BHARAT HEAVY ELECTRICALS LTD. NEW DELHI HUMAN RESOURCE DIVISION: CORPORATE OFFICE (ADMINISTRATION DEPARTMENT)

TENDER NO.:AA:GAX:07:ES:202

Dated: 03.03.2008

Sub: Supply, installation, testing and commissioning of Electrical Items for CIT

OWNER : BHARAT HEAVY ELECTRICALS LIMITED

LOCATION : BHEL House, Siri Fort, New Delhi-110049

ISSUED TO

(a) Name of Agency with address : M/s. with Telephone / Mobile no.

(b) Date of receipt of request for issue of tender document

(c) Date of issue of tender document :

(d) If downloaded from website, please fill the name of agency with address and Telephone / Mobile no.

Signature of issuing official



Corporate Office, BHEL House, Sirifort, Asiad, New Delhi Tele No. 011- 26001010-2233, 26493760 (Fax)

No. AA:GAX:07:ES:202 Dt. 03.03.2008

Submission of tender on 21.03.08 by 11.30 AM Due date for opening on 21.03.08 at 02.30 PM

SUB: Supply, installation, testing and commissioning of Electrical Items for CIT

We are pleased to invite offers, in sealed covers for the subject procurement. The terms & conditions of the tender are mentioned below:-

1.0 TERMS & CONDITIONS OF TENDER:

- 1.1 Enquiry No. & due date must be legibly superscribed on the envelope.
- 1.2 Tenders shall be received and opened on the due date and time as mentioned above and opening will be in the presence of tenderers or their authorized representatives who may like to be present.
- 1.3 Tenders shall be strictly in accordance with the tender specifications. Any deviations shall be listed out separately.
- 1.4 Prices shall remain valid for 60 days from the due date.
- 1.5 BHEL shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject any tender in part or full with out assigning any reason whatsoever.
- 1.6 Tenders received after due date & time are liable to be rejected.
- 1.7 BHEL reserves the right to increase or decrease the tendered quantity by + 15%.
- 1.8 Tender should be submitted along with covering letter of the party duly signed / accepted on each and every page of the tender as per the instructions given for quoting the Technical and Price bid.

- 1.9 Each tenderer have to deposit EMD of Rs.20,000.00 (Twenty Thousand only) for this tender and the same will be in the form of Pay Order or Demand Draft only, in favour of BHEL, payable at New Delhi. EMD submitted by tenderer will be forfeited if tenderer revokes his tender within validity period or increases his prices. All the technically qualified Tenderers will be deemed registered with BHEL, New Delhi for future procurements of similar nature for sending the Limited tender enquiry as and when required.
- 1.10 Each tender shall be accompanied by separate envelop carrying EMD as mentioned above failing which the tender will be rejected.
- 1.11 Successful tenderer should submit performance bank guarantee from any scheduled bank as per the prescribed format before release of 90% payment by BHEL. The value of the bank guarantee should be equivalent to 10% of order value excluding taxes and duties and it should be valid for a period of one year.

BHEL reserves the right to en-cash the performance bank guarantee in addition to other claims and penalties in the contractual obligations or in the event of termination of contract.

- 1.12 EMD of all tenderers will be returned within fifteen days from date of placement of order and acceptance by the successful tenderer.
- 1.13 Prices quoted by the parties will be firm and no escalation on account of labour or material or taxes or any reason what so ever will be payable.
- 1.14 Prices quoted by the tenderers for the items should be inclusive of all taxes and duties. These prices should be on FOR BHEL Stores basis. These prices should be inclusive of the charges for packing & forwarding, freight & insurance, loading & unloading.

The quoted prices should remain firm during the validity of the offer. The prices should be quoted in the price bid format Annexure–III (enclosed). If the prices are quoted in any other form then the bid is liable to be rejected.

