Syama Prasad Mookerjee Port, Kolkata HALDIA DOCK COMPLEX AN ISO-9001:2015 ORGANISATION Plant & Equipment (P&E) Division Operational administrative Building (1<sup>st</sup> Floor), Chiranjibpur; P.O.: Haldia, Dist.: Purba Medinipur, West Bengal, Pin – 721 604.



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# No. SDM(P&E)/553 Calibration/ ENQ /30

Date: 11.02.2021

# 'REQUEST FOR SUBMISSION OF OFFER'

M/s. -----

Dear Sir,

# <u>Subject:</u> Enquiry for packing/unpacking and repacking of Measuring Instrument/Tools of Haldia Dock Complex, SMP, for to & fro Journey by HDC's road transport from Haldia to Kolkata and back, for the purpose of calibration.

You are requested to submit your sealed offer, in triplicate, for proper packing of different types of measuring instruments/tools, as mentioned in enclosed Annexure - L (2020) of Haldia Dock Complex, for protection against any damage, loss & breakage during transportation from Haldia to Kolkata and back, for the purpose of calibration. Your offer should be based upon the enclosed **Terms & Conditions, Scope of work and Bill of Quantities.** 

You are requested to observe the following, in totality, while submitting your offer.

# The offer is to be submitted in three parts.

Part – I - Earnest Money (Bid Security Declaration) Part- II - Techno-Commercial Bid (Un-priced) Part-III - Price Bid.

**Part-I:** No Earnest Money is required to be deposited to Haldia Dock Complex, Syama Prasad Mookerjee Port Trust, Kolkata. All bidders shall submit a "Bid Security Declaration" as per format attached as "Annexure-E (EM)". The said document in original is to be submitted separately in a sealed envelope superscribing <u>'Earnest Money'</u> & <u>"Enquiry No. SDM(P&E)/553 Calibration/ ENQ /30 Dt. 11.02.2021"</u>

**<u>Part-II:</u>** The Techno-Commercial Bid (Un-Priced) should be submitted in a sealed envelope distinctly superscribing "TECHNO-COMMERCIAL BID" (Un-priced), "Enquiry No" & "Due Date of Submission" on the sealed envelope. The Techno-Commercial Bid should contain:-

- a. Complete set of the Enquiry letter, duly signed & stamped, as token of acceptance of the terms & conditions and Scope of work etc.
- b. Un-priced Bill of Quantities, indicating that the quotation has been made exactly as per the "Bill of Quantities Priced" of the Enquiry Document.
- c. A declaration that PRICE BID does not contain anything, other than Bill of Quantities and Price.
- d. All documents and declarations, as mentioned in the Enquiry.

<u>**Part –III:**</u> The Price Bid as per Bill of Quantities of the Enquiry should further be submitted in a sealed envelope, distinctly superscribing "PRICE-DO NOT OPEN". No extraneous clause shall be included in the Priced Bill of Quantities.

## Page no. 2

# Enquiry no. SDM(P&E)/553 Calibration/ ENQ /30 Date: 11.02.2021 (Continued.....)

All sealed envelopes, under Part-I, II & III above should be sealed inside a bigger envelope and this bigger envelope, superscribed with the Enquiry Number, Due date & Contents of the envelope, is to be submitted at the office of Plant & Equipment Division, Haldia Dock Complex, within scheduled date and time of submission. Each of the envelopes should also be superscribed with Enquiry Number, Date and the contents on the cover distinctly.

It is requested to submit your sealed offer, in triplicate positively within 14:00 hrs. of 04.03.2021.

Techno-commercial Bid (Part-II) along will Part-I, will be opened at 15:30 hrs. on 04.03.2021, at the **Office of Plant & Equipment Division, Operational Administrative Building, Chiranjibpur, Post: Haldia, Dist.: Purba Medinipur, Pin - 721604.** You may depute your authorized representative to be present during opening of the offer(s).

## Price bids of only techno-commercially qualified bidders will be opened with due intimation.

In case of unscheduled Holiday/ Bandh on the above mentioned date of submission / opening of the Bid, the same shall be submitted / opened on the next working day at the same time stipulated earlier. You should note that due dates of the enquiry will not be extended in any case.

