

IRRIGATION AND WATERWAYS DIRECTORATE GOVERNMENT OF WEST BENGAL

METROPOLITAN DRAINAGE MECHANICAL DIVISION

[Invitation for Expression of Interest/for Budgetory Quotation]

EOI No WBIW/EE/MDMD/EOI-12 /2021-22

Sl	Particulars	Details
No		
01	Start Date of Issuance of EOI Document	13.01.2021
02	Last date of submission of Queries	18.01.2022
03	Pre bid Conference	19.10.2022
04	Issue of Corrigendum	20.01.2022
05	Last Date of Issuance EOI Document	21.01.2022
06	Last Date and time for Submission of EOI	24.01.2022

NAME OF THE WORK:

"Design, Supply, Erection, Testing & Commissioning of 33/6.6 KV Switchyard equipment along with 3 nos 5 MVA and consumer VCB panel, HT and LT Panel in connection with the work 'Supply, installation, testing and commissioning including trial run and five (05) years successful operation and maintenance of external water lubricated Vertical turbine pump sets of Sixteen (16) nos. 150 cusec with electro-mechanical installation complete for the proposed additional pump house (augmentation of existing pump house) at Kulti for lower Bagjola khal in P.S Haroa, Mouja: Kamargati, G.P: Kulti, Block: Haroa, Dist: North 24 Parganas, State: West Bengal.'".

EXECUTING DIVISION: Metropolitan Drainage Mechanical division

YEAR: 2021-22

1.0 Invitation for EOI / Single stage of Bidding

The Executive Engineer, Metropolitan Drainage Mechanical Division invites EOIs from prospective bidders ('Bidders') for the work "Design, Supply, Erection, Testing & Commissioning of 33/6.6 KV Switchyard equipment along with 3 nos 5 MVA and consumer VCB panel, HT and LT Panel in connection with the work 'Supply, installation, testing and commissioning including trial run and five (05) years successful operation and maintenance of external water lubricated Vertical turbine pump sets of Sixteen (16) nos. 150 cusec with electro-mechanical installation complete for the proposed additional pump house (augmentation of existing pump house) at Kulti for lower Bagjola khal in P.S Haroa, Mouja: Kamargati, G.P: Kulti, Block: Haroa, Dist: North 24 Parganas, State: West Bengal.". The successful Bidder will carry out the scope of work in accordance with the specifications provided in a detailed Request for e-NIT document which will be brought out by the Executive Engineer, Metropolitan Drainage Mechanical Division in later stage after obtaining administrative approval of the work. Now, Executive Engineer, Metropolitan Drainage Mechanical Division seeks EOI for budgetary quotes from Bidders of repute for the above work from Bidders who meet the pre- qualification criteria specified in this document will be short-listed to have comparison of cost between various prospective bidder. In case of non compliance they may offer their own solution.

2.0 Introduction to the project

The Irrigation and Waterways Department of the Government of West Bengal is responsible for the main system of drainage Canals which drain away both Sewage and from water from different municipalities including Kolkata Municipal Corporation.

One of the main draining system is Bagjola Khal which is draining important parts of the

northern and north-eastern parts of Kolkata.

As its downstream and the Bagjola Khal drains into the Kultigong which is part of the Sundarban delta system. The Kultigong, at the outfall location of the Bagjola Khal, has a tidal fluctuation of about 4.5M during monsoon period. To ensure drainage into Kultigong during the higher tidal water levels a pump house of 2400 cusec ($2,44,800 \, \text{m}^3$ / hr) has been proposed for construction.

3.0 Indicative scope of work

The design, drawing, manufacture, fabrication, erection, testing/ inspection of 33 KV outdoor substation shall be carried out strictly as per Indian Electricity Rules, Latest BIS code of practices and prior approval of Directorate of Electricity, Govt of West Bengal.

Supply, installation, testing, commissioning of 3 nos. 5MVA 33KV/6.6KV, , and 2 nos. 250 KVA 33KV/0.433KV power transformer, 6.6KV VCB consumer panel, ACB at Sub

Station (433 V), 1 set LT panel at Pump House ,Capacitor Bank , HT < Cabling , Earthing, , Internal illumination and allied electrical works ,Lightening conductor, instrumentation and communication system, Batter bank with charges also in the scope of work.

The contractor shall confirm of having visited site and collected and verified the data relating to site condition. The contractor acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility. The contractor shall be responsible for overall verification of equipment under the scope of work eg. Make, Model, specifications and responsible for detailed design of mechanical and electrical works of the proposed pumping station. Compliances with these specifications does not limit the responsibility of the contractor for the overall performance of the pumping station. Contractor can offer changes in design for better performance. Justification of such changes shall be provided by the contractor, such changes are subject to approval by E.I.C.

5.0 Instructions to Bidders

- 5.0.1 Bidders are advised to study all instructions, forms, terms, requirements and other information in the EOI documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the EOI documents with full understanding of its implications.
- 5.0.2 The response to this EOI should be full and complete in all respects. Failure to furnish all information required by the EOI documents or submission of a proposal not substantially responsive to the EOI documents in every respect will be at the Bidder's risk and may result in rejection of its proposal.
- 5.0.3 For better understanding of work, brief description of work as per our preliminary assessment are given for better understanding of the project. In this stage bidder are requested to propose their work description, with quoting rate, so that in later stage under detailed NIT, complete scope of work and technical specification may be enclosed, so that bid may be evaluated on equal footing.

5.1 EOI proposal preparation costs & related issues

- 5.1.1 The Bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by the Purchaser to facilitate the evaluation process, unless explicitly specified to the contrary.
- 5.1.2 Purchaser will in no case be responsible or liable for those costs, regardless of the

- conduct or outcome of the bidding process.
- 5.1.3 These Expression of Interest (EOI) are purely for estimation purpose and to know the present market rate and under no circumstance, It shall be construed as quotation for placing the supply order. For competitive bidding separate notice inviting Tender will be published.

