financial Bid) are invited by the D.E. & Divisional Manager, WBSEDCL, Raghunathpur Division, Purulia-723133(W.B.)from experienced, resourceful, bonafied & working agencies of WBSEDCL/WBSETCL/WBPDCL/Central Govt./State Govt./Semi - Govt./Undertaking for the following works.

| Sl.<br>No. | Tender<br>Notice No.                                    | Name of the work  | Estimate<br>d Cost<br>(Rs.) | Completi<br>on Time | Earnest<br>Money (Rs.) |
|------------|---|---|-----------------------------|---------------------|------------------------|
| 01.        | DM/RNPD/<br>TENDER/<br>24-25/05<br>DATED: -<br>27.03.24 | Supply & Delivery of 21 nos. 11 KV CT for installation at Dumurkhola 33/11 KV Sub-Station under Raghunathpur Division | 721035.0<br>0               | 1(One)<br>Month     | 14421.00               |

# **Schedule of Key Dates**

| SL. | Activity   |    | Date & Time             |
|-----|--|----|-------------------------|
| No. |  |    |                         |
| 1.  | Date of Issue of NIT   | 1: | 27.09.2024              |
| 2.  | Document download start date   | :  | 27.09.2024 (05.00 PM)   |
| 3.  | Pre-bid meeting at the Chamber of<br>Raghunathpur (D) Division, under<br>Purulia Region Dist:-Purulia. | :  | 30.09.2024 (12.00 NOON) |
| 4.  | Bid submission start date  | :  | 27.09.2024 (06.00 PM)   |
| 5.  | Last date of online submission of Technical Bid and Financial Bid.                                     | .: | 16.10.2024 (04.00 PM)   |

FQgistered Office: "Vidyut Bhavan", Block- DJ, Sector- II, Bidhannagr, Kolkata- 700091 Telephone: 2359 1930 to 1940 & 23197 + PBX/Extn.No. F□k: 033-2359-1954 Corporate Ideentity Number (CIN): U40109WB2007SGC113473

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WEST DENICAL STATE SECONDARY STATES

# WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LTD.

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OFFICE OF THE DIVISIONAL MANAGER

## RAGHUNATHPUR DIVISION OFFICE

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TELE: 032-51256031: FAX: 032-51256030

CIN NO-U40109WB2007SGC113473, Mall ID: dm.raghunathpur@wbsedcl.in

| 6.  | Last Date of submission EMD(online)  | : | 16.10.2024 (02.00 PM)  |
|-----|--|---|--|
| 7   | Last date of submission of BG (Physical copy)(For bidders, who want to submit EMD in form of BG)                                 |   | N/A  |
| 8.  | Opening of Technical Bid at the office of<br>the Raghunathpur (D) Division, Dist:-<br>Purulia, WBSEDCL.                          | : | 22.10.2024 (04.00 PM)  |
| 9.  | Opening of Financial Bid for technically qualified bidders at the Raghunathpur (D) Division, under Purulia Region Dist:-Purulia. | : | To be notified Later   |
| 10. | Validity of offer  | ; | 180 days w.e.f the date of opening of financial bid.   |
| 11. | Completion Period of the work  | : | 01(One) month w.e.f. the date of handing over the site.  |
| 12. | Maintenance Period or the Defect<br>Liability Period.  | : | 01(One) Year from the date of completion of works.   |
| 13. | Financial Bid  | : | Rate shall be quoted in value (Rs) above/less/<br>At par against the Estimated value in the BOQ.   |
| 14. | Online Bid Submission  | : | The Bidders are required to submit the Technical and Financial Bid documents through only ONLINE i.e. uploading the documents complete in all respect by maintaining the Online Bid submission procedure through the Website <a href="https://www.wbtenders.gov.in">www.wbtenders.gov.in</a>   |
| 15. | These procedure will be followed   | : | <ul> <li>Names of the technically qualified bidders as per the bid criteria after verification with original &amp; evaluation will be displayed in the e-portal &amp; this office notice board.</li> <li>The financial bid documents of the technically qualified bidders will only be opened.</li> <li>List of Financial comparison chart of bidders will be published on the next day after</li> </ul> |

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#### RAGHUNATHPUR DIVISION OFFICE