## Encl: As stated above.

Thanking you, Yours faithfully,

(S.Chakrabarty) Sr. Dy. Manager (P&E), for General Manager (Engg.), Haldia Dock Complex, Syama Prasad Mookerjee Port, Kolkata

#### Scope of Work

#### The job involves -

- Packing at Haldia and repacking at Kolkata of each & individual measuring instrument/tool to suit as per respective shape and size of the instrument/tool with the following packing materials:
   4-ply board, Thermo coal Sheet, paper cutting/flake, Foam/Rubber Sheet, Jute cloth, binding strip & clip etc. Due care must be given during packing and repacking that no instrument/tool gets damage. The packing and repacking should be made upto the satisfaction of Sr. Dy. Manager (P&E),HDC or his authorized representative, in all respect.
- 2. : Marking of each & individual packing box containing with instruments/tools by paint, wherein the Identification no. of the respective instrument/tools as per the enclosed list of instruments should clearly be mentioned.
- 3. : A group of 8 (eight) to 10 (Ten) Nos. individual small packing boxes to be kept inside the bigger wooden packing boxes and should be marked by paints/marker pen, showing the Identification Nos. of the instruments/tools contained thereof.
- 4. : The above packing work of the listed Measuring Instruments/Tools are to be done at Loco Section of P&E Division, under HDC, to make them ready in all respects for despatching the same for calibration at M/s. Electronics Regional Test Laboratory (East), Kolkata, hereafter will be called as M/s. ERTL (East). Transport will be provided by HDC for carrying the instruments from HDC's premises at Haldia to M/s. ERTL (East), Kolkata.
- 5. : On reaching the above packing boxes at the premises of M/s. ERTL (East), Kolkata (address is given below), to unpack/remove the measuring instruments/tools, from the packing boxes for handing over the same for calibration at M/s. ERTL (East), Kolkata.
- 6. : On subsequent date after completion of calibration of the listed measuring instruments/tools at the premises of M/s. ERTL (East), Kolkata, the same should be repacked carefully and repacking work should be carried out at the premises of M/s. ERTL (East), Kolkata (address is given below).
- 7. : After repacking, all the packed materials will be transported and returned to Loco Section of P&E Division, under HDC. Transport will be provided by HDC for carrying the measuring instruments/tools from M/s. ERTL (East), Kolkata to Loco Section of P&E Division, under HDC, at Haldia. However after return of the same at Loco Section of P&E Division, under HDC, at Haldia, the contractor have to unpack the measuring instruments/tools from the packing boxes.
- 8. : Quantity: Quantity of instruments/tools will be as per enclosed Annexure-L (2020), quantity of which may vary.
- 9. : Address of M/s. Electronics Regional Test Laboratory (East) at Kolkata:-Block-DN, Sector –V, Salt Lake City, Kolkata – 700 091

# **Terms & Conditions**

#### 1. : **Price :**

The price to be quoted should remain firm and should be inclusive of all taxes and other charges etc as applicable and on consolidated/Lump-sum basis.

#### 2. : **Price variation:**

The prices, other than statutory taxes as applicable, shall be firm and fixed till completion of the work.

#### 3. : <u>Payment Terms :</u>

50% payment will be made on completion of handing over of all the ordered instruments at the office of M/s. ERTL (East), Laboratory, Kolkata [hereinafter will be called as M/s. ERTL (East)], within 30 days after receipt of clear & un-ambiguous bills along with all necessary documents.

Balance 50% payment will be made on completion of the job, within 30 days after receipt of clear & unambiguous bills along with all necessary documents.

#### 4. : <u>Completion Period :</u>

- 4.1 : Packing: The job will have to be completed within 15 (fifteen) working days after receipt of order from Plant & Equipment Division or as communicated/confirmed from the office of Plant & Equipment Division.
- 4.2 : Repacking job at the premises of M/s. ERTL (East) will have to be taken up by the contractor within 03 (three) days after receipt of intimation/confirmation from the office of Plant & Equipment Division & the repacking work will have to be completed within 03 (three) working days there after at the premises of M/s. ERTL (East), Kolkata.
- 4.3 : After receipt of the packed materials at Loco Section, under Plant & Equipment Division, HDC, at Haldia, unpacking work will have to be completed within 03 (three) working days after receipt of intimation/confirmation from the office of Plant & Equipment Division.

#### 5. : Handling of the instrument/tools while being packed :-

Adequate care should be taken, so that none of instruments/tools get any damage while being packed, unpacked and repacked by labours of the contractor both at Haldia and at Kolkata.

## 6. : <u>Validity :</u>

The validity of the offer should not be less than 90 days from the actual date of opening of the offer.