- 1.15 The supply, installation, testing & commissioning of all the items should be completed in all respects within a period of 60 days from the date of issue of Purchase Order by BHEL. Otherwise, Liquidated Damages shall be imposed @ half percent of the PO value per week or part thereof and subject to a maximum of 10% of PO value.
- 1.16 Tenderers in their own interest may visit the site location etc and get fully acquainted with the prevailing working conditions and clarify all doubts before submitting the offer.

- 1.17 The party which quotes the lowest total package rate shall be L1. Normally, order shall be placed on the L1 party at lowest total package rate (Refer Price Bid Format **Annexure-III**).
- 1.18 The successful tenderer must comply with all statutory labour laws, regulations applicable i.e. like minimum wages act, timely payment of wages etc. including taking of insurance cover etc. for workers employed for installation, etc. Any obligation on account of the above will be the liability of the successful tenderer.
- 1.19 All the supplied material shall remain under warranty for a period of 12 months from the date of supply.
- 1.20 The successful tenderer should insure the material at his own cost and any loss or damage to the material, during handling, transportation, storage, installation, up till commissioning, shall be to the account of the successful tenderer.
- 1.21 The Tenderers are required to quote for all the items & no column should be left blank. Tenders for part supply or incomplete in any respect, are liable to be rejected. Tenderers shall certify in the Techno- commercial bid that prices for all the items have been quoted.
- 1.22 Technical evaluation shall be done strictly on the basis of the technical specifications cum compliance/deviation statement (Annexure-II) to be filled by the tenderer. No weight age shall be given to tenderers quoting equipment of higher specifications than required. The bids of tenderers offering equipment of lower specifications than required shall be rejected.
- 1.23 Penalty will be levied by BHEL as per relevant clauses of the Tender on account of delay, violation of contract conditions and non-performance of the successful tenderer.
- 1.24 Tenders shall be accompanied with a covering letter giving index interlinking all the documents and all pages should signed & stamped.
- 1.25 BHEL reserves the right to accept or reject any of the bid / all bids with or without deviation or cancel / withdraw the invitation for bid without assigning any reason whatsoever and in such case no tenderer shall have any claim arising out of such action by BHEL.

2.0 **QUALIFYING CRITERIA:**

2.1 Tenderer should either be a company registered under the Companies Act or a partnership/proprietorship firm.

- 2.2 The average annual financial turnover of the tenderer during the last three years ending on 31.03.2007, should not be less than Rs. 50.00 Lakhs.
- 2.3 Tenderer should have successfully executed during the last seven years ending on 29.02.2008, either of the following:
 - a) Three similar orders valuing not less than Rs.12.00 lakhs each; OR
 - b) Two similar orders valuing not less than Rs.17.00 Lakhs each; OR
 - c) One similar order valuing not less than Rs.23.00 Lakhs.

(Similar order means design, supply & installation of LT Panels, supply & laying of power cables, etc)

2.4 Tenderer should have a valid Income Tax PAN, Service Tax Registration No. & VAT Registration No.

3.0 **DOCUMENTS REQUIRED:**

- 3.1 The Tenderer shall submit documents in respect of possessing Qualifying requirements as under duly certified and stamped by his authorized signatory:
 - a) Proof three previous years IT return in support of Average Annual financial turnover as per clause no. 2.2 above.
 - b) Proof of orders or completion certificates in support of the qualifying criteria mentioned at clause no. 2.3 above with covering letter / indexing of the same.
 - c) A copy of tender enquiry duly signed on each and every page shall be submitted along with technical bid.
 - d) The technical specifications cum compliance/deviation statement (Annexure-II) duly filled up.
 - e) Price Bid format (Annexure-III) duly signed by the tenderer mentioning 'Q' in the column of prices.
 - f) Each Tenderer has to enclose the proof of Income Tax PAN, Service Tax Registration No. & VAT Registration No.
 - g) Tenderer has to submit a No deviation statement on letter head duly signed & stamped as per Annexure-V, in case there is no Technocommercial deviation.