RULIA BARAKAR ROAD, RAGHUNATHPUR NEW BUS STAND, 15T FLOOR : RAGHUNATHPUR PURULIA — 723133 TELE: 032-51256031: FAX: 032-51256030

СIN NO-U40109WB2007SGC113473, Mall ID: dm.raghunathpur@wbsedcl.in

|  | <ul> <li>opening. WBSEDCL reserves the right to reject or cancel any or all pre-qualification documents and bid document without assigning any reason's whatsoever.</li> <li>To supply the materials in good condition during the Delivery. The materials should be delivered as per specification mentioned in the NIT.</li> </ul> |
|--|---|
|--|---|

#### **INVITATION TO BID**

## 1.0 SCOPE OF WORK:

The specification/contract is intended to cover execution of Supply & Delivery of 21 nos. 11 KV CT under Raghunathpur Division.

### 2.0 REQUEST FOR TENDER:

Tender paper will be available at the Websites www.wbtenders.gov.in.

### 3.0 SUBMISSION OF TENDER:

The tender will be submitted in two bid systems i.e. Techno-Commercial bid & financial bid, online only through the Website <a href="https://www.wbtenders.gov.in">www.wbtenders.gov.in</a>

#### 4.0 ELIGIBILITY CRITERIA OF THE BIDDER:

- a. One sample of Each Material is to be submitted at Raghunathpur Divisional Store, Adra Road, Purulia-723133, physically within the closing date of tender. The tag with the sample should contain the name of the sample as well as the name of the vendor/bidder, for a valid tender, sample has to be approved by the Divisional Authority. The approval or rejection of sample will be communicated via mail/electronically subsequently. The technical evaluation of the bidders, whose samples aren't approved, will not be opened & henceforth they will be deemed disqualified. Rejected Samples can be taken away. After PO is awarded, the awardees can adjust the sample with the delivered material lot & the remaining materials can be taken back by the respective vendors.
- b. The bidders shall have credential for supply of the tendered items to WBSEDCL, other Govt. Departments in earlier occasions within last three financial years.
- c. Original manufacturers/Distributors of tendered items will be eligible in the tender and must submit Dealership Certificate in PDF format.
- 4.1 <u>Technical Specification</u>: Details of the technical specification is attached in a separate sheet at the end of the NIT
- 4.1.1 All materials should be as per the specifications as given below:-

Specification for 200-100/1-1 A CT

| Core | Burden | Class | ISF/ALF |  |
|------|--------|-------|---------|--|
| 1    | 15 VA  | 0.5S  | <5      |  |

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| 2                  | 15 VA             | 5P    | 15      |
|--------------------|-------------------|-------|---------|
| nosification for A | 00-200/1-1-1 A CT |       |         |
|                    |                   | Class | ISF/ALF |
| Core               | Burden            |       | -       |
| 1                  | 15 VA             | 0.55  | <5      |
| 2                  | 15 VA             | 5P    | 15      |
| 3                  | Class- PS         |       |         |

CT should be BMC/Plastofab make.

CT should be suitable for Areva make 11 KV VCB Panel.

#### 4.2 Commercial & Financial:

- 4.2.1 The average annual turnover of the bidder during last three years shall not be less than 30% of the estimated cost. (Annexure-I).
- 4.2.2 Working capital in the year, proceeding the year of bid submission shall not be less than 30% of the estimated cost.
- 4.2.3 In case documents certifying credit facility from a scheduled bank is submitted, the requirement given in cl 4.2.2 shall be judged by adding available credit facility and working capital taken together (Financial Capability proof certificate from bankers, one year from date of Publication of NIT).
- 4.3 The Bidder must include following documents to substantiate the qualifying requirement such as:
  - 4.3.1 Monetary value of similar work performed by the bidder in last Seven years (copy of order and completion certificate to be enclosed.) (Annexure-II)
  - 4.3.2 Major items of construction equipment proposed to carry out the contract. (Annexure-III)-N/A
  - 4.3.3 Qualification and experience of key site management and technical personnel proposed for the contract. (Annexure-IV)- N/A
  - 4.3.4 Annual Audited Financial Report for last 3 (three) years to be submitted for verification in respect of bidders for whom audit of account is mandatory. For those whose audit of accounts is not mandatory, they shall submit copy of IT returns along with related enclosures for last five years.
  - 4.3.5 Information regarding any past and current litigation with WBSEDCL/WBSETCL/Govt./PSU in which the bidder is involved, the party's concerned and the disputed amount.
  - 4.3.6 Photocopy of following documents:

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CIN NO-U40109WB2007SGC113473, Mall ID: dm.raghunathpur@wbsedcl.in

- i) P. Tax certificate with latest challan.
- ii) PAN Card.
- iii) GST Registration Certificate with latest return.
- 4.4. All documents must be self authenticated.
- 4.5. Notwithstanding anything stated above, the owner (WBSEDCL) reserves the right to assess the Capacity and capability of the bidder to execute the work, should the circumstances warrant such assessment in the overall interest of the owner.
- 4.6. Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if
- 4.6.1. Made misleading or false representation in the forms, statements and attachments Submitted in proof of the qualifying requirements and/or
  - 4.6.2. Record of poor performance such as abandoning the work, not properly completing the contract, inordinate delays in completions, litigation history or financial failure.

### 5.0 Pre-Bid Meeting:

- 5.1. Pre bid meeting will be held on 30.09.2024 at 12-00 Noon at the Chamber of Divisional Manager, RaghunathpurWBSEDCL
- 5.2. Any change in date shall be available in website of www.wbtenders.gov.in.
- 5.3. Non attendance at the Pre-bid meeting will not be a cause for disqualification of bidders.
- 5.4.If there be any discrepancy or obscurity in the meaning of any clauses of the bid document or if there be any query of the intending bidder, the bidder may submit their queries to the tendering authority on or before 30.09.2024. The clarification given in the pre-bid discussion shall be final and binding on the bidder, being a part of the original Bid Documents.

#### Note:

- 1. WBSEDCL reserves the right to reject or accept any Bid or part thereof or all Bids received at its sole discretion without assigning any reason(s) whatsoever.
- 2. WBSEDCL reserves the right to go to divisible contract, if necessary.
- 3. WBSEDCL is not necessarily bound to accept the lowest offer.
- 4. Tender cost /Tender Fee is abolished. All participating bidders are therefore exempted from payment of tender free.
- 5. No interest shall be payable for Bid Guarantee/EMD.
- 6. Any extraneous conditions will be treated as non-responsive.
- 7. The Bids must be submitted in prescribed proforma only, where indicated i.e. Annexure, BOQ and Rate
- 8. Bidders shall ensure that all pre-requisites are duly fulfilled by them and if there be any dispute regarding non-submission of any document, WBSEDCL reserves the right to cancel the Bid unilaterally without assigning any reasons.
- 9. The bidder is expected to examine carefully all instructions, conditions, forms schedules terms, annexure, specifications and drawings of the bidding document. Bids, which are

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OFFICE OF THE DIVISIONAL MANAGER

#### **RAGHUNATHPUR DIVISION OFFICE**

TLL JRULIA BARAKAR ROAD, RAGHUNATHPUR NEW BUS STAND, 1ST FLOOR : RAGHUNATHPUR PURULIA — 723133 TELE: 032-51256031: FAX: 032-51256030

CIN NO-U40109WB2007SGC113473, Mall ID: dm.raghunathpur@wbsedcl.in

determined to be not substantially responsive to the requirement of the bidding document, may lead to rejection.

- 10. All bids in the range of -20% to -80% of the estimated cost shall furnish an Additional PerformanceSecurity in the form of Bank Guarantee (Annexure-VII) from any scheduled Bank, which shall be equal to 10% of the Tendered amount.
- 11. Earnest Money (EMD): Earnest Money Deposit shall be submitted through online mode through

the e-Tendering portal (https://wbtenders.gov.in). All offline instruments like Bank Draft, Pay Order etc. willbe stopped for e-tender procurement. In case of unsuccessful/rejected bids, the EMD shall be refundeddirectly from the e-Tendering portal. However for successful bids, the EMD

will berefunded by WBSEDCL as per norms.

