

**LADY HARDINGE MEDICAL COLLEGE & ASSOCIATED HOSPITALS, NEW
DELHI**

(Ministry of Health & Family Welfare, Govt. of India)

Date: 18.01.2022

Amendment No. – II

**Project Name: Electrical Work at Lady Hardinge Medical College & Associated
Hospitals, New Delhi and their Maintenance during Defect Liability
Period.**

Tender no: HSCC/LHMC/Electrical/2021.

Dear Sir,

This has reference to the pre bid meeting held on 07.01.2022 at 15:00 hrs for the captioned subject works,

Please find enclosed the following as an AMENDMENT-II / CLARIFICATION-I :-

1. Annexure-I pertains to clarifications of pre bid queries.
2. Annexure-II Drawings
3. Annexure-III list of approved makes and manufacturers

The above shall be treated as a part of tender to be submitted online duly signed & stamp along with tender.

All other terms & conditions of tender shall remain unchanged.

Prospective bidders are advised to regularly scan through HSCC e-tender portal <http://www.tenderwizard.com/HSCC> as corrigendum/amendments etc., if any, will be notified on this portal only and separate advertisement will not be made for this.

(-Sd-)

**General Manager (Projects), HSCC (I) Ltd.
For & on Behalf of Director, LHMC, New Delhi**

Electrical Work at Lady Hardinge Medical College & Associated Hospitals, New Delhi and their Maintenance during Defect Liability Period

Annexure-I

S. No.	Item No./Ref. document & page no.	Tender Specifications	Queries	HSCC Reply/ Amendment
1	List of Makes		Please provide list of approved makes.	Make List enclosed as Annexure-III
2	Master Electrical SLD		Please provide Electrical Master SLD for detailed technical details.	Rate shall be quoted as per BOQ & Specifications.
3	Volume - V (Bill of Quantities), BOQ S. No. 1.01 (Page No. 2)	Expansion of Existing HT Panel	Please provide Existing HT Panel technical details like (Make, SLD, GA etc.)	800A, 11KV 3No. VCB Panel (2 I/C, 1-O/G) of Schnieder Make. Bidder is requested to access the condition of HT at site before quoting the price
4	Volume - V (Bill of Quantities), BOQ S. No. 1.06 (Page No. 4)	11KV HT Aluminium Armoured Cable (3C, 300 sq.mm.)	HT Cable shall be Earthed or Un-Earthed type?	Earthed
5	Volume - I (Pre Qualification) (Page No. 4)	“Similar Works” shall mean “Electrical works comprising of Supply, installation testing and commissioning of LT substation equipment with one transformer of individual capacity not less than 2,000 KVA”.	<p>We have executed similar Electrical Sub Station work as below in last seven years:</p> <p>SITC of transformer capacity of 4000KVA with individual transformer capacity as (1250KVA - 1 No., 1000 KVA - 2 no. & 750 KVA - 1 no.) in BITS, Pilani, Rajasthan (Value - 10 Crores).</p> <p>SITC of transformer capacity of 2500KVA with individual transformer capacity as (1250KVA - 2 No.) in ASI, Noida (Value - 5.26 Crores).</p> <p>We had also installed, tested & commissioned 1600KVA - 8 nos. transformers at ESIC Patna. (Value - 19 Crores).</p> <p>Request you to please either remove or give relaxation in the clause of individual transformer capacity of 2000KVA so that we can also participate in this subject tender.</p>	As per tender condition.
6				
7	Item No-1.01: Expansion of HT Panel	Internal Arc Test	Internal Arc test to be considered as 0.1Sec or 1 Sec. Please confirm.	1 sec as per IEC/IS standard
8				
9	Item No- 1.01 & 1.02 : HT Panels	Earthing Truck	We will considered 1 No. Earthing truck for Busbar side & 1 earthing truck for Cable side, Please confirm.	yes, as per tender specs & Boq
10				
11	Item No-1.03, 2500KVA Oil type Transformer	Transformer will have metering CT & PT of class 0.5 including interconnection of control cables as per detailed technical specifications and as required. Transformer losses must be as per 1180 efficiency level-II or pevalent at the time of supply ammended up to date	We will provide Neutral CT & PT of class 0.5 in place of Metering CT & PT, Please confirm	Accepted