5.2 Pre-bid Meeting

5.2.1 Superintending Engineer ,Mechanical & Electrical Circle , Kolkata shall hold a prebid meeting (both offline and online) with the prospective Bidders on<19.01.2022 at 15:00 Hrs > at <O/O Superintending Engineer ,Mechanical & Electrical Circle , Kolkata ,6 th Floor ,Jalsampad Bhawan, Salt Lake City ,Kolkata-91> The Bidders will ensure that their queries with regard to the EOI, to be addressed by the EOI issuing Authority during the Pre-Bid meeting shall reach by post, facsimile or email on or before <15.01.2022 at 14:00 Hrs > to the officer whose details are provided below (Nodal Officer):

Executive Engineer
Metropolitan Drainage Mechanical Division
Jalasampad Bhawan (4th floor), Salt Lake City, Kolkata-91
Telephone No-03323345768, Email Id: <u>ee-metromecdvn@wbiwd.gov.in</u>
/mdmdiwd@gmail.com ,Mobile No- 9476155032/ 9875503310

5.3 Responses to pre-bid queries and issue of corrigendum

- 5.3.1 The Nodal Officer notified by the EOI issuing authority will endeavor to provide timely response to all queries. However, the department makes no representation or warranty as to the completeness or accuracy of any response made in good faith.
- 5.3.2 At any time prior to the last date for receipt of bids, EOI inviting authority may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the EOI document by issuing a corrigendum.
- 5.3.3 The corrigendum (if any) & clarifications to the queries from all Bidders will be posted on the https://wbtenders.gov.in >, (www. www.wbiwd.gov.in) and emailed to all participants of the pre -bid conference.
- 5.3.4 Any such corrigendum shall be deemed to be incorporated into this EOI.
- 5.3.5 In order to afford prospective Bidders reasonable time in which to take the corrigendum into account in preparation of their bids, Purchaser may, at its discretion, extend the last date for the receipt of EOI Bids.

5.4 Right to terminate the EOI process

5.4.1 EOI issuing authority may terminate the EOI process at any time without assigning any reason. EOI issuing authority makes no commitments, expression or implied

that this process will result in a business transaction with anyone.

5.5 Bid Submission Procedure

<Option 1: In case of Online Submission on e-Procurement portal>(This EOI may not be submitted through e procurement portal)

Bidders should submit their responses to an EOI as per the procedure specified in the e-Procurement portal (specify URL) being used for this purpose. Generally, the items to be uploaded on the portal would include all the related documents mentioned in this EOI, such as:

- Tender Fee (in this case , no EMD is required)
- Pre-qualification response
- Additional certifications/documents Eg. Power of Attorney, CA certificates on turnover, etc.

However, each of the above documents must be uploaded in the format specified for this purpose and as per the specified folder structure in the e-Procurement portal.

The bidder must ensure that the bid is digitally signed by the Authorized Signatory of the bidding firm and has been duly submitted (freezed) within the submission timelines. The Department will in no case be responsible if the bid is not submitted online within the specified timelines.

All the pages of the Proposal document must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the Bidder's Proposal.

OR

<Option 2: In case of physical submission of bids at office of Executive Engineer >

- a. Bids shall be submitted in a single sealed envelope and superscripted <Name of the Work > and <Reference EOI No.>. This envelope should contain two hard copies of EOI proposal marked as "First Copy" and "Second Copy" and one soft copy in the form of a non-rewriteable Compact Disc (CD). CD media must be duly signed using a permanent pen/ marker and should bear the name of the Bidder. Bids are to be dropped in tender box kept in the O/O Executive Engineer, Metropolitan Drainage Mechanical Division
- Bids shall consist of supporting proofs and documents as defined in the Prequalification section.
- c. Bidder shall submit all the required documents as mentioned in the Appendix including various templates (Form 1 to Form 4). It should be ensured that various formats mentioned in this EOI should be adhered to and no changes in the format should be done.
- d. Envelope should indicate clearly the name, address, telephone number, Email ID and fax number of the Bidder.

- e. Each copy of the EOI should be a complete document and should be bound as a volume. The document should be page numbered, must contain the list of contents with page numbers and shall be initialed by an authorized representative of the Bidder.
- f. Different copies must be bound separately.
- g. Bidder must ensure that the information furnished by him / her in respective CDs is identical to that submitted by him in the original paper bid document. In case any discrepancy is observed by the authority in the contents of the CDs and original paper bid documents, the information furnished on original paper bid document will prevail over the soft copy.
- h. EOI document submitted by the Bidder should be concise and contain only relevant information as required under the EOI Bids shall consist of supporting proofs and documents as defined in the Pre - qualification section.

- h. Bidder shall submit all the required documents as mentioned in the Appendix including various templates (Form 1 to Form 4). It should be ensured that various formats mentioned in this EOI should be adhered to and no changes in the format should be done.
- Envelope should indicate clearly the name, address, telephone number, Email ID and fax number of the Bidder.
- j. Each copy of the EOI should be a complete document and should be bound as a volume. The document should be page numbered, must contain the list of contents with page numbers and shall be initialed by an authorized representative of the Bidder.
- k. Different copies must be bound separately.
- I. Bidder must ensure that the information furnished by him / her in respective CDs is identical to that submitted by him in the original paper bid document. In case any discrepancy is observed by the Purchaser in the contents of the CDs and original paper bid documents, the information furnished on original paper bid document will prevail over the soft copy.
- m. EOI document submitted by the Bidder should be concise and contain only relevant information as required under this EOI.

5.6 Short listing criteria

- 5.6.1 Purchaser will shortlist Bidders who meet the pre-qualification criteria mentioned in this EOI.
- 5.6.2 Any attempt by a bidder to influence the bid evaluation process may result in the rejection of its EOI proposal.