A) The bidder shall deposit the requisite earnest money through online mode only (Bank Name-ICICI BankLtd., A/C No.-193405000657, Account Title- West Bengal State Electricity Distribution Company Ltd, Account Type -Current, IFSC Code-ICIC0001934, MICR Code-700229096, Bank Address-ICICI BANK LTD., BLOCK-4A, ECOSPACE BUSINESS PARK, RAJARHAT, KOLKATA-700156.) Following payment options are available for online payment of EMD, for the intending bidders,

i)Net-banking through Payment Gateway.

ii)RTGS/NEFT Payment: On selection of RTGS/NEFT as the payment mode, the e-procurement portal

will show a pre-filled challan having the details to process RTGS/NEFT transaction. The bidder will print the challan and use the pre-filled information to make RTGS/NEFT payment using his bank account. Once the payment is made, the bidder will come back to e-procurement portal to continue the bidding process after expiryof a reasonable time to enable the RTGS/NEFT process to be completed.

12. Performance Bond/Security Deposit:

12.1. As a contract security the contractor shall have to furnish performance Bond in the form of

Bank Guarantee amounting to 10% (Ten percent) of the contract price (to be mentioned in

the LOI/Order) to guarantee the faithful performance and security of the contract in

accordance with all the conditions and terms stipulated herein and the relevant

attached. Performance Bond will also have the guarantee for successful and satisfactory

performance of the materials supplied under the contract till the expiry of the

period as stated herein before.

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Corporate Ideentity Number (CIN): U40109WB2007SGC113473

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12.2. The Performance guarantee is to be submitted to the Controlling Officer of the work

immediately on receipt of the order.

In exceptional cases

Submission of EMD through BG: For submission of EMD in the form of BG, bidders will have to opt for

EMD Exemption in e-tender portal and upload scanned copy of BG in the EMD exemption document uploadsection. Physical copy of BG shall be submitted at the office of tender inviting authority as per respective clauses of NIT. EMD amount can be paid either in online mode or submitted through Bank Guarantee (BG)infull. Partial payment through online mode and remaining submission through BG is not allowed.

- B) GENERAL INSTRUCTIONS FOR ONLINE PAYMENT OF EMD:
- i)The bidder will have to mandatorily pay through Net-banking facility once Net-banking mode is opted

for payment.

- ii) Status of NEFT/RTGS payment through Challan for a bid may take time for bank settlement which is
- updated in 24 Hrs. (approx.). As such bidders opting to pay through NEFT/RTGS mode shall make paymentwell before 24 Hrs. to avoid any complicacy.
- iii) In case actual EMD as per NIT is more than the one shown in E-tender Portal, bidders will have to optfor NEFT/RTGS mode (challan mode). In that case the total actual EMD amount is to be paid only throughNEFT/RTGS mode (challan mode).
- iv) The bank account used for payment of EMD by the bidders shall be maintained operative until the completion of tendering process. All refunds will be made mandatorily to the Bank A/c from which payment of EMD has been initiated.
- C) REFUND OF EMD AMOUNT:
- i) For unsuccessful bidders, EMD amount submitted against the tender shall be refunded automatically

through an automated process, by NIC portal on receipt of updated status of any bid.

ii)For successful Bid(s), EMD will be refunded from WBSEDCL authority after completion of tendering

process and following due procedures.

iii)The bank account used for payment of EMD by bidders shall be maintained operative until the completion of tendering process. All refunds will be made mandatorily to the Bank A/c from which the payment of EMD has been initiated.

iv) For any queries related to payment and refunds, bidders will have to communicate with ICICI Customer Support, viz., 033-40267512/13 since payment gateway facility used by E-tender portal is maintained by ICICI.

(A. Singh)
Divisional Manager
Raghunathpur Division

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#### RAGHUNATHPUR DIVISION OFFICE

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CIN NO-U40109WB2007SGC113473, Mall ID: dm.raghunathpur@wbsedcl.in

MEMO NO.: DM/RNPD/ESTB/TENDER/23-24/05/ 986 (i-yi)

DATED: 27.09 20

### Copy forwarded for information and necessary action please to:-

- 1. The Zonal Manager, Midnapore (D) Zone, WBSEDCL, Midnapore.
- 2. The Regional Manager, Purulia Region, WBSEDCL,
- 3. The Asst. Manager (HR&A), Raghunathpur Divisionl Office, WBSEDCL, Raghunathpur (with an advice to attend during tender opening.)
- 4. The Asst. Manager (F&A), Raghunathpur Divisionl Office, WBSEDCL, Raghunathpur (with an advice to attend during tender opening.)
- 5. The Divisional Engineer (Tech) Raghunathpur Division Office, WBSEDCL, Raghunathpur (With an advice to attend during tender opening.)