4.0 PROCEDURE FOR SUBMISSION OF SEALED TENDERS:

- 4.1 The offer is to be submitted as required in two parts in separate sealed covers prominently superscribed as Part-2 "Price Bid" and also indicating on each of the covers the tender number and due date and time as mentioned in the tender enquiry. Envelop of Part-1"Techno-commercial Bid" shall contain documents required in Para 3.0 above and Part-2 "Price Bid" shall contain price bid duly quoted in the Price format (Annexure-III). The third sealed cover shall contain required amount of EMD and shall be super scribed as EMD. These three separate covers 1, 2 and 3 shall together be enclosed in fourth envelope and this sealed cover shall be superscribed with tender number and due date. Tenders submitted without EMD will be rejected.
- 4.2 Part 1 of the bid will be opened first and scrutinized. Successful tenderers in Technical Bid (Part 1) will only be considered for opening of Price Bid (i.e. Part 2). Date of opening of Price Bid will be intimated separately to the Tenderers who qualify in the Techno-Commercial bid. BHEL, however, reserves the right to opt for reverse auction (online bidding) instead of opening of submitted sealed price bids, for determining the lowest tenderer.
- 4.3 Offers should be strictly in accordance with the tender specifications & tender terms.
- 4.4 The Tenderer should accept all terms & conditions of the tender unconditionally. In case the Tenderer wants to deviate from the tender terms & conditions, such deviations shall be clearly specified in the offer. If no deviations are given in the offer, it will be presumed that the Tenderer has accepted all terms and conditions of the tender.
- 4.5 Offers with deviations from terms and conditions of this tender are likely to be rejected.
- 4.6 Clarifications, if any, of Technical / Commercial nature, can be obtained from the officer to whom the tender is to be submitted before the tender due date.

5.0 Payment Terms

90% payment will be made within 15 days from the date of receipt of material in good condition or the date of submission of 90% invoice along with supporting documents (PBG, MRC, etc), whichever is later. Remaining 10% payment will be made within 15 days from the date of commissioning

or the date of submission of 10% invoice along with supporting documents, whichever is later. No advance payment shall be made by BHEL.

6.0 **General**

- 6.1 The material is being procured on outright purchase basis.
- 6.2 All materials shall be as per applicable Indian standards.
- 6.3 Only brand new material should be supplied by the successful tenderer.
- 6.4One set of Items is to be installed at, BHEL House, Siri Fort, New Delhi-110049. Remaining set is to be installed at HRDI & ESI Complex, Plot No.25, Sector-16A, Noida-201301.
- 6.5 Before manufacturing the panels the wiring diagram has be approved by BHEL Engineer-in-Charge.
- 6.6 Electrical distribution drawing has be prepared by the successful tenderer as per actual installation and submitted to BHEL Engineer-in-Charge.
- 6.7The material/components supplied should be of the makes mentioned in **Annexure-IV**.
- 6.8 Care should be taken by the successful tenderer while installing the equipment to avoid damage to the building. The successful tenderer shall be responsible for repairing all damages and restoring the same to their original finish at his own cost.

7.0 Installation

8.0

The installation shall include:

Bill of Quantities:

- 7.1 Minor civil work involving laying of conduit pipes/cables/wires/cable trays/cable trunks.
- 7.2 Minor civil work involving fixing of Panels, Distribution boards, etc.
- 7.3 Supply of any other minor item required for completing of installation, but left inadvertently.
- 7.4 Disconnecting existing circuits (wiring) from the existing panel & reconnecting these circuits in the new Distribution Boards.

SI. No. Description of Item Unit Qty Rate Amount (Rs.) (Rs.) The Bill of Quantities enclosed at Annexure-I.

The Technical Specifications cum Compliance/deviation Statement is enclosed at Annexure-II. The Price Bid Format is enclosed at Annexure III. The material/components supplied should be of the makes mentioned in Annexure-IV. Format for No Deviation Certificate is enclosed at Annexure-V

Please submit your lowest quotation / offers for the above requirement subject to our terms and conditions given in the above so as to reach the under mentioned on or before the due date mentioned above.

To, Rajan Yadav Manager (HR-GAX) Corporate Office, BHEL House, Siri Fort, New Delhi – 110049.