5.7 Evaluation Process

- 5.7.1 Superintending Engineer, Mechanical & Electrical Circle, Kolkata will constitute a committee to evaluate the responses of the Bidders in response to this EOI document (Tender Committee).
- 5.7.2 The Tender Committee constituted by the Superintending Engineer, Mechanical & Electrical Circle, Kolkata shall evaluate the responses to the EOI and all supporting documents & documentary evidence. Inability to submit requisite supporting documents or documentary evidence, may lead to rejection of the Bidder's EOI proposal.
- 5.7.3 Each of the responses shall be evaluated to validate compliance of the Bidders according to the pre-qualification criteria, forms and the supporting documents specified in this EOI document.
- 5.7.4 The decision of the Tender Committee in the evaluation of responses to the EOI shall be final. No correspondence will be entertained outside the evaluation process conducted by the Purchase Committee.
- 5.7.5 The Tender Committee may ask for meetings with the Bidders to evaluate its suitability for the assignment
- 5.7.6 The Tender Committee reserves the right to reject any or all proposals.

5.8 Pre-qualification evaluation criteria

#	Basic requirement	Specific requirements	Documents required
1	Legal Entity	 Should be a company registered under the provisions of the Indian Companies Act, 2013 or a partnership firm registered under the Indian Partnership Act, 1936 or the Limited Liability Partnerships Act, 2008. Registered with the GST authorities. Should have been operating for the last three years. 	 Certificate of incorporation / Partnership deed GST registration Certificate of commencement of business (if applicable)
2	Board resolution / Power of attorney in favour of authorised signatory	A board resolution OR power of attorney in the name of the person executing the bid, authorizing the signatory to commit the Bidder.	Board resolution; OR Power of attorney with appropriate supporting documents
3	Sales turnover	Annual sales turnover generated from services related to system integration during each of the last three financial years (as per the last published Balance sheets), should be at least INR <value and="" in="" numbers="" words="">. This turnover should be on account of Information Communication Technology (ICT) systems development and implementation (i.e. revenue should be on account of system integration/turnkey solutions or products and their associated maintenance or implementation services, packaged software etc.) only</value>	Extracts from the audited balance sheet and profit & loss; OR Certificate from the statutory auditor
4	Technical capability	Bidder must have successfully completed at least the following numbers of work for 33 KV Outdoor Substation or similar works (must have Electrical license of appropriate voltage level as per IE rules 2003) of value specified herein: - One project of similar nature not less than the amount <value 80%="" cost="" equal="" of="" quoted="" to="">; OR - Two projects of similar nature not less than the amount equal <value 60%="" cost="" equal="" of="" quoted="" to="">; OR - Three projects of similar nature not less than the amount equal <value 40%="" cost<="" equal="" of="" quoted="" th="" to=""><th>Completion certificates from the competent authority; OR Work order + Self certificate of completion (Certified by the statutory auditor)</th></value></value></value>	Completion certificates from the competent authority; OR Work order + Self certificate of completion (Certified by the statutory auditor)

5	Debarment	Debarment should used as a mandatory Pre-	Self Certified letter
9	Dobaiment	l	
		Qualification criterion to restrict organizations	that the bidder (or
		that have been either debarred by by the	any of its successor)
		tendering department for breach of ethical	is not in the active
		conduct or fraudulent practices, etc. as specified in	debarred list
		Rule 151 of GFR.	published by:
			a) Central/ State
			Public
			Procurement
			Portal; and

5.9 Examination of Bids and Determination of Responsiveness

The Bid evaluation committee (TEC) will evaluate whether each Bidder is satisfying the eligibility and qualifying criteria prescribed in the pre-qualification document and declare names of the qualified Bidders.

Prior to the details evaluation, the tender accepting authority will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations.

Assessment: The detailed assessment for pre-qualification shall be based on the following information submitted by the Bidder:

- 1. Data submitted in prescribed format given in tender documents.
- 2. Bidder's techno-commercial proposals for carrying out the entire works in accordance with the specifications in this document.

The techno-commercial submissions must principally demonstrate the adequacy of bidders' appreciation of the:

- --The project
- -- Design and detail engineering
- --The methods proposed for mobilization and establishment of site installation and for the timely completion, testing and commissioning and O&M of the project.
- --The arrangements for the logistic support for completion, testing and commissioning of all works of the project.
- --Requirements of the Department.

Bidders are advised to note that the evaluation of techno-commercial bids will be based on the detailed examination of the submittals and would be carried out mainly on the basis of the following principal aspects of the techno-commercial bids.

- (i) Financial Strength
- (ii) Experience of Similar Class of work
- (iii) Performance of Work
- (iv) Personnel & Establishment
- (v) Plant and Equipments

5.10 FOMAT FOR LETTER OF RESPONSE (ANNEXURE-A)

(ANNEXURE-A)

To
The Executive Engineer
Metropolitan Drainage Mechanical Division
Irrigation & Waterways Directorate
JalsampadBhawan , 4 th Floor
Salt Lake .Kol – 700091

Sub:- RESPONSE TO - EOI

Dear Sir,

١.	of Interest sought by you vide your	J			•		•	ated
2.	 2. We are duly authorized t	to repres	sent	and	acr	on	behalf	of
	(hereinafter the "respondent")							
3.	3. We have examined and have no	reservati	ons to	the E	EOI D	ocume	ent includ	gnib
	Addenda No(s)			_				
4.	4. I/We understand that							
	a) This EOI is intended to procure	trash skim	mer b	oat by	Irrigat	ion ar	nd waterw	ays
	Department, Govt. of West Ben	ngal.						