6. NOTICE BOARD.

Divisional Manager Raghunathpur (D) Division

WBSEDCL

# WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED (A Govt. of West Bengle Enterprise)

Estimate for supply and Delivery of 06 nos 600-300/1+1+1A and 15 nos of 200-100/1+1+1A of 11 KV CT for 12 KV Areva make switchgear panels of Dumurkhola 33/11kV sub-station under Raghunathpur (D) Division.

n SCHEDULE OF MATERIALS:-

| I) | SCHEDULE OF MATERIALS:-   | 1 1     | Occupation | UOM         | Cost (in Rs.)       | Amount (in Rs.)  |
|----|---|---------|------------|-------------|---------------------|------------------|
| SI | Item  | Mat Cod | Quantiy    | UOM         | Cost (iii res)      | Tanouni (in Tan) |
| 1  | Epoxy resin cast CT suitable to Areva Make 12KV indoor shunt trip VCB Ratio: 600-300/1+1+1A, Burden = 15 VA, Class:0.5S |         | 6          | Nos         | 32,500.00           | 195,000.00       |
| 2  | Epoxy resin cast CT suitable to Areva Make 12KV indoor shunt trip VCB Ratio: 200-100/1+1+1A,                            |         | 15         | Nos         | 30,600.00           | 459,000.00       |
|    | Burden = 15 VA, Class:0.5S  |         |            |             | Total               | 654,000.00       |
|    |   |         |            | Escallation | on @5% for FY 24-25 | 32,700.00        |
|    |   |         |            |             | Material cost       | 686,700.00       |
|    |   |         |            | 5           | Sundry @ 5%         | 34,335.00        |
|    |   |         |            |             | l cost of Material  | 721,035.00       |

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| 1.23  | Auxiliary AC supply   | 240V AC 50 Hz shall be controlled by suitably rated miniature circuit breaker.   |  |
|-------|---|--|--|
| 1.24  | Hardware  | GI   |  |
| 1.25  | Earth bus   | Electrolytic Copper, Rectangular shape, 25X6mm(Min) and to carry 18.4 KA for 1 Second.   |  |
| 1.26  | Power and control cable entry   | From bottom for Power Cable. For control cables through Remote Terminal Box installed at the backside of the Panel.  |  |
| 2.0   | Circuit Breaker   |  |  |
| 2.1   | Type of isolation & Draw out  | Horizontal isolation & Horizontal Draw out.  |  |
| 2.2   | Voltage class, insulation level, short time rating                      | As specified for switchgear  |  |
| 23    | Rated current   | 800 Amps.  |  |
| 2.4   | Duty cycle  | O - 0.3sec -CO - 3min -CO  |  |
| 2.5   | Short circuit rating  |  |  |
| 2.5.1 | AC sym. Breaking current  | 26.3 KA (for Vacuum Interrupter)   |  |
| 2.5.2 | Short circuit making current  | 65.75KA (for Vacuum Interrupter)   |  |
| 2.6   | Operating time  |  |  |
| 2.6.1 | Break time  | Less than 80 ms.   |  |
| 2.6.2 | Make time   | Less than 100 ms.  |  |
| 2.7.  | Range of auxiliary voltage  | The state of the s |  |
| 2.7.1 | Closing   | 85% - 110%   |  |
| 2.7.2 | Tripping  | 70% - 110%   |  |
| 2.7.3 | Spring charging   | 85% - 110%   |  |
| 2.8   | Auxiliary Switch  | Properly rated and robust in nature shall be provided in all panels and wired upto SIC (Secondary Isolated Contact) with identical SIC and ferrule numbers and sufficient number of NO and NC contacts for the following:- CB 'ON' for Local indication —NO contact CB'ON' for Remote indication—NO contact CB'OFF' for Local Indication —NC Contact CB'OFF' for Remote Indication — NC Contact CB 'Auto Trip' for Local and Remote Indication—NC Contact. Other Contacts used as per scheme for closing and tripping and trip ckt supervision.  |  |
| 2.8.1 | No. of spare contacts in Aux. Switch for WBSEDCL use                    | Minimum 6 NO + 6 NC  |  |
| 2.9   | No. of spare contacts of service and test position limit switch contact | 2 NO+2NC   |  |
| 2.10  | No. of spare contacts of Spring charge limit switch                     | 2 NO + 2 NC  |  |
| 3.0   | Current Transformers for Incom  | ing Panel  |  |
| 3.1.  | Voltage class, insulation level   | As specified for switchgear  |  |