Phone no. -26001010, Extn.-2233, Fax -26493760, E-mail: admry@bhel.co.in

Thanking you,

Yours faithfully, For & on behalf of BHEL

(Rajan Yadav) Manager (HR-GAX)

Bill of Quantities (Annexure-I)

Bill of Quantities (Annexure-I)							
SN	Item Description	Unit	Qty				
	CIT ASIAD Electrical Panels, Distribution boards for Asiad						
1	Design, Manufacture & Supply of Switchboard for Asiad as per Specifications mentioned at Annexure II S.No.1	No.	1				
2	Design, Manufacture & Supply of Distribution Board-A for Asiad as per Specifications mentioned at Annexure II S.No.2	No.	1				
3	Design, Manufacture & Supply of Distribution Board-B for Asiad as per Specifications mentioned at Annexure II S.No.3	No.	1				
4	Installation of Panels from S. No. 1 to 3	Lot	1				
5	Supply of TPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link, busbar populated with following MCCBs/MCBs Incomer: 1 no. of 200 Amp MCCB with over current and short circuit thermal magnetic releases, 3P, 415V, BC-16 kA Outgoing: 4 nos. of 100 Amp TP MCB, BC-10 kA	Nos.	2				
6	Supply of TPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link, busbar protection with following MCBs Incomer: 1 no. of 100 Amp 415V TPN MCB, BC-10 kA Outgoing: 4 nos. of 50 Amp TP MCB, BC-10 kA	Nos.	2				
7	Supply of SPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link populated with following MCBs Incomer: 1 no. of 100 Amp 240V DP MCB, BC-10 kA Outgoing: 14 nos. of 32 Amp SP MCB, BC-10 kA	Nos.	4				
8	Supply of TPN DB, made of 16 SWG CRCA sheet, IP-42, powder coated, double door, with DIN channel, earth link, neutral link, busbar populated with following MCBs Incomer: 1 no. of 100 Amp 415V TPN MCB, BC-10 kA Outgoing: 6 nos. of 32 Amp TP MCB, BC-10 kA	Nos.	2				
9	Supply of TPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link, busbar populated with following MCBs Incomer: 1 no. of 100 Amp 415V TPN MCB, BC-10 kA Outgoing: 18 nos. of 32 Amp SP MCB, BC-10 kA	Nos.	2				
10	Supply of SPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link populated with following MCBs Incomer: 1 no. of 40 Amp 240V DP MCB, BC-10 kA Outgoing: 10 nos. of 16 Amp SP MCB, BC-10 kA		3				
11	Supply of SPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link populated with 2 no. of 40 Amp 240V DP MCB, BC-10 kA	Nos.	3				
12	Installation of SPN & TPN DB from S. No. 6 to 12	Lot	1				
13	Earthing (Supply & burying of 600mm x 600mm x 3.0mm copper plate, vertically for earthing with its top at least 5 meters below ground level complete with 20 mm G.I. pipe for watering funnel, 300 mm square C.I. frame with hinged cover, masonry housing, alternate layers of coke and salt at least 150 mm thick all-round including excavation and back filling etc. complete in all respects.)	No. of Pits	8				
14	Supply of 50 X 6 mm GI Strip	RMT	70				
15	Testing and Commissioning of complete Electrical Supply Distribution and Cabling System at CIT Asiad	Lot	1				
	Electrical Cables for Asiad						
16	Supply of PVC insulated flexible single core 1.5 Sqmm sheathed copper wire	RMT	720				
17	Supply of PVC insulated flexible single core 2.5 Sqmm sheathed copper wire	RMT	360				
18	Supply of PVC insulated flexible single core 4 Sqmm sheathed copper wire	RMT	180				
19	Supply of PVC insulated flexible single core 6 Sqmm sheathed copper wire	RMT	1200				
20	Supply of PVC insulated flexible single core 10 Sqmm sheathed copper wire	RMT	550				
21	Laying of PVC insulated flexible single core copper wire of Size from 1.5 Sqmm to 10 Sqmm in MS conduit pipe / cable trunks (excluding the cost of supply of MS conduit pipe / cable trunks)	RMT	3000				
22	Termination of PVC insulated flexible single core copper wire of Size from 1.5 Sqmm to 10 Sqmm including cost of heavy duty copper lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	100				
23	Supply of PVC insulated flexible single core 16 Sqmm sheathed copper wire	RMT	300				