- b) Irrigation and waterways Department , Govt. of West Bengal may float a separate Tender (based on their requirement) , with all conditions like Eligibility Criteria , and our participation in this EOI doesn't guarantee any qualification to that tender .
- 5. We are attaching with this letter, the copies of original documents defining:
 - a) The Respondent's legal status;
 - b) Its principal place of business;
 - c) Its place of incorporation (if respondents are corporations); or its place of registration (if respondents are cooperative institutions, partnerships or individually owned firms);
 - d) Self-certified financial statements of Last three years , clearly indicating the financial turn over and net worth.
 - e) Copies of any project undertaken for the last 5 years , in any Govt department .
- 6. We shall assist Irrigation and waterways Department , Govt. of West Bengal its authorized representatives to obtain further clarification form us , if needed .
 - a) Executive Engineer of Metropolitan Drainage Mechanical Division is authorized representative may contact the following nodal persons for further information on any aspects of the Response:

SI No.	Contact Name	Address	Telephone	E-mail

- 7. This application is made in the full understanding that:
 - a) Reserves the right to reject or accept any or all applications, cancel the EOI and subsequent bidding process without any obligations to inform the respondent about the grounds of same.
 - b) We confirm that we are interested in participating in the selection process through this EOI.
- 8. We certify that our turnover and net worth in the last three years is as under:

Financial Year	Turn over	Net worth		

- 9. In response to the EOI we herby submitting the following details annexed to this application:
- 10. The undersigned declare that the statements made ad the information provided in the duly completed application are complete, true, and correct in every detail. We also understand that in the event of ant information furnished by us being found later on to be incorrect or any material information having been suppressed, may delete our name from the list of potential bidders. We further understand that Irrigation and waterways Department, Govt. of West Bengal will give first preference to the applicants considered relevant for the purpose.

Yours sincerely,

(sign)
Name
In the Capacity of
Duly authorized to sign
The response for and on behalf of

EOI No. WBIW/EE/MDMD/EOI-12 /2021-22

Memo No: 58 /1 (6)/2B-4 Date: 13.01.2022

Copy forwarded for information and taking necessary action please for wide publication to :-

1	The Chief Engineer, Mech & Elect , I&W Directorate, 2 nd Floor, Jalsampad Bhawan ,Govt of West Bengal.
2	The Superintending Engineer, Mechanical & Electrical Circle ,Kolkata, 6 th Floor, Jalsampad Bhawan I&W Dte.
3	Office Notice board.

Executive Engineer

Metropolitan Drainage Mechanical Division
Irrigation & Waterways Directorate



QUOTED BID PRICE IN EOI

Schedule of work of the Project: **Design, Supply, Erection, Testing & Commissioning of 33/6.6 KV Switchyard equipment along with 3 nos 5 MVA and consumer VCB panel, LT panel and other allied electrical works in connection with in connection with work "Supply, installation, testing and commissioning including trial run and five (05)** years successful operation and maintenance of external water lubricated Vertical turbine pump sets of Sixteen (16) nos. 150 cusec with electro-mechanical installation complete for the proposed additional pump house (augmentation of existing pump house) at Kulti for lower Bagjola khal in P.S Haroa, Mouja: Kamargati, G.P: Kulti, Block: Haroa, Dist: North 24 Parganas, State: West Bengal"

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	ELECTRICAL PORTION (OUTDOOR SUBSTATION) Supply, delivery, storing at site, erection, testing & commissioning of 5 MVA 33KV / 6.6KV, 3 phase, 50HZ Δ/λ, Dyn 11 outdoor ONAN type Transformer in IP 55 enclosure with copper windings, OFF load tap changing arrangement in steps of + 1-2.5% & ± 7.5%, having HV Bushing suitable for primary side and cable entry box for 6.6 KV, 3Nos x 3C x 300 sqmm. XLPE/ARMD, AL cables on the secondary side, three channel temperature scanner for continuous monitoring of the windings and oil temperature etc. with supply of all associated materials and accessories like oil conservator, Bucholz relay, pressure release valve silica gel breather, mounting channels bolts, nuts washers, screw, clamps, painting, earthing etc. and confirming to IS 1180-Level-II and as per specification as laid down in the contract complete in all respect as required at site including construction of required size RCC pedestal		Nos						

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	Supply, delivery, storing at site,installation, testing & commissioning of 250 KVA, 33KV /433V, 3 phase, 50HZ Δ/λ , Dyn 11 outdoor ONAN type transformer in IP 55 enclosure with copper windings, OFF load tap changing arrangement in steps of + 1-2.5% & $\pm 7.5\%$, having HT bushing suitable for primary side and 1.1KV, 2 Nos x 3-1/2C x 300 sqmm. XLPE/ARMD, AL cables on the secondary side Cable End Box, three channel temperature scanner for continuous monitoring of the windings , with supply of all associated materials and accessories like oil conservator, silica gel breather, Buchluz relay, mounting channels bolts ,nuts washers, screw, clamps, painting, earthing etc. and confirming to IS- 1180 (Level-2) and as per specification as laid down in the contract complete in all respect as required at site including construction of required size RCC pedestal.	2.0	Nos						
	Supply, Errection, testing and commissioning of Vaccum Circuit Breaker of 33 KV,3,ph,50 c/s,1250 A, outdoor type, porcelain clad with making all connections and control cable for operating the V.C.B. and C.T./P.T. Including cost of all material, T&P(Hot dip galvanized M.S structure withRCC foundation as required) etc. and as per detailed specification in tender document.	6	Nos						
	Supply, Errection, testing and commissioning of Outdoor type Isolator of 33 KV rated , insulation Class F ,170 KV peak 1250 A (with maximum current capacity of 17.5 KA for 2 sec) ,3 phase , double break centre post rotating with earth blades along with supporting insulator , base channel , manual operating mechanism , terminal control	9	Nos						