# 7. : Eligibility Criteria :

The bidders should enclose with their offer <u>photo copies of valid GST registration Certificate (if applicable)</u>, which in original shall be produced when demanded for inspection.

#### 8. : Evaluation of Price-Bid and selection of Successful Bidder:

While evaluating the Price Bids, the Total amount (in Rs.) on consolidated/lump sum basis, as quoted by the Bidders as per **Price Bid Schedule** shall be taken into account and will be considered for evaluation. Selection of the successful bidder will be made on the basis of the "lowest TOTAL PRICE" thus arrived. In case it is found that the quoted "TOTAL PRICE" is same for two or more bidders and their bids become the lowest, the respective bidders will be given chance to submit their fresh Price Bid, subject to the condition that the fresh rate so quoted must be less than the rate quoted by the respective bidders earlier. Selection of the successful bidder will be made on the basis of the revised "lowest TOTAL PRICE" thus obtained.

#### 9. : <u>Earnest Money :</u>

No Earnest Money is required to be deposited to Haldia Dock Complex, Syama Prasad Mookerjee Port Trust, Kolkata. All bidders shall submit a "Bid Security Declaration" as per format attached as "Annexure-E (EM)".

# 10. : Access to Site / Gate Pass:

In connection with execution of the order, the contractor shall have to abide by the rules and regulations of HDC, SMP, which may be varied time to time, in respect of entry / exit and movement in the premises. Necessary **Gate Pass** for entering into the Dock area will be issued for the personnel, equipment, machineries, materials etc. of the contractor for execution of the instant work <u>on payment of necessary</u> charges as per rules then prevailing, on the basis of written request from the contractor.

Haldia Dock Complex is presently in the process of introducing RFID based Dock Entry Permits and the present system of issuing paper permits will be phased out. With a view to strengthen security of the dock, it has been decided that photocopy of proof of identity has to be submitted for one-time registration of all the individuals seeking man permits. The following documents will be considered as a valid proof of identity.

- Passport (Relevant pages with photo & address)
- Driving License.
- Voter ID Card (EPIC).
- AADHAAR (UID).
- Income Tax PAN Card.

Please note that document substantiating proof of identity is required to be submitted once for each individual. For getting subsequent permits, the sponsoring firms may quote ID number and type of ID of the individual which was submitted initially for registration.

#### 11. : Liquidated Damage Clause:

In the event of party's failure to execute the contract within the stipulated date(s) or such extension(s) thereof, as may be allowed by HDC,SMP, in writing, the contractor will be required to pay as compensation to the Trustees and not as penalty @  $\frac{1}{2}$ % for every week or part thereof 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. The Trustees may, without prejudice to any other method of recovery, deduct the amount from any money due to the contractor. Such deduction of such damages shall not relieve the contractor from his obligation to complete the work or liabilities under the contract.

# 12. : The bidder(s) shall have to give a declaration that their firm have not been banned or de-listed by any Government or Quasi-Government agencies or PSUs.

13. : Syama Prasad Mookerjee Port, Kolkata reserves the right to accept or reject the offer in part or as a whole and do not bind themselves to accept the offer or to assign any reason thereof and no damage claim whatsoever will be payable by Syama Prasad Mookerjee Port. Mere issuance of enquiry document or opening of offer shall not construe that the bidder is considered automatically qualified.

#### 14. : **Price Bid :**

The Price Bid as per Bill of Quantities of the Enquiry should be submitted in a separate sealed envelope, distinctly superscribing "PRICE-DO NOT OPEN", as mentioned in Sl. No. c) – Part- III of the enquiry. No extraneous clause shall be included in the Priced Bill of Quantities. The sealed price bid is to be attached separately with the sealed envelopes, as mentioned against sl. no. a) – Part- I & b)- Part- II of the enquiry letter.

All the **three** sealed envelopes under Part-I, II & III above should be sealed inside a **bigger envelope** and this bigger envelope, superscribed with Enquiry No. SDM(P&E)/553 Calibration/ ENQ /30 Date: 11.02.2021, Do not open before 15:30 hrs. of 04.03.2021 & Contents of the envelope, are to be submitted at the Office of Plant & Equipment Division, Haldia Dock Complex, Operational Administrative Building, Chiranjibpur, Post: Haldia, Dist.: Purba Medinipur, Pin - 721604., within scheduled date and time of submission. Each of the envelopes should also be superscribed with Enquiry Number, Date and the contents on the cover distinctly.