24	Supply of PVC insulated flexible single core 25 Sqmm sheathed copper wire	RMT	160
25	Supply of PVC insulated flexible single core 35 Sqmm sheathed copper wire	RMT	70
26	Laying of PVC insulated flexible single core copper wire of Size from 16 Sqmm to 35 Sqmm in MS conduit pipe / cable trunks (excluding the cost of supply of MS conduit pipe / cable trunks)	RMT	500
27	Termination of PVC insulated flexible single core copper wire of Size from 16 Sqmm to 35 Sqmm including cost of heavy duty copper lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	50
28	Supply of 650/1100V grade, 4 core, 240 sqmm, aluminium conductor, XLPE insulated, GI wire/strip armoured, PVC overall sheathed as per IS 1554 part I. power cable	RMT	250
29	Laying of 4 core, 240 sqmm, aluminium conductor, XLPE insulated, GI wire/strip armoured power cable underground / on cable tray/ in riser / in false ceiling / flooring (excluding the cost of supply of cable tray/ in riser)	RMT	250
30	Termination of 4 core, 240 sqmm, aluminium conductor, XLPE insulated, GI wire/strip armoured power cable including cost of heavy duty Aluminium lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	10
31	Supply of 25mm dia, 16 SWG MS Conduit pipe of with all fittings & Accessories.	RMT	150
32	Supply of 32mm dia, 16 SWG MS Conduit pipe of with all fittings & Accessories.	RMT	150
33	Supply of 40mm dia, 14 SWG MS Conduit pipe of with all fittings & Accessories.	RMT	150
34	Supply of 50mm dia, 14 SWG MS Conduit pipe of with all fittings & Accessories.	RMT	200
35	Laying of MS conduit pipe of size from 25 mm dia to 50 mm dia in concealed manner.	RMT	650
36	Supply of perforated MS slotted cable trays duly painted including the cost of hangers, hooks, fastener etc for suspension from ceiling and of size 40 x 150 mm x 40 mm x 2 mm	RMT	50
37	Supply of Ladder type cable trays including the cost of hangers, hooks, fastener etc and of size 150 mm wide, 25x75x25 mm channel, 2 mm thick	RMT	50
38	Laying and Fixing of cable trays	RMT	100
39	Supply of 300 X 50 mm MS Box section type cable trunking made out of 16 SWG. CRCA. sheet, painted complete with fixing arrangements and other accessories	RMT	110
40	Supply of 150 X 50 mm MS Box section type cable trunking made out of 16 SWG. CRCA. sheet, painted complete with fixing arrangements and other accessories	RMT	50
41	Supply of Junction Boxes 325 X 325 X 65 mm for MS Box section type cable trunking made out of 16 SWG. CRCA. sheet, painted complete with fixing arrangements and other accessories	Nos.	40
42	Laying and fixing of MS Box section type cable trunking made out of 16 SWG CRCA. Sheet to be laid in concealed manner	RMT	110
	CIT NOIDA	-	
43	Design, Manufacture & Supply of Main Panel as per Specifications mentioned at Annexure II S.No	4No.	1
44	Design, Manufacture & Supply of Servo Bypass Panel as per Specifications mentioned at Annexure II S.No.5	No.	1
45	Design, Manufacture & Supply of AC Panel as per Specifications mentioned at Annexure II S.No.6	No.	1
46	Installation of Panels from S. No. 43 to 45	Lot	1
47	Supply of TPN 12 Way Vertical DB, populated with FP 100 Amp MCCB as incomer and 32 Amp SP MCB (27 Nos.) and 63 Amp TP MCB (9 Nos.) as outgoing.	No.	2
48	Supply of TPN 6 Way DB populated with FP 100 Amp MCCB as incomer and 20 Amp SP MCB (16 No.) as outgoing.	No.	1
49	Fixing of TPN/SPN DBs	Nos.	3
50	Supply of Aluminium conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 3 1/2 core X 150 sq mm cable (Main Incomer)	RMT	85
51	Supply of Aluminium conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 3 1/2 core X 120 sq mm cable (For AC and Servo)	RMT	45
52	Supply of copper conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 4 core X 25 sq mm cable (For 40 KVA UPS)	RMT	45
53	Supply of copper conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 4 core X 16 sq mm cable (For 12 KVA UPS)	RMT	45
54	Supply of copper conductor 4 core X 6 sq mm cable (For ACs in UPS Room)	RMT	20
55	Supply of copper conductor 3 1/2 core X 35 sq mm cable (For 12 KVA UPS Output)	RMT	30
56	Supply of copper conductor 1 core X 16 sq mm cable (for Earthing)	RMT	30