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
5	Supply, Errection, testing and commissioning of 33 KV Current Transformer , single phase, 50 c/s, 3 core hermitically sealed out door type C.T. having following current ratio including cost of all material, T&P etc. and as per detailed specification in tender document. (Each set Consists of 3 nos. C.T.) (Make-Jyoti/AE/Kappa) (IP 65 or More)								
5.1	Dual Core CT with CTR: 150A/1A-1A, 30VA, CL: 1.0/5P10	9	Nos						
5.2	Dual Core CT with CTR: 15A/1A-1A, 30VA, CL: 1.0/5P10	6	Nos						
5.3	Dual Core CT with CTR: 600A/1A-1A, 30VA, CL: 1.0/5P10(incomer)	3	Nos						
6	Supply, Errection, testing and commissioning of 33 KV Potential Transformer , single phase, 50 c/s, 3 core hermitically sealed out door type P.T. having voltage ratio 33 KV /110 V, 150 VA, including cost of all material, T&P etc. and as per detailed specification in tender document. (Each set Consists of 3 nos. P.T.) (Make- Jyoti/AE/Kappa) (IP65 or more)	2	Set						
	Supply, Errection, testing and commissioning of Lightning Arrestor of 10 KA, 42 KV rated insulation class ,BIS 170 KV peak single phase , 50 Hz vlave type ,LA station type , outdoor type, alongwith surge counter and insulation base and suitable for 33 KV system conforming to IS : 3070(P-1)1974 and amendments thereafter and as required , including cost of all material, T&P etc. and as per detailed specification in tender document and as per approved drawing to complete the whole job.	18	Nos						

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	Supply, Errection, testing and commissioning of 33 KV Earthing System in switchyard with G.I Pipe Electrode of 80 mm dia and 3000 mm length with perforations of 12 mm dia holes @ 150 mm from each other at right angle along with removable type top cap and 250 mm clamp with nuts & bolts and G.I Flat of size 75 x 8 mm, for connecting structures and all sub station equipments i,e Transformers, VCB, PTs. CTs, High level bus, Low level bus, Isolators, Lightening arresters & all structures from earthing grid GI shield wire as required to complete the job as a whole as per approved drawing and calculation to complete including cost of all material, T&P etc. and as per detailed specification in tender document.(Approx 50 sets of electrodes)	1	Job						
	Supply, Errection, testing and commissioning of 33 KV Relay control panel of requisite size (for 1 no. incomer & 5 nos. outgoing V.C.B. for transformer feeders) fabricated with 14 SWG CRC sheet, powder coated painted having following equipments:								

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	For incomer: (i) O/C & E/F relay, Type: MICOM P127, Make: Areva/Schinder, Rating: 1A, Aux voltage: 110V DC1 no. (ii) Tripping relay VAJH 13, Make: Areva/Schinder, Aux voltage: 110V1No (iii) Trip circuit supervision relay(TCN), Type: VAX31, Make: Areva/Schinder, Aux voltage: 110V DC1No (iv) DC fail relay VAA 11, Make: Areva/Schinder, Aux voltage: 110V DC1No. (v) Annunciator with Push button. 110V DC, 8 window, Make: Minilec1No. (vi) Digital Ammeter 0-600A with ASS (vii) Digital voltmeter 0-33KV with VSS (viii) 3-phase Energy meter1No. (ix) Breaker control switch(TNC)1No. (x) Local/Remote selection switch (xi) Hooter (xii) Frequency meter1 no. (xiii) Power factor meter1No. (xiv) Indication lamps for ON/OFF/SPRING CHARGE/Auto trip/Dc fail/TCH/PT supply. (xv) MCB for DC supply and AC supply, Fuse & Link as	1.0	Set						

For outgoing transformer feeder:	Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
		(i) O/C & E/F relay, Type: MICOM P127, Make: Areva/Schinder, Rating: 1A, Aux voltage: 110V DC1 no. (ii)Restricted Earth fault relay(REF), Type: CAG14, Make: Areva/Schinder (iii) Stand by E/F relay, Type: CDG11, Make: Areva/Schinder (iv) Transformer differential relay. Type: DUOBIAS(M)/MIB202,Make: Essen Reroll, Aux voltage: 110V DC1No. (v) Tripping relay: Type: VAJH23, Make: Areva/Schinder, Aux Voltage: 110V DC1No.(xvii) Indication lamps for ON/OFF/SPRING CHARGE/Auto trip/Dc fail/TCH/PT supply. (vi)Trip circuit supervision relay. Type: VAX31, Make: Areva/Schinder, Aux. voltage: 110V DC1No. (vii) Auxiliary Relay VAJH13, Make: Areva/Schinder, Aux voltage: 110V DC1 No. (viii) DC fail relay, Type: VAX11, Aux voltage: 110V DC1No. (ix) Transformer auxilliary relay. Type: VAA33, Aux. voltage: 110V3 nos. (x)Breaker control switch(TNC)1No. (xi) Local/Remote switch1no. (xii) Digital ammeter with ASS as per 33 KV CT ratio for 1 no incomer feeder & 8 nos transformer feeders)1No in each feeder. (xiii) Digital voltmeter 0-33KV with VSS (1 no incomer feeder & 8 nos transformer feeders)1No in each feeder. (xiv) Annunciation with push button. 12 window, Make: Minilec. (xv) Semaphone, Make: ALSTOM, Aux voltage: 110V DC2 nos/panel. (xvi) Hooter1 no. (xvii) Indication lamps for ON/OFF/SPRING CHARGE/Auto		Set						

