

To  
 Sr. Dy. Manager (P&E),  
 Operational Administrative Building (1<sup>st</sup> floor),  
 Haldia Dock Complex, Kolkata Port Trust,  
 Chiranjibpur, PO & PS: Haldia,  
Dist. Purba Medinipur.

Dear Sir,

**Subject : Quotation for Annual Shutdown Maintenance of different H.T. & L.T. equipments, installed at different locations/ sub-stations of Haldia Dock Complex, under Chiranjibpur Power House Section.**

With reference to above enquiry, we are pleased to furnish our offer as given below:

Sl. No.	Item Description	Qty	Unit rates (excluding GST) [in ]	Amount (excluding GST) [in ]	SGST %	CGST %	IGST %
1.	<b><u>H.T. Oil Circuit Breaker :</u></b>						
	Preventive Maintenance of 3.3 KV H.T. Oil Circuit Breaker as per the enclosed "Scope of Work."	42 Nos.					
2.	<b><u>L.T. Oil Circuit Breaker :</u></b>						
	Preventive Maintenance of L.T. Oil Circuit Breaker as per the enclosed "Scope of Work."	57 Nos.					
3.	<b><u>HT MOCB, BOCB, Gang Isolator, CT, PT :</u></b>						
	Preventive Maintenance of following yard switchgears at Intake s/s, as per the enclosed "Scope of Work."						
	(i) 33 KV MOCB	2 Nos.					
	(ii) 33 KV BOCB	2 Nos.					
	(iii) HT Outdoor Gang Isolator	25 Nos.					
	(iv) Outdoor Bus-bar	12 Nos.					
	(v) CT with Bus section	18 Nos.					
	(vi) PT with Bus section	12 Nos.					
4.	<b><u>Transformer :</u></b>						
	Preventive Maintenance of Transformers of following ratings as per the enclosed "Scope of Work."						
	(i) 500 KVA, 3.3 KV/415 V	8 Nos.					
	(ii) 315 KVA, 3.3 KV/415 V	2 Nos.					
	(iii) 100 KVA, 3.3 KV/415 V	3 Nos.					
<b>TOTAL =</b>					<b>With out GST</b>		
					<b>With 18% GST</b>		

The aforesaid rates are exclusive of GST, to be paid extra as per the rates mentioned above.

a) **Pre-qualification criteria:**

1. Valid GST registration certificate.
2. Contractor shall have "Valid Electrical Contractor's License issued by competent authority of State / Central Govt. in line with The Indian Electricity Rules, 1956".

b) **Scope of Work:**

1. As per **Annexure-I**.
2. The work is to be executed at site, under direct supervision of a person holding a valid certificate of competency [at least for Underground Cable/ Over head upto 33000 V] issued or recognised by the competent authority (in line with The Indian Electricity Rules, 1956).
3. Relevant aspects of following Rules / Code of Practices should also be followed and complied with:
  - a) Indian Factories Act
  - b) Dock Workers (Safety, Health & Welfare) Act, 1987
  - c) The Workmen's Compensation Act, 1923
  - d) The Minimum Wages Act, 1948
  - e) The Contract Labour (Regulation & Abolition) Act, 1970
  - f) Other Local Regulations
4. Electricity and water, if required, will be provided free of cost for the purpose of execution of the work at site.
5. The installation will be taken over by HDC, KoPT only after successful installation, testing & commissioning of the work.
6. If during execution of work any damage takes place in the property of HDC, the same will have to be mended good by the contractor at their risk, cost and arrangement. **Otherwise the same will be repaired / replaced by HDC, either departmentally or through outside agency and the cost of repairing / replacement will be recovered from the contractor, along with overhead charges @19.25%.**
7. The Contractor should arrange, at their own cost, all necessary tools, tackles, lifting machineries, scaffolding, temporary lighting etc., required for the execution of total work.
8. In connection with the aforesaid work, all materials will be under the custody of the Contractor, till completion of work and commissioning of the same.
9. In connection with aforesaid work, transportation and handling of all materials should be done by the Contractor at their own risk, cost and arrangement
10. In connection with aforesaid work, spares and consumables (all materials) would be supplied by HDC, KoPT.

c) **Payment Terms:**

**90%** payment of the basic value along with 100% GST, will have to be made within **30 (thirty) days**, after **execution of work** in line with the "Item description" and "Scope of Work" against submission of clear & unambiguous bill (in triplicate), along with required documents like inspection report /Job certification sheet.

**Balance 10%**, against **execution of work**, which may be retained as **Security Deposit**, may be released, without any interest, after completion of **Guarantee Period**.

d) **Completion Period :**

The **supply & delivery of spares** would be completed within 120(One hundred twenty) days, from the date of placement of order or arrangement of site clearance.