S. No.	Item No./Ref. document & page no.	Tender Specifications	Queries	HSCC Reply/ Amendment
12	Item No- 1.05	Temperature rise	Temperature rise of busduct shall be as per IEC 61439 Part 6	As per IEC 61439 Part-6 ammended uptodate
13	Item No- 1.18 & 1.19	Fabrication and Installing following size of preforted M.S Cable tray including Horizontal and vertical bends, reducers, tee, crossmember and other accessories as required and duly Suspended from the ceiling with M.S 12 mm rod suspenders and including painting etc. as required.	Please confirm Cable trays shall be Pregalvanised/Hot dipped or M.S Painted.	Hot dipped galvanized to be provided
14	Item No-2	TTA & PTTA type	We understand Main LT Panels will be TTA Type rest of other panels shall be PTTA Type, Please confirm.	Yes, Main LT Panel/APFC/ will be as per IEC-61439-I/II
15	Item No-4	Thickness of DB sheet enclosure	Thickness of DB sheet enclosure shall be as per Manufacturer standards	Accepted
16				
17	Item No-2	Fire Suppression System	We assume Fire Suppression system in Panels shall not be in our scope, Please confirm.	As per tender/Specification
18				
19	Item No- 5	MS Conduit	We will consider 20 mm minimum size of MS conduit , please confirm.	Accepted
20	Item No-6	Supporting System	We will considered Hanging support in BOQ Item No- 1.16	As per tender condition.
21	General	Liasioning Work	We assume Liasioning work not in our scope, Please confirm.	
22				
23	Tender Drawings		Please provide Tender drawings for proper calculation of conduit length in autocad format.	Rate shall be quoted as per BOQ & Specifications.
24	RCC Foundation works		We understand Associated Civil works, like RCC foundation in Panels, Electrical equipments,Cutout in Walls and floors etc shall not be in our scope. Please confirm .	As per tender specs/BOQ
25	Assignment clause.		Voltas has transfer the project business to its wholly owned subsidiary viz. Universal MEP Projects & Engineering Services Limited ('UMPEL') , which is 100% subsidiary of Voltas Limited." Voltas (A Tata Enterprise) is proposing to restructure its B2B business comprising Domestic Projects Business relating to MEP/HVAC. In view of the same, after the award of contract, job will be executed by " Universal MEP Projects & Engineering Services Limited ".	As per tender condition.
26	NIT Volume-I at Page No. 17	mentioned Volume-6 Drawing, but in tender wizard site only Volume-I to Volume-V available for downloading	Please upload Volume-VI if available.	drawing enclose at Annex-II
27				

S. No.	Item No./Ref. document & page no.	Tender Specifications	Queries	HSCC Reply/ Amendment
28	HT Panels/Main LT or Sub Panels		HT Panels/Main LT or Sub Panels manufacturers should be OEM or System integrator, please confirm	As per list of approved make
29	Transformer	The transformer mentioned in BOQ Level-II, at present basically Level – III, transformer used in project.	Please confirm it is level-II or Level-III.	efficiency Level-III
30	5. In BOQ sub head – 5 Wiring	Item no. 5.2 item description of twin control light point mentioned but the quantity of item not available in column of quantity	Can we quote for R/o for this item or left the same without quoting.	item no. 5.02 deleted
31	6. In BOQ sub head – 8 LT Cable	The supply quantity of cables is 13100 Mtr. But the installation quantity is 12500.50 Mtr., there is difference in quantity 599.5 Mtr. between supply & installation	Please clear the same.	Cable quantity shall be as per actual site requirement will be installed.
32	In BOQ Sub Head – 8 LT Cable	BOQ item no. 8.06 is it 1C x 300 sq. mm Cable or it is Cable end termination.	Please confirm.	Amendment- BOQ Item No. 8.06 to be read as Supply, Laying, Fixing, Testing & Commissioning of 1CX300sq.mm of 1.1kV grade Single core LT FRLS PVC insulated, PVC sheathed, multi strand, flexible Copper conductor Un. Ar. Cable. Including making end terminal joints complete as required.
33			As per Government notification regarding changes in GST rates in government entity projects. Please confirm what GST percentage to be considered for this project 12% or 18%.	As per tender condition.
34			If we have completion/Performance certificate for completed project direct awarded from M/s HSCC (India) Ltd. Is it compulsory to submit Performance certificate as per prescribed format given, either we can submit the performance Certificate provided earlier from M/s HSCC (India) Ltd.? Please confirm.	Yes
35			If we have already bank provided solvency certificate, is it compulsory to submit solvency certificate in prescribed format? Please confirm.	As per tender condition.
36			Kindly provide the list of approved makes of various electrical equipments like Transformers, HT Panels, LT Panels, HT cable, LT cable, Bus duct, etc	List of approved make enclosed
37			Please provide clarification whether we require separate GST for UP or not.	As per tender condition.
38			Road cutting permission for laying of HT and LT Cables will be provided by HSCC or it has to be obtained by the contractor.	As per tender condition.