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	Procurement of materials, design of structure, preparation of fabrication drawing, fabrication, galvanising, proto assembly, testing and FOR destination, delivery of structural members for switchyard equipment support structure, Gantry etc fabricated from structural steel conforming to IS:2062 including GInuts, bolts, foundation bolts, washers and other accessories complete as per as per approved drawing and technical specification to complete the whole job. [Consisting of but not limited to the following items, subject to site requirement] (i) L.A with bus support structure - 6 sets. (ii) Isolator structure - 9 sets. (iii) 33 KV CT structure6 sets (iv) Bus support structure(DP LL)-6 sets. (v) High level bus support-6 sets. (vii) PT structure-2 sets. conforming to relevent IS.	1	Job						
	Supply, Errection, Testing & Commissioning of Bus bar (both High Level and Low Level) suitable for Al pipe size 48 mm/ 50 mm dia IPS x 5 mm ACSR Conductor, suspension / tension insulator, Post Insulator, Hardware, Power Connection clamps etc. As required to complete the work as per layout & as per approved drawing.	1	Job						
	Providing and Errection of fire stand as per approved drawing for fire bucket with M.S. angle iron 50x50x6 mm with shed of M.S. Sheet to cover the bucket and properly including cost of all material, T&P etc. and as per detailed specification in tender document.	25	Nos						
	Auto CADD 33/6.6 KV and distribution power system drawing with 12 copies indication complete land with dimension, plan of sub station with equipment ,road , duct routes , pre commissioning test including approval of D.O.E., Govt of West Bengal .	1	Job						

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
14.00	Providing of Earth Shielding of 33 KV Sub Station including S &F of as per following items as per approved drawing and technical specification to complete the whole job. 1. 12.8 Mtr. Rail Pole (8 Nos.) 2. CI Reel 3. Turn Buckle 4. GI Flat 50 x 6 mm 5. 50 Square ACSR Rabbit Conductor as Shielding wire .	1	Job						
15	CONSUMER 1-PANEL VACUUM CIRCUIT BREAKER AT SUB-STATION(Single Panel IC/ OG) Supply, delivery, storing at site, erection testing & commissioning of indoor, floor mounted metal clad totally enclosed horizontal cubicle fully compartmentalized, extensible on either side motor operated spring charged, electrically/manually operated fully drawout type 6.6KV Vacuum Circuit Breaker(VCB) Board having rupturing capacity of 180MVA at 6.6KV conforming to specification etc and detail shown in single line diagram and as described below Including supplying necessary mounting channels and all other mounting accessories complete. Make-Siemens/ABB/Schnider Note:All works are to be done in accordance with I.E.rules and regulation and as per direction of Engineer-in-charge.GA drawing for each panel has to be get approved by the engineer-in-charge before manufacturing the same. (A) Incomer/ Outgoing(Single Panel IC/OG) (i) 1-No. 1250A TP,6.6 KV, 26.2 KA for 3 sec, Vacuum Circuit Breaker (VCB) (ii) (a) 1-set (3 Nos in each set) dual Core CT for 3 nos 5MVA Transformer: CTR:500/1A+1A, CORE 1: For metering,		Nos						

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	(iii)2-set cable termination box suitable for 3C x 300 sqmm.6.6KV, XLPE /A, AL cable (iv)1-set microprocessor based Numerical type relay with two elements for O/C and one element for E/F protection with time and current settings, (70%- 100% for current and 0.3-1.0 for time settings), RS 485 and 232 port for SCADA integration and data up and down loading etc. with aux/tripping relays as required. (v)1-set 0-600A AC flush mounting digital ammeter with selector switch for 3 nos 5 MVA transformers (vi)1 set Draw out type 6.6KV/110V, 100VA star/star dry type potential transformer with primary (3A) and secondary (4A) HRC fuse protections. (vii) 1-set 0-8KV flush mounted digital voltmeter and selector switch (viii) 1-set High speed master trip relay. (ix) 1-set Continuous trip circuit supervision with relay (x) 1-set ON/OFF/TRIP/TRIP CIRCUIT HEALTHY lamps and push buttons (xi) 1-set (2 Nos. in each set) 110V, DC shunt trip coil for tripping with power pack unit (xii) 1- set (2 Nos. in each set) Aux. contactors with necessary fittings (xiii) 1-set Digital KWH & PF meter (xiv) Earth bus-bar and all other accessories complete (xv) 1-set R/Y/B phase indication lamps (Rate analysis enclosed)								

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	CONSUMER 1-PANEL AIR CIRCUIT BREAKER AT SUBSTATION (Single Panel IC/OG) Supply, delivery, storing at site, erection testing & commissioning of indoor, floor mounted metal clad totally enclosed horizontal cubicle fully compartmentalized, extensible on either side motor operated spring charged, electrically/manually operated fully drawout type 433V Air Circuit Breaker(ACB) Board having rupturing capacity of 35MVA at 433V conforming to specification etc and detail shown in single line diagram and as described below Including supplying necessary mounting channels and all other mounting accessories complete.LT panel shall be suitable for 433V AC 50HZ,3 phase and neutral system. Make-Siemens/L&T/ABB/Schnider Note:All works are to be done in accordance with I.E.rules and regulation and as per direction of Engineer-in-charge.GA drawing for each panel has to be get approved by the engineer-in-charge before manufacturing the same.	3	Set						
	(A) Incomer/ Outgoing (Single Panel IC/OG) (i) 1-Nos 800A FP,500V, 50 KA,Air Circuit Breaker (ACB) (ii)1-set (3 Nos in each set) CT with CTR 800/1A, 15VA,CL-1 for metering. (iii)2-set cable termination box suitable for 3 nosx 3½ -C x 300 sqmm.1.1KV, XLPE /A, AL cable (iv)1-set 0-800A AC flush mounting digital ammeter with selector switch. (v) 1-set 0-500V flush mounted digital voltmeter with selector switch (vi) 1-set ON/OFF/TRIP/TRIP CIRCUIT HEALTHY lamps and push buttons (vii) 1-set R/Y/B phase indication lamps (viii) 1-set TRIP/NEUTRAL/CLOSE selector switch (ix) Earth bus-bar and all other accessories complete (x) 1-set Multi Function Meter								