Technical Specification for 11 kV SCADA compatible Shunt trip switchgear panel

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| 3.2. Type    |   | Triple core, Dual ratio, Cast resin, Indoor type .  Marking on primary and secondary terminal as per requirement of IEC 60044-1, IS 16227 (PART 1 &  |
|--------------|---|--|
|              |   | 2)and shall be indelibly marked. The secondary   |
|              |   | terminals shall have screw type terminals.   |
| 3.3.         | Class of insulation                                       | Class E or better  |
| 3.4.         | Ratio   | 600/400/1-1-1A   |
| 3.5.         | Number of secondary                                       | Three, Core 1: Metering, Core 2: Protection, Core 3: Protection  |
| 3.6.         | Accuracy class  | Core 1 : 0.5, Core 2 : 5P15, Core 3 : PS.  |
| 3.7          | ISF of Metering Core                                      | <=5 at lower ratio   |
| 3.8          | ALF of Protection Core                                    | 15   |
| 3.9          | VA output   | 10VA for both protection and metering  |
| 3.10         |   |  |
| 3.11         | Excitation current and other particulars of PS class CT's | 30mA at Vk/2 (at lower ratio), V <sub>k</sub> >=170 V at LR  |
| 3.12         | Other particulars   | R <sub>CT</sub> ≤ 4 ohms at 75° C at higher ratio, Panels to be supplied with CT ratio set at higher ratio. Common terminals for CT secondary shall be shorted and earthed. Only ring type socket to be used in CT circuit.  P1 terminal of CT shall be at Bus side. |
| 3.13         | Short time current rating                                 | 18.4 kA for 1 second   |
| 4.0          | Current Transformers for Ou                               | tgoing Panel   |
| 4.1.         | Voltage class, insulation level                           | As specified for switchgear  |
| 4.2.         | Туре  | Dual core, Dual ratio, Cast resin, Indoor type. Marking on primary and secondary terminal as per requirement of IEC 60044-1, IS 16227 (PART 1 & 2) and shall be indelibly marked. The secondary terminals shall have screw type terminals.                           |
| 4.3.         | Class of insulation                                       | Class E or better  |
| 4.4.         | Ratio   | 200-100/1-1A   |
|              | Number of secondary                                       | 2, Core 1 : Metering, Core 2 : Protection  |
| 4.5.         |   | -, -, -, -, -, -, -, -, -, -, -, -, -, -   |
| 4.5.<br>4.6. | Accuracy class  | Core 1 : 0.5, Core 2 : 5P15.   |
| 4.6.         | Accuracy class  | <=5 at lower ratio   |
| 4.6.         | Accuracy class  ISF of Metering Core                      | <=5 at lower ratio   |
| 4.6.         | Accuracy class  | <=5 at lower ratio   |

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|-------|---|----|
| P (3) |   |    |
| 18    | 1 |    |
| -39   |   |    |
|       | 1 | 9. |