# PRICE BID BILL OF QUANTITIES

SI.	Description of work	Total basic amount (in Rs.) on	Appli	cable % o	cable % of GST	
No.		consolidated/lump sum basis exclusive of GST charges etc. as applicable for all the listed instruments/tools [Annexure – L (2020)]. (The amount should be written in digit followed by text.)	SGST	CGST	IGST	
1	Packing work of the listed measuring instruments/tools [as per Annexure – L (2020)] at Loco section under P&E Division, HDC, unpacking of the same at the premises of M/s. ERTL (East), Kolkata. Repacking of items, as per Annexure – L (2020), after calibration, at the premises of M/s. ERTL (East), Kolkata and finally unpacking of the same at Loco section under P&E Division, HDC, as per scope of work and terms & conditions of the enquiry.					

Full signature and seal of the bidder

#### **Bid Security Declaration Format**

#### Annexure-E (EM)

#### Packing/unpacking and repacking of Measuring Instrument/Tools of Haldia Dock Complex, SMP, for to & fro Journey by HDC's road transport from Haldia to Kolkata and back, for the purpose of calibration.

To, General Manager (Engg.), Haldia Dock Complex; Syama Prasasd Mookerjee Port, Kolkata

I/We, the undersigned, declare that: I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of three years from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity

- (i) fail or reuse to execute the contract, if required, or
- (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of

- (i) the receipt of your notification of the name of the successful Bidder; or
- (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)

Name: (insert complete name of person signing the Bid Securing Declaration)

Dated on \_\_\_\_\_ day of \_\_\_\_\_ (insert date of signing)

Corporate Seal:

		INSTRUME	NTS FOR CALIBRATIC			Annexure	
Enq. Sl No.	Order sl. No.	Section wise Sl no.	HDC Section	Section I.D.No.	Intrument /Tools	Range	Calibration Place (ERTL Lab. / HDC on site)
75	72	8		P&E/OCB/14	HandDrivengeneratortypeInsulationTester,(M/cno.53643)	1000 Volts, DC, 0 –2000 M Ohm & Infinity	ERTL
76	73	9		P&E/OCB/17	generator type Insulation	500 Volts, DC, 0 Ohm –1000 M Ohm & Infinity.	
77	74	10		P&E/OCB/18		500 Volts, DC, 0 –1000 M Ohm & Infinity	
78	75	11		P&E/OCB/21	Secondary Current (Relay) test set, 230 V, Single Phase, 50 Hz, M/c No. 200909428	1500 VA	ERTL
79	76	12	•	P&E/OCB/24	Digital Clamp Meter [M/C no. 1502203]	AC-750 V, DC- 1000 V, 400 V, 400 A, 2000 A	
80	77	13		P&E/OCB/25	Motor Checker	300 mH, 80 ohm, 500V, 0- 20 M ohm & Infinity.	ERTL
81	78	14	•	P&E/OCB/26	Inside Micrometer		ERTL
82	79	15		P&E/OCB/28	Dial Gauge	10.0 mm	ERTL
83	80	16		P&E/OCB/29	Dial Gauge,[Type J02, Reading 0.01 mm]	10.0 mm	ERTL
84	81	17		P&E/OCB/30	Digital Vernier	12"	ERTL
85	82	18		P&E/OCB/31	Dial Vernier,[Sl No. 38B050], Make: Mitutoyo.	300 mm	ERTL
86	83	New-1		P&E/OCB/34	Lux Meter 2727 Sl. no. Q 639655 Made in Taiwan	Range A : 0- 1999 X 1 LUX Range B : 2000 19990 X 10 LUX Range C : 20000-50000 X 100 LUX	
88	84	1	CHIRANJIBPUR	P&E/PH/01	AC KV Meter	110V(33KV/11	ERTL
89	85	2		P&E/PH/02	AC Ammeter	5A(120A/5A)	ERTL
90	86	3	DIVISION: PLANT & EQUIPMENT	P&E/PH/03	AC KV Meter	110V(33KV/11 0V)	
91	87	4	4	P&E/PH/04	A.C. Ammeter	5A(120A/5A)	ERTL
92	88	5		P&E/PH/05	AC KV Meter	110V(33KV)/1 10V	
93	89	6		P&E/PH/09	AC KV Meter	15KV (11KV)/ 110V	ERTL