S. No.	Item No./Ref. document & page no.	Tender Specifications	Queries	HSCC Reply/ Amendment
39			For approval of energisation of substation, permission will be taken from CEA or State Electrical Inspector	As per tender condition.
40			Do we need to submit the bank solvency as CPWD do not require the same and it has to be submitted only by non CPWD registered contractors?	As per tender condition.
41			Kindly divide the tender into different sub heads namely HT portion and LT portion as it will benefit the department by lowering the cost due to competition.	As per tender condition.
42			Whether inspection of the electrical equipments will be at factory or at site.	As per tender condition.
43			Do CPWD registered firms need to fulfill the work experience condition of 80%, 60% and 40% of similar works as CPWD registered firms do not require such criteria for participating and such conditions are only applicable for non CPWD registered firms	As per tender condition.
44			Do we need to submit tender fees of Rs. 10,000 as CPWD has exempted MSME's from submitting the same and we are registered with MSME	As per tender condition.
45	BOQ Sr. No. 1.01 & 1.02	HT Panel	Kindly provide the SLD for HT panel	Rate shall be quoted as per BOQ & Specifications.
46	BOQ Sr. No. 1.04	Battery Charger Panel	Kindly provide Battery charger panel specification	As per BOQ.
47	BOQ Sr. No. 3.01 , 3.02 & 3.03	MV PANELS	Kindly provide the SLD for MV panel	Rate shall be quoted as per BOQ & Specifications.

ANNEXURE-III

LIST OF APPROVED MAKES FOR ELCTRICAL SYSTEM

Contractor shall use the materials of approved make as indicated below unless specified in BOQ or as approved by the HSCC engineer incharge. The contractor shall ensure the correct selection of the approved make meeting the specifications and application duties. Before placing order for procurement, the sample of approved make shall be got verified for its suitability to the specification and application duty. However, HSCC engineer incharge reserves the right to opt for the best preferred listed make. The contractor shall quote the rates for the material and equipment as per the list of approved makes. In the event of the contractor wants to use alternate makes other than those stipulated for non availability, monopolistic attitude with proof, the contractor can send a proposal after ensuring that what he proposes at the least meets both the quality and safety standard of the stipulated makes, and the financial benefit, if any, that will accur to the client. He shall also stand full guarantee to his alternate proposal. The alternate makes can be used only after an approval accorded by the client/HSCC., whose decision will be final in this matter.

Note- Approved Main LT Panel manufacture can use their Own Manufactured items for fabrication of panels. Authorized panel builders will not be accepted.

S.No.	ITEM	MAKE
1	HT VCB Panel Board/ RMU	Siemens/L&T/ABB/Schneider
2	Transformer	ABB/Prolac/ Schneider/Alstom/Voltamp
2a	Additional Make for Dry Type Transformers	Raychem-RPG
3	Main LT Panel/ APFC panels / Active Harmonic Filter (AHF)	Siemens/ L&T/ABB/Schneider/Legrand
4	Additional make for APFC Panel/ AHF	EPCOS, Ducati
5	Synchronization Panel/AMF Panel	OEM of the DG set or above panel manufacturer as mentioned against s.no.-3
6	Diesel Engine:	Cummins/ Caterpillar/MTU/ Perkins/ Kirlosker Oil Engine Ltd.
7	Alternator:	Stamford/AVK/ Leroysoner/ Kirlosker Oil Engine Ltd.
8	Fastener	Hilti/ Fisher or equivalent as approved by HSCC
9	Anti-vibration mounting:	Dunlop, Gerb, resistoflex
10	Bus Duct/Rising main	L&T/ABB/Siemens/Schneider/GE/ Legrand/C&S

- **Equivalent makes can be added with price adjustment with the prior approval of Engineer-in-charge**

11.	Battery:	Panasonic/Hitachi/Cummins/Exide/Amar Raja
11a	Automatic Battery Charger	Max Power/Voltstat/Amar Raja/Chabbi Electrical
12.	MV panels/Fire panel/AHU Panel	Tricolite/Adlec./Sterling &Wilson / Control & Switchgear/Nitya Electro Control Pvt. Ltd./SPC Electrotech/Neptune/Risha Control Engineers Pvt. Ltd./Milestone
13.	ACB	L &T 'U' Power(Omega)/ Siemens 3WL/ ABB/ Legrand(DMX)/ Schneider (NW- Master Pact)
14.	Moulded Case Circuit Breaker	L &T – (D sine/DL) / Siemens-VA/ ABB / Schneider – (NSX/NS) /Legrand-DPX
15.	Power/auxiliary Contactors, timers, Relay, starters	ABB/ Schneider/ L&T/ Siemens
16.	AMF Relay	wood ward/Schneider/Siemens
17.	SFU with HRC	L&T/ Siemens/ ABB/ Schneider/GE
18.	Change over switches/Isolators	Schneider / Siemens/ABB/GE/L&T
19.	Instruments (Analog & Digital)	L&T/ AE/ Siemens/ Schneider/ABB
20.	Timers	Legrand/ L&T/ Siemens/ ABB
21.	Cast resin current Transformers:	AE/L&T /Kappa/Newtek
22.	Selector Switches:	L&T /KAYCEE/ Siemens
23.	Push button, Indicating Lamps LED:	L&T(selzer, Esbee) /Siemens/Schinder/Rishab
24.	Auto manual changeover switches (3Way)	Kaycee/L&T/ Schnieder/Siemens