57	Termination of 3.5 core, 150 sqmm, aluminium conductor, XLPE insulated, GI wire armoured power cable including cost of heavy duty Aluminium lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	12
58	Termination of 3.5 core, 120 sqmm, aluminium conductor, XLPE insulated, GI wire armoured power cable including cost of heavy duty Aluminium lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	8
59	Termination of 3.5/4 core, 6 sqmm to 35 sqmm, copper conductor, XLPE insulated, GI wire armoured power cable including cost of heavy duty copper lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	12
60	Termination of PVC insulated flexible single core copper wire of Size 16 Sqmm including cost of heavy duty copper lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	10
61	Laying of XLPE insulated armoured, served, sheathed 1100 volts grade 3 1/2 core X 150 sq mm aluminium cable in the existing trench between HRDI Main Panel at Ground Floor to the UPS Room Mail Panel at Ground Floor. On surface the cable run shall be fixed by GI clamps etc. of suitable size or on existing cable tray complete in all respect. The armouring of the cable shall be properly connected with the earth conductor including fixing of palm or pin type copper tin plated cable socket (lug) to the cable leads, insulating with tape and making connections with brass / nickel plated dou compression gland complete in all respects including supply of clamps, lugs, tape and compression glands etc.	RMT	85
62	Laying of aluminium conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 3 1/2 core X 120 sq mm cable (For AC and Servo)	RMT	45
63	Laying of copper conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 4 core X 25 sq mm cable (For 40 KVA UPS)	RMT	45
64	Laying of copper conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 4 core X 16 sq mm cable (For 12 KVA UPS)	RMT	45
65	Laying of copper conductor 4 core X 6 sq mm cable (For ACs in UPS Room)	RMT	20
66	Laying of copper conductor 3 1/2 core X 35 sq mm cable (For 12 KVA UPS Output)	RMT	30
67	Laying of copper conductor 1 core X 16 sq mm cable (for Earthing)	RMT	30
68	Earthing (Supply & burying of 600mm x 600mm x 3.0mm copper plate, vertically for earthing with its top at least 3 meters below ground level complete with 20 mm G.I. pipe for watering funnel, 300 mm square C.I. frame with hinged cover, masonry housing, alternate layers of coke and salt at least 150 mm thick all-round including excavation and back filling etc. complete in all respects.)	No.	1
69	Supply of 50 X 6 mm GI Strip	RMT	4
70	Testing and Commissioning of Electrical Supply Distribution System at CIT Noida	Lot	1

ANNEXURE-II

	SPECIFICATIONS	Compliance (YES/NO)	Deviation (If any)
	1. Switchboard for Asiad		
Panel	Front operated, cubicle type, front & back access, made of 2.0 mm thick CRCA steel sheet, vertical free floor standing, dust and vermin proof, with IP-52 protection, powder coated with paint thickness of 50-60 micron, hinged and lockable doors, modular compartmentalized, complete with interconnections, tinned copper crimped lugs, earthing terminal, for use at 415 V, 3 phase, 4 wire 50 Hz system, suitable for fault