L	IST OF	INSTRUME	NTS FOR CALIBRAT	ION		Annexure	e-L (2020)
Enq. Sl		Section wise	HDC Section	Section I.D.No.	Intrument /Tools	Range	Calibration
No.	sl. No.	Sl no.					Place (ERTL
							Lab. / HDC on
							site)
94	90	7			Matan	1000 V-16-	ERTL
94	90	/		M/P&E/PH/12	Motor operated Insulation Tester	DC, 20 M Ohm	
					insulation rester	–20000 M Ohm	
						& infinity.	
95	91	8		M/P&E/PH/13	Motor operated	2500 Volts	ERTL
,5	71	0		WI/1 &L/111/15	Insulation Tester	DC, 50 M Ohm	
					insulation rester	-50000 M Ohm	
						& Infinity.	
						& minity.	
96	92	9		M/P&E/PH/15	Motor operated	2500 Volts	ERTL
70	12	,		101/1 QL/1 11/15	Insulation Tester	DC, 0 Ohm	
					mountation rester	-10000  M Ohm	
						& Infinity.	
						æ minity.	
97	93	10		M/P&E/PH/16	Hand operated	500 Volts, DC,	ERTL
						0 Ohm $-1000$	
						M Ohm &	
						Infinity.	
98	94	11		M/P&E/PH/17	Hand operated	500 Volts, DC,	ERTL
70	<i></i>					0 Ohm $-1000$	
						M Ohm &	
						Infinity.	
99	95	12		P&E/PH/040	A.C. Voltmeter	0-	ERTL
,,,	)5	12		1 0 1 1 0 10	The voluneter	0 750V(750/7.5V	LKIL
						)	
100	96	13		M(P&E)/PH/112	Heat Gauge	0 – 600°C	ERTL
101	97	14		M(P&E)/PH/19	Hand operated	5000 V, DC, 0	ERTL
					Insulation Tester	$\Omega$ to 20000 M	
						$\Omega$ & infinity	
102	98	15		M(P&E)/PH/21	Secondary Current	0-150 A, 1500	ERTL
					Injection Set	VA	
103	99	16		M(P&E)/PH/22		0-50000 Lux	ERTL
					Meter		
104	100	17		M(P&E)/PH/23		0-50000 Lux	ERTL
					Meter		
105	101	18		M(P&E)/PH/24	Digital Micro-ohm	0- 200 m Ω	ERTL
100	102	10			meter	0.650 ° C	EDTI
106 107	102 103	19		M(P&E)/PH/26 M(P&E)/PH/27	Heat Gauge	0-650 ° C 0-650 ° C	ERTL
107	103	20 21		M(P&E)/PH/27 M(P&E)/PH/28	Heat Gauge Heat Gauge	0-650 °C 0-600 °C	ERTL ERTL
108	104	21 22		M(P&E)/PH/28 M(P&E)/PH/29	Heat Gauge	0-600 °C	ERTL
109	105	22		M(P&E)/PH/29 M(P&E)/PH/31	Heat Gauge	0-600 °C	ERTL
110	100	23		M(P&E)/PH/32	Heat Gauge	0-600 ° C	ERTL
112	107	24		M(P&E)/PH/33	Heat Gauge	0-600 ° C	ERTL
112	103	26		M(P&E)/PH/34	Heat Gauge	0-600 ° C	ERTL
113	110	20		M(P&E)/PH/37	Heat Gauge	0-600 ° C	ERTL
115	111	28		M(P&E)/PH/38	Heat Gauge	0-600 ° C	ERTL
116	112	29		M(P&E)/PH/39	Heat Gauge	0-600 ° C	ERTL
117	113	30		M(P&E)/PH/42	Heat Gauge	0-600 ° C	ERTL
118	114	31		M(P&E)/PH/43	Heat Gauge	0-600 ° C	ERTL
118	114	31		M(P&E)/PH/43 M(P&E)/PH/44	Heat Gauge	0-600 °C	ERTL
119	115	33		M(P&E)/PH/45	Heat Gauge	0-600 ° C	ERTL
120	117	34		M(P&E)/PH/47	Heat Gauge	0-600 ° C	ERTL
121		35		M(P&E)/PH/48	Heat Gauge	0-600 ° C	ERTL
	118	55					
122	118 119			. ,	Heat Gauge	0-100 ° C	ERTL
	118 119 120	36 37		M(P&E)/PH/49	Heat Gauge Heat Gauge	0-100 ° C 0-100 ° C	ERTL ERTL
122 123	119	36		. ,	Heat Gauge Heat Gauge Heat Gauge		ERTL ERTL ERTL