Site clearance for execution of work and arrangement of Power shut down will be done by HDC, KoPT.

e) **Inspection:**

**Executed work** shall be inspected and tested jointly by the authorised representatives of HDC, KoPT and the Contractor.

Physical checking of **Executed work** will be carried out at site, based on the “Item description” and “Scope of Work” by the representative of Plant & Equipment Division, HDC.

f) **Guarantee:**

The **work** executed by the Contractor will be guaranteed for a period of 12 (Twelve) months from the date of commissioning as per scope of work.

The Contractor shall be responsible for making good, at their expense, any defect, which may occur before expiry above period.

g) **Gate Pass:**

Necessary Gate Pass for entering into the Dock Area would be issued for the personnel, equipment, machineries, materials etc. of the contractor in connection with the aforesaid supply, on chargeable basis, as per rules then prevailing, on the basis of written request from the contractor.

h) **Liquidated Damage:**

If the Contractor fails to complete the job within the stipulated date or such extension(s) thereof, as may be allowed by Engineer, HDC in writing, the Contractor shall be required to pay as compensation (Liquidated Damage) to HDC, KoPT and not as penalty, @ ½ % of the cost of unfinished portion of the work, for every week's delay( part of the week would be treated as full week), provided always the entire amount of compensation to be paid under the provision of this clause shall not exceed 10 % of the total contract value. HDC, KoPT may, without prejudice to any other method of recovery, deduct the amount of such damages from any money which is due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from their obligation to complete the work or from any other of their obligations or liabilities under the contract. Taxes as applicable rate on LD amount if any will be levied

i) **Validity:**

The offered price is valid for 90 (**Ninety**) days, from the date of quotation.

j) Filled in enquiry and required document are to be physically deposited at the office of Tendering Authority **Sr. Dy. Manager [P&E Div.-II, Operational Administrative Building(1st floor), Haldia Dock Complex, Chiranjibpur, Haldia, PIN:721604]**, separately in a one sealed envelope, mentioning Tender Enquiry no. with proper marking.

i)	<b>Starting date &amp; time of submission of bid</b>	::	<b>14.01.2020 from 11:00 Hrs. (IST).</b>
ii)	<b>Closing date &amp; time of submission bid</b>	::	<b>29.01.2020 up to 15:00 Hrs. (IST).</b>
iii)	<b>Date &amp; time of opening of Bid (Techno-commercial Bid and Price Bid)</b>	::	<b>29.01.2020 up to 15:30 Hrs. (IST) onwards.</b>

k) **Contact Person:**

Shri R.N.Roy,  
Sr. Dy. Manager (P&E),  
Haldia Dock Complex,  
Operational Administrative Building (1<sup>st</sup> floor),  
Chiranjibpur; P.O. Haldia; Dist. Purba Medinipur;  
PIN: 721 604; West Bengal; India.  
**Telephone no. : + 91-3224-252526 ; e-mail : rnroy.hdc@nic.in**

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**Annual Shutdown Maintenance of different H.T. & L.T. equipments, installed at different locations/ sub-stations of Haldia Dock Complex, under Chiranjibpur Power House Section.**

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**Scope of Work**

**A) 33/11/3.3KVH.T. Oil Circuit Breaker/ BOCB**

**1. Moving Truck Carriage Assembly:**

- Checking of Insulating Oil and filtration of the same (minimum acceptance value 40 KV), if required. Checking of Oil level and topping-up with filtered oil, if required.
- Cleaning of Moving Contact along with Arcing Contact assembly. Removal of Burrs / uneven surface by filing.
- Cleaning of Arc Chutes.[Checking of IR Values post cleaning].
- Cleaning and adjustment of Moving Contact Bridge.
- Checking and cleaning of Auxiliary Contact assembly.
- Checking of tripping assembly of the Breaker with external battery (voltage supply).

**2. Fixed Portion:**

- Checking and cleaning of spouts.
- Smear with thin layer of petroleum jelly.
- Checking and cleaning of TULIP Contact assembly.

**3. Checking of Breaker Assembly:**

- Checking of Breaker Locking arrangement.
- Checking of tripping of Circuit Breaker with manual operation of the Relay.
- Check Insulation Resistance of the Circuit Breaker with a 2500 V Meggar and note the value
- Replacement of Gasket assembly.
- If required replacement of star washers, neoprene rubber

**4. Checking of Control circuit and Accessories of Circuit Breaker**

- Checking of Rotary – Selector switch along with terminal connection at Voltmeter and Ammeter.
- Checking of connection at Terminal Block of the Control wires.
- Checking of secondary PT Fuse of the Circuit Breaker.
- Checking of Indicating Lamps (replacement, if required).