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
17	HT PANEL IN PUMP HOUSE FOR HIGHER CAPACITY MOTOR Supply, delivery, storing at site, erection, testing & commissioning of 6.6KV (180MVA) TP floor mounting free standing HTpanel made of 14SWG CRCA sheet steel extensible on either side totally enclosed, dust and vermin proof, self supported, free standing unit with base channel, multi tier, compartmentalised cubicle, front access type construction with details of feeders as given below .HT panel shall be suitable for 6.6KV AC 50HZ, 3 phase system. Panels shall be treated with seven tanks process before painting with two coats of epoxy paint over two coats of epoxy primer all of approved shade complete with front operated incoming and outgoing switchgears, cablealleys, provision for cable entries from top and bottom, necessary meters, internal wiring with 1.1KV, copper wire (2.5 sq.mm) protection HRC fuse etc terminal blocks, selector switches, inter connection with insulated (1.1KV grade) colour coded copper conductor cable, gland plates, earth bus of copper, lifting bolts, level inscriptions, earth connections etc and supply of all necessary accessories all complete and mending good the damages as required. Make-Siemens/ABB/Schnider: Note: All works are to be done in accordance with I.E. rules and regulation and as per direction of Engineer-in-charge. GA drawing for each panel has to be get approved by the engineer-in-charge before manufacturing the same.	1	Set						

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
17.1	(A) Incomer (i) 3-No 1250A TP,6.6 KV, 26.2 KA for 3 sec, Vacuum Circuit Breaker (VCB) (ii)3-set (3 Nos in each set) dual Core CT: CTR:600/1A+1A, CORE 1: For metering, class-1.0, 15VA, CORE 2: For Protection, Class-5P10, 15VA (iii)3-set cable termination box suitable for double run 3C x 300 sqmm.6.6KV, XLPE /A, AL cable (iv)3-set microprocessor based Numerical type relay with two elements for O/C and one element for E/F protection with time and current setting,(70%-100% for current and 0.3-1.0 for time settings), RS 485 and 232 port for SCADA integration and data up and down loading etc. (v)3 set-0-600A flush mounting digital ammeter with selector switch (vi) 3-set Draw out type 6.6KV/110V, 150VA star/star dry type potential transformer with primary (3A) and secondary (4A) HRC fuse protections.(2 Nos for Bus PT and 1 no for line PT) (vii) 3-set 0-8KV flush mounted digital voltmeter and selector switch (viii) 3-set high speed master trip relay. (ix) 3 set-Continuous trip circuit supervision with relay (x) 3 set-Continuous trip circuit supervision with relay (x) 3 set-ON/OFF/TRIP/TRIP CIRCUIT HEALTHY lamps and push buttons (xi) 3- set (2 Nos. in each set) - 110V, DC shunt trip coil for tripping with power pack unit (xii)3- set (2 Nos. in each set)- Aux. contactors with necessary fittings (xiii) 3-set Digital KWH & PF meter (xiv) Earth bus-bar and all other accessories complete (xv) 3-set R/Y/B phase indication lamps								

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	(B) Bus-Bars 3-Set TP, 6.6KV, 1250A, 180 MVA continuous rated copper busbar with insulating sleeves (C) Bus Coupler (i) 2-No 1250A TP,6.6 KV, 26.2 KA for 3 sec,Vacuum Circuit Breaker (VCB) (ii)2-set (3 Nos) dual Core CT: CTR:600/1A+1A, CORE 1: For metering, class-1.0, 15VA, CORE 2: For Protection, Class-5P10, 15VA (iii)2-set microprocessor based Numerical type relay with two elements for O/C and one element for E/F protection with time and current settings,(70%- 100% for current and 0.3-1.0 for time settings), RS 485 and 232 port for SCADA integration and data up and down loading etc. (iv)2 set-0-600A flush mounting digital ammeter with selector				quotes)				
	switch (v) 2-set high speed master trip relay. (vi) 2-set-Continuous trip circuit supervision with relay (vii) 2- set-ON/OFF/TRIP/TRIP CIRCUIT HEALTHY lamps and push buttons (viii) 2- set (2 Nos.)- Aux. contactors with necessary fittings (ix) Earth bus-bar and all other accessories complete (x) Annunciator unit. 8W (xi) 2-set R/Y/B phase indication lamps								

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	(D) Outgoing (i) 16-Nos. 630A TP,6.6 KV, 26.2 KA for 3 sec, Vacuum Circuit Breaker (VCB) (ii) 16-set (3 Nos in each set) dual Core CT: CTR:75/1A+1A, CORE 1: For metering, class-0.5, 10VA, CORE 2: For Protection, Class-5P10, 15VA (iii)16set cable termination box suitable for 3C x 300 sqmm.6.6KV, XLPE/A, AL cable (iv)16-set 0-75A AC flush mounting digital ammeter with selector switch. (v)16-set high speed master trip relay/aux relay. (vi) 16-set-ON/OFF/TRIP/TRIP CIRCUIT HEALTHY lamps and push buttons (vii) 16-set - Aux. contactors with necessary fittings (viii) Annunciator unit. 8W (ix) Hooter (x) 16-set R/Y/B phase indication lamps (xi) 16-set Temperature Scaner (Masibus make) (xii) 16-set MICOM P225 brand relay for motor protection (xiii) 16 set: TNC switch & Local/Remote selection switch.								
	Supply, delivery and storing at site, erection, testing & commissioning of capacitor bank of 350 KVAR or suitable rating to reach improve power factor near to 1, delta connected double dielectric heavy duty Metalised poly propylene -Heavy duty (MPP-H) power factor correction capacitor 6.6KV AC,3ph,50Hz, as per IS:13340 & IEC specification to be connected directly in parallel with the 450 KW motor terminals. Including supply and installation of Reactor/ Inductor coil, contactors etc as required against each module to provide sufficient time delay.Including supply of 16G well ventilated,Powder coated MS enclosure of appropriate size and duly painted . Note:Capacitor should be able to with stand a 110% of rated voltage and 130% of rated current.	16	Nos						