LI	ST OF	INSTRUME	NTS FOR CALIBRATIC	N		Annexure	e-L (2020)
Enq. Sl No.	Order sl. No.	Section wise Sl no.	HDC Section	Section I.D.No.	Intrument /Tools	Range	Calibration Place (ERTL Lab. / HDC on site)
127	123	40		M(P&E)/PH/55	Heat Gauge	0-100 ° C	ERTL
128	124	41		M(P&E)/PH/56	Heat Gauge	0-100 ° C	ERTL
129	125	42		M(P&E)/PH/57	Heat Gauge	0-100 ° C	ERTL
130	126	43		M(P&E)/PH/58	Heat Gauge	0-100 ° C	ERTL
131	127	44		M(P&E)/PH/59	Heat Gauge	0-100 ° C	ERTL
132	128	45		M(P&E)/PH/60	Heat Gauge	0-100 ° C	ERTL
133	129	46		M(P&E)/PH/63	Heat Gauge	0-100 ° C	ERTL
134	130	47		M(P&E)/PH/64	Heat Gauge	0-100 ° C	ERTL
135	131	48		M(P&E)/PH/65	Heat Gauge	0-100 ° C	ERTL
136	132	49		M(P&E)/PH/66	Heat Gauge	0-100 ° C	ERTL
137	133	50		M(P&E)/PH/67	Heat Gauge	0-100 ° C	ERTL
138	134	51		M(P&E)/PH/71	Heat Gauge	0-100 ° C	ERTL
139	135	52		M(P&E)/PH/72	Heat Gauge	0-100 ° C	ERTL
140	136	53		M(P&E)/PH/73	Motor Checker	0-60 Ω,0-300 mH	
141	137	54		M(P&E)/PH/76	Hand operated Insulation Tester	1000 Volts, DC. 0 Ohm - 5000 M Ohm & Infinity.	ERTL
142	138	55		M(P&E)/PH/77	Hand operated Insulation Tester	1000 Volts, DC. 0 Ohm - 5000 M Ohm & Infinity.	ERTL
143	139	56		M(P&E)/PH/78	Earth Tester, (DET – 2000)	0 – 20 Ohms, O – 200 Ohms	ERTL
144	140	1	1st & 2nd OIL JETTY,	P&E/2OJ/04	Voltmeter D.C.	0-200V	ERTL
145	141	2	DIVISION: PLANT &	P&E/2OJ/014	Voltmeter A.C.	110V	ERTL
146	142	3	EQUIPMENT	P&E/2OJ/024			ERTL
		5			meter	750V, 20A, 200A, 600A, 200Ω, 2KΩ.	
147	143	4		P&E/2OJ/042	Ammeter A.C	1A (150A/ 1A)	ERTL
148	144	5		P&E/2OJ/015	Voltmeter A.C.	0-4 KV , (C.T. Ratio: 3.3 KV/110 V)	
149	145	6		P&E/2OJ	Ammeter, A.C	0-400 A , (C.T. Ratio: 400A/5A)	ERTL
150	146	7		P&E/BW/044	Insulation Tester	500 Volts, DC, 0 Ohm –1000 M Ohm & Infinity.	
151	147	New-1		P&E/2OJ/043	Lux Meter Make : LUTRON (LX-101A) Sl. no. R 014141 Made in Taiwan		ERTL
152	148	1	CENTRAL WORKSHOP, DIVISION: PLANT &		Inside Micrometer	50-300 mm	ERTL
153	149	2	EQUIPMENT	P&E/CW/02	Outside Micrometer	50-150 mm	ERTL
154	150	3		P&E/CW/03	Vernier Caliper	0-300 mm	ERTL