| 4,11  | Name Plate of CT indelibly marked | Al.   |  |
|-------|-----------------------------------|---|--|
|       | reality marked                    | Name plate for the current transformer shall be provided with all the required details as per IEC 60044-1, IS 2705 Standards, including:- i) The manufacturer's name ii) Serial number and a type designation iii) Rated primary and secondary current iv) Rated frequency v) Rated output and corresponding accuracy class for each secondary winding, including the rated accuracy limit factor and Instrument security factor for protection and metering secondary windings respectively. vi) The highest voltage of the equipment vii) The rated Insulation level viii) The rated short-time thermal current (Ith) and the rated dynamic current ix) Class of Insulation x) Rated continuous thermal current xi) Property Label – "Property of WBSEDCL" xii ) Guaranteed for 5 Years |  |
| 5.0   | Voltage Transformers              |   |  |
| 5.1.  | Туре                              | Dry / Resin cast, draw out type, 3-phase, 5-  |  |
|       | ~                                 | limb or it should be combination of three no Single Phase PT housed in a withdrawable carriage complete with HV fuses. Copies of Type test certificate and routine test certificate as per IEC 60044-2. IS 16227 (PART 1 & 3)shall be submitted with the tender for evaluation purpose. Each PT shall be provided with Vector diagram plate as per relevant provision of IS showing primary and secondary terminals.  |  |
| 5.2.  | Rated Voltage                     |   |  |
| 5.2.1 | Primary                           | 11000 /\3V  |  |
| 5.2.2 | Secondary                         | 110 /v3V  |  |
| 5.3   | No of phases                      | 3   |  |
| 5.4   | No. of secondary windings         | 1(one)  |  |
| 5.5   | Method of connection              | Star/Star with both neutral earthed   |  |
| 5.6   | Rated voltage factor              | 1.2 continuous, 1.9 for 8 hours.  |  |
| 5.7   | Class of insulation               | Class E or better   |  |
| 5.8   | Accuracy class                    | 0.5   |  |
| 5.9   | Primary and secondary fuses       | HRC current limiting type, primary fuse Replacement shall be possible with VT in withdrawn position   |  |
|       |                                   | withdrawn position .  |  |
| 5.10  | Voltage class                     | withdrawn position  |  |

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| 1.23  | Auxiliary AC supply   | 240V AC 50 Hz shall be controlled by suitably rated miniature circuit breaker.   |  |
|-------|---|--|--|
| 1.24  | Hardware  | GI   |  |
| 1.25  | Earth bus   | Electrolytic Copper, Rectangular shape, 25X6mm(Min) and to carry 18.4 KA for 1 Second.   |  |
| 1.26  | Power and control cable entry   | From bottom for Power Cable. For control cable through Remote Terminal Box installed at the backside of the Panel.   |  |
| 2.0   | Circuit Breaker   |  |  |
| 2.1   | Type of isolation & Draw out  | Horizontal isolation & Horizontal Draw out.  |  |
| 2.2   | Voltage class, insulation level, short time rating                      | As specified for switchgear  |  |
| 23    | Rated current   | 800 Amps.  |  |
| 2.4   | Duty cycle  | O - 0.3sec -CO - 3min -CO  |  |
| 2.5   | Short circuit rating  | 0 0.0360 00 0 011111 00  |  |
| 2.5.1 | AC sym. Breaking current  | 26.3 KA (for Vacuum Interrupter)   |  |
| 2.5.2 | Short circuit making current  | 65.75KA (for Vacuum Interrupter)   |  |
| 2.6   | Operating time  |  |  |
| 2.6.1 | Break time  | Less than 80 ms.   |  |
| 2.6.2 | Make time   | Less than 100 ms.  |  |
| 2.7.  | Range of auxiliary voltage  | E COS CICAT TOO IIIS.  |  |
| 2.7.1 | Closing   | 85% - 110%   |  |
| 2.7.2 | Tripping  | 70% - 110%   |  |
| 2.7.3 | Spring charging   | 85% - 110%   |  |
| 2.8   | Auxiliary Switch  | Properly rated and robust in nature shall be provided in all panels and wired upto SIC (Secondary Isolated Contact) with identical SIC and ferrule numbers and sufficient number of NO and NC contacts for the following:- CB 'ON' for Local indication —NO contact CB'ON' for Remote indication—NO contact CB'OFF' for Local Indication —NC Contact CB'OFF' for Remote Indication —NC Contact CB 'Auto Trip' for Local and Remote Indication—NC Contact. Other Contacts used as per scheme for closing and tripping and trip ckt supervision. |  |
| 2.8.1 | No. of spare contacts in Aux. Switch for WBSEDCL use                    | Minimum 6 NO + 6 NC *  |  |
| 2.9   | No. of spare contacts of service and test position limit switch contact | 2 NO+2NC   |  |
| 2.10  | No. of spare contacts of Spring charge limit switch                     | 2 NO + 2 NC  |  |
| 3.0   | Current Transformers for Incom  | ing Panel  |  |
| 3.1.  | Voltage class, insulation level As specified for switchgear             |  |  |

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