- **Equivalent makes can be added with price adjustment with the prior approval of Engineer-in-charge**

25	MCB distribution Boards	L &T/Hager/Legrand/ Siemens/ Schneider/GE /ABB-Itus/ Philips
26	RCCB/MCB	L & T / Legrand-DX3/ Siemens / Schenider –Acti 9/GE/ Hager/Philips/ABB-SB
27	HT/LT- XLPE cables	CCI/Universal/Finolex/Rallison/Bonton
28	Copper Control cable	CCI/ Universal-Unistar/Finolex/ Rallison/Bonton
29	Compression Glands & Lugs	Comet/ Dowells/Metalcraft
30	PVC Tape	Steel Grip/3M/Burger
31	Cable Jointing kit	Raychem / 3M/Denson
32.	Cable Trays/ Raceways	OBO/ Legrand/ Cooper/BEC
33	Terminal Strips	Elmex/ Connectwell/ Technoplast
34	LED light fitting & Fixture	Philips / GE/ Crompton Greaves/Bajaj/Orient
35	MS conduit	BEC/ AKG/ Steel Kraft

- **Equivalent makes can be added with price adjustment with the prior approval of Engineer-in-charge**

36	PVC conduit	Supreme/Prince/Finolex/AKG/BEC
37	Conduit accessories MS & PVC(ISI Marked)	Supreme/Prince/Finolex/AKG/BEC/ Steal kraft
38	Solar Power system(PV Cell)	TATA Power Solar, CEL, BHEL, BEL
39	Copper conductor PVC insulated wires, Co-axial , Telephone wires & cables	L&T/ Batra Henlay/ Bonton/Havells/Rallision/RR Kabel/Finolex
40	Additional make for telephone wire & cable	Delton/Fusion polymer
41	Modular Switches & sockets Outlets	Legrand-Myrius or Anti bacterial/L&T Oris/ Schneider -Livia / Philips -Sleek /ABB(Tvisha)
42	Metal clad Socket outlets With boxes	L & T /Hager/ Siemens/ Schneider/ ABB/Legrand /HPL
43	Lighting protection	ABB/Erico/Galaxy electrode /Earth plus/OBO
44	UPS system	Schneider- MG, APC/ Eaton Power ware/ Emerson/ABB
45	High Mast poles	Crompton Greaves /Phillips/Bajaj/Surya
46	Ceiling fans	Crompton Greaves/ Orient/ Usha
47	PC with CPU and monitor etc	HP/ Compaq/Del/IBM
48	Auto Transfer switch	Cummins/Emerson-Asco/GE/ Russelectric
49	Public address system	Bosch/ Bose/ Honey well /Harman
50	CCTV camera	Pelco /Bosch/Sony/Axis
51	LCD/LED Monitor	Sony/Panasonic/Samsung/ Toshiba
52	Fire Detection System Addressable	Honeywell-Notifier/Edward/Bosch/ Siemens/Schneider

- **Equivalent makes can be added with price adjustment with the prior approval of Engineer-in-charge**

53	FDA Conventional	Honeywell/Bosch/Schneider/Cooper/Ravel
54	Portable fire extinguisher	Minimax/Ceasefire/
55	EPABX system	Avaya/ Siemens-unify/Alcatel/Cisco
56	Nurse Call bell system	Honeywell/Schreak/ Rauland/Omnitech/Daksh
57	Capacitor	Epcos, Schenider, L&T, Ducati
58	APFC Relay	Epcos, L&T, Biluk, Ducati, Schneider
59	Occupancy Sensor	Philips/ Honeywell/ Schneider/Lutron/Legrand
60	Lifts/ Dumb Waiters/Escalators	Otis /Kone/ Mitsubishi/ Scheindler/Johnson
61	BMS, field devices etc	Honeywell-Trend/L&T-Atmos/Siemens/Schneider
62	Lighting Control	Lutron/ Philips/ ABB/ Schneider/ Legrand
63	Chemical Earthing	OBO Bettermann / Erico/Furse / Ingesco/
64	Access Control System	Honeywell-Pro-3000/Schneider/Lenel/Cardex
65	Boom barrier	Magnetic/ Somfy/ RIB/FAAC
66	CAT 6 UTP, CAT 6A UTP/STP, Optical Fibre-cable	Molex/Systimax/Panduit

- **Equivalent makes can be added with price adjustment with the prior approval of Engineer-in-charge**

END OF TECHNICAL SPECIFICATION