L	IST OF	INSTRUME	NTS FOR CALIBRATIC	DN		Annexure	-L (2020)
Enq. Sl No.	Order sl. No.	Section wise Sl no.	HDC Section	Section I.D.No.	Intrument /Tools	Range	Calibration Place (ERTL Lab. / HDC on site)
155	151	4		P&E/CW/04	Digital AC/DC combined Clamp Meter, M/C no. 65443		
156	152	5		P&E/CW/06	Megger	2.5KV, 0-5000 MΩ	ERTL
157	153	6		P&E/CW/07	Motor Checker	20 MOHM, 500V, 60Ω, 300 mH.	ERTL
158	154	7		P&E/CW/08	Insulation Tester	500 Volts, DC, 0 Ohm –1000 M Ohm & Infinity.	
159	155	8		P&E/CW/09	Hand Driven generator type Insulation Tester	-	ERTL
160	156	9		P&E/CW/10	Hand Driven generator type Insulation Tester	2500 Volts, DC, 0 –10000 M Ohm & Infinity	ERTL
161	157	10		P&E/CW/11		500 Volts, DC, 0 Ohm –1000 M Ohm & Infinity.	
162	158	11		P&E/CW/13		2500 V DC, 50- 50000 M-ohm.	ERTL
164	159	1	G. C. BERTH EQUIPMENT, DIVISION: PLANT & EQUIPMENT	P&E/GCB/085	Analog Multimeter	2.5V,         10V,           25V,         100V,           250V,         500V,           1000V         DC,           2.5V         1000V           AC,         50mA           100mA         DC,           100mA         10A           AC,         1KΩ	ERTL
165	160	2		P&E/GCB/096	Earth Megger	0-10 Ω	ERTL
166	161	3		P&E/GCB/098	Hand Driven	500 Volts, DC, 0 Ohm – 1000 M Ohm & Infinity	
167	162	1	3RD OIL JETTY, DIVISION: PLANT & EQUIPMENT		Ammeter, A.C	0-100 A, (C.T ratio: 100 /5 A)	ERTL
168	163	2		P&E/3OJ/06	A.C Voltmeter	0-500V	ERTL
169	164	3		P&E/3OJ/10	Ammeter A.C.	0-1200 A	ERTL
170 171	165 166	4	TOWNSHIP ELECT. MAINT., DIVISION: PLANT & EQUIPMENT	P&E/30J/11 P&E/TSEM/06	DC Volt Meter Digital Clamp Meter	0-100V 1000V DC, 200V AC, 20A, 200A, 600A AC, 200Ω, 20KΩ	ERTL ERTL
172	167	2		P&E/TSEM/07	Relay Test Set.	110V, 125V, 250V AC, 500V (250V MAX) AC, 15A, 30A.	ERTL

L	IST OF	INSTRUME	NTS FOR CALIBRATIC	N		Annexure	-L (2020)
Enq. Sl No.		Section wise Sl no.	HDC Section	Section I.D.No.	Intrument /Tools	Range	Calibration Place (ERTL Lab. / HDC on site)
173	168	3		P&E/TSEM/13	AC Volt Meter	150V, 300V, 450V, 600V.	ERTL
174	169	4		HDC-14	AC Ammeter	0-6A	ERTL
175	170	5		P&E/TSEM/14	AC Volt Meter		ERTL
176	171	6		MIS-14(TSEM)	A.C. KV Meter	0-15KV (11KV / 110V)	ERTL
177	172	7		P&E/TSEM/15	AC Ammeter	0-6A	ERTL
178	173	8		P&E/TSEM/16	AC Ammeter	0-6A	ERTL
179 180	174 175	9 10		P&E/HDC-16 P&E/TSEM/17	Earth Tester Sound Level Meter		ERTL ERTL
						100dB & 80- 130dB	
181	176	11		P&E/TSEM/18	Analog Multimeter	2.5V,         10V,           25V,         100V,           250V,         500V,           1000V         DC,           2.5V         1000V           AC,         50mA           10A         DC,           100mA         10A           AC,         1KΩ           1MΩ	ERTL
182	177	12		P&E/TSEM/22	Motorized Insulation Tester, Make: CIE, Model: CIE/777, Sl. No: 30503	Volt DC: 10 – 10000 M Ohm/	ERTL
183	178	13		P&E/TSEM/23		500 Volts, DC, 0 –1000 M Ohm & Infinity	
184	179	14		P&E/TSEM/24		500 Volts, DC, 0 Ohm –1000 M Ohm & Infinity.	
185	180	New-1	CENTRAL GARAGE & WORKSHOP, DIVISION: PLANT & EQUIPMENT		Air Receiver, Pressure vessel Make-Elgi Sl. no. 57995 Horizontal type Mfg. year-1982	Maximum permissible working pressure : 12 kgf/cm <sup>2</sup> g	ERTL
186	181	New-2		P&E/CGW/02	Pressure vessel		ERTL