**B) L.T. Oil Circuit Breaker**

- Cleaning of dust/foreign materials from oil surfaces of the Circuit Breaker.
- Remove Circuit Breaker Top Cover and bring the oil-tank of the Breaker to inspection position.
- Cleaning inside of the Circuit Breaker Top Chamber.
- Check and clean all parts/components. Cleaning of Moving Contact along with Arcing Contact assembly. Removal of Burrs / uneven surface by filing. Replacements of Copper contacts
- Tightening of nuts, bolts, etc.,
- Checking and tightening of CT Secondary wire Terminals- NO VOLT Coil Terminals, etc.

- Mechanism of the Circuit Breaker to be checked, cleaned and smeared with thin layer of machine oil for lubricating in the different moving parts.
- Replacement of gaskets.
- Replacement of CT, Fuse terminals, wiring, Breaker Plug Boards/ Panel side plug boards.
- Adjustment of relay setting.
- Check Insulation Resistance of the Circuit Breaker with a 500 V Meggar and note the value

### **C) 33/11/3.3KV Indoor/ Outdoor TYPE P.T**

- Cleaning of Plug – in position and contact of P.T.
- Checking of locking arrangement of P.T.
- Checking of dielectric strength of oil (if required TOP up will filtered oil).
- Checking and cleaning of Insulators.
- Checking of P.T. Secondary Fuses.
- Cleaning of PT contact tips and Bus bar
- Checking of earthing.
- Cleaning and tightness checking of PT connection with bus bars.
- Check Insulation Resistance of the Circuit Breaker with a 2500 V Meggar and note the value

### **D) 33/11/3.3KV Indoor/ Outdoor TYPE C.T**

- Checking of dielectric strength of oil (if required TOP up will filtered oil).
- Checking and cleaning of Insulators.
- Checking of CT. Secondary Fuses.
- Cleaning of CT contact tips and Bus bar
- Checking of earthing.
- Cleaning and tightness checking of CT connection with bus bars.
- Check Insulation Resistance of the Circuit Breaker with a 2500 V Meggar and note the value

### **E) 33KV MOCB**

#### **1. Pole Assembly:**

- Checking of Insulating Oil and filtration of the same (minimum acceptance value 40 KV), if required. Checking of Oil level and topping-up with filtered oil, if required.
- Cleaning of Moving Contact along with Arcing Contact assembly. Removal of Burrs / uneven surface by filing.
- Cleaning of Arc Chutes.[Checking of IR Values post cleaning].
- Cleaning and adjustment of Moving Contact.
- Checking and cleaning of Auxiliary Contact assembly.
- Checking of tripping assembly of the Breaker with external battery (voltage supply).
- Checking and cleaning of spouts.
- Smear with thin layer of petroleum jelly.

#### **2 Checking of Breaker Assembly:**

- Checking of Breaker Locking arrangement including spring charging.
- Checking of tripping of Circuit Breaker with manual operation of the Relay.
- Check Insulation Resistance of the Circuit Breaker with a 2500 V Meggar and note the value

### 3 Checking of Control circuit and Accessories of Circuit Breaker

- Checking of Rotary – Selector switch along with terminal connection at Voltmeter and Ammeter.
- Checking of connection at Terminal Block of the Control wires.
- Checking of secondary PT Fuse of the Circuit Breaker.
- Checking of Indicating Lamps (replacement, if required).

### F) Transformers.

- Cleaning of Bushings and Arcing Horns.
- Checking and Tightening of connection from Circuit Breaker to Transformer.
- OFF – LOAD Filtration of Insulating Oil, topping – up, if required (minimum acceptance value 40KV at 4mm. gap)
- Checking of Silica Gel in the Breather (replacement, if required).
- Cleaning of Transformer surface.
- Proper tightness of radiator valves.

### G) 33KV Aluminium Pipe bus bars.

- Cleaning of Bushings and Arcing Horns.
- Checking and Tightening of connection.
- Replacement of Aluminium binding Tape for Proper tightness of connections.
- Replacement of Damaged AAAC conductors teeing of Aluminium binding Tapes.
- Replacement of MS Nuts, Bolts, & Washers.
- Replacement of PG Clamps, DOG Clamps etc.

### H) 33KV Gang Isolators.

- Cleaning of Bushings and Arcing Horns.
- Checking and Tightening of connection.
- Replacement of Aluminium binding Tape for Proper tightness of connections.
- Replacement of Damaged AAAC conductors teeing of Aluminium binding Tapes.
- Cleaning if required, Replacement of MS Nuts, Bolts, & Washers.
- Cleaning if required, Replacement of PG Clamps, DOG Clamps etc.
- Servicing of Moving assembly of Isolator.
- Cleaning if required, Replacement of Copper contacts.(if Damaged). Re-assembly of Fixed Contacts and checking of spring tension of the contact.
- Checking of correct position of Limit Switch and function of the same.