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	Supply, delivery and storing at site, erection, testing & commissioning of capacitor bank of 130 KVAR or suitable rating to reach improve power factor near to 1, delta connected double dielectric heavy duty Metalised poly propylene -Heavy duty (MPP-H) power factor correction capacitor 6.6KV AC,3ph,50Hz, as per IS:13340 & IEC specification to be connected directly in parallel with the 250 KW motor terminals. Including supply and installation of Reactor/ Inductor coil, contactors etc against each module to provide sufficient time delay. Including supply of 16G well ventilated, Powder coated MS enclosure of appropriate size and duly painted . Note: Capacitor should be able to with stand a 110% of rated voltage and 130% of rated current.	5	Nos						
	BATTERIES & BATTERY CHARGER WITH D.C.D.B Supply, installation, testing and commissioning with supervision of 110V,200Ah Exide Plante Led Acid battery cosisting of 55 nos 2V each (YKP-17) plante cell in transparent SAN container complete with plante positive plate, pasted negative plate, vent plugs, insulator, lead planted copper connectors, nuts, washers etc dry and uncharged. The battery bank will be supplied along with non sesismic M.S steel strand two coats of polyurethane lacquer which acts as a strong resistence to sulphuric acid corrosion with cell nos sticker, suitable stand insulator, inter row and inter tier connector and required sulphuric acid sufficient for first filling of the above battery (including approximately 10 % spare) in non returnable polythelene jerrycans suitable pached as in the technical specification along with Chloride power system & solution Ltd make 110V automatic float cum boost charger along with integrated DCDB as in the technical specification.	3	Set						

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
21	LT PANEL AT PUMP HOUSE Supply, delivery, storing at site, erection, testing & commissioning of 415V (35MVA) TPN floor mounting free standing LTpanel made of 14SWG CRCA sheet steel extensible on either side totally enclosed, dust and vermin proof, self supported, free standing unit with base channel, multi tier, compartmentalised cubicle, front access type construction with details of feeders as given below .LT panel shall be suitable for 500/415VAC 50HZ,3 phase and neutral system. Panels shall be treated with seven tanks process before painting with two coats of epoxy paint over two coats of epoxy primer all of approved shade complete with front operated incomingandoutgoing switchgears, cablealleys, provision for cable entries from top and bottom, necessary meters, internal wiring with 1.1KV, copperwire (2.5 sq.mm) protection HRC fuse etc terminal blocks, selector switches, inter connection with insulated (1.1KV grade) colour coded copper conductor cable, gland plates, earth bus of copper, lifting bolts, level inscriptions, earth connections etc and supply of all necessary accessories all complete and mending good the damages as required.	1	Set						

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	(A) Incomer (i) 2-Nos 630A FP,500V, 50 KA,Air Circuit Breaker (ACB) Drwaout type (ii)2-set (3 Nos in each set) 15VA,800/1A,CL-1 for metering CTs (iii)2-set cable termination box suitable for 3 nosx 3 1/2-C x 300 sqmm.1.1KV, XLPE /A, AL cable (iv)2-set 0-630A AC flush mounting digital ammeter with selector switch. (v) 2-set 0-500V flush mounted digital voltmeter with selector switch (vi) 2-set ON/OFF/TRIP/TRIP CIRCUIT HEALTHY lamps and push buttons (vii) 2-set R/Y/B phase indication lamps (viii) 2-set TRIP/NEUTRAL/CLOSE selector switch (ix) Earth bus-bar and all other accessories complete (x) Annunciator unit. 8W (xi) 2-set Multi Function Meter (B) Bus-Bars 2-Set TPN, 500/415V, 630A, 50Hz, 50 MVA continuous rated copper bus-bar with insulating sleeves								

Sl. No	Description of work as per preliminary assessment	Qnty.	Unit	Description of work proposed by the bidder (for budget quotes)	Quantity (for budget quotes)	Unit (for budget quotes)	Rate Excluding GST (Rs.) (budget quotes)	Applicable GST Amount (in Rs)	Total Amount (Rs). (budget quotes)
	(C) Bus Coupler (i) 1-No 630A FP,500V, 500 KA,Air Circuit Breaker (ACB) (ii)1-set (3 Nos) 15VA, 500/1A,CL-1 for metering CTs (iii)1-set 0-500/1600A AC flush mounting digital ammeter with selector switch. (iv) 1-set ON/OFF/TRIP/TRIP CIRCUIT HEALTHY lamps and push buttons (v) 1-set R/Y/B phase indication lamps (vi) 1-set TRIP/NEUTRAL/CLOSE selector switch (vii) Earth bus-bar and all other accessories complete (viii) Annunciator unit. 8W (D) Outgoing (i) 3 Nos- 400A FP 500/415V MCCB with breaking capacity of 50 KA including 0-400A CL-1 digital ammeter with 400/5A class-1 CTs and selector switch and ON/OFF/TRIP indication light complete (2 nos for for cooling/lubricating pump panel, 1 no spares). (ii) 9 Nos- 63A FP 500/415V MCCB with breaking capacity of 50 KA including 0-63A CL-1 digital ammeter with 60/5A class-1 CTs and selector switch and ON/OFF/TRIP indication light complete (2 nos for LDB, 2 nos for PDB, 1 nos for battery charger, 1 no for street light,1 no for yard lighting, 2 nos spares). (iii) 7Nos- 100A FP 500/415V MCCB with breaking capacity of 50 KA including 0-100A CL-1 digital ammeter with 100/5A class-1 CTs and selector switch and ON/OFF/TRIP indication light complete (2 no for EOT crane, 4 nos for monorail crane, 1 no spare). (E) Earth bus-bar Continuous earth bus ba rof 50 x 6mm G.I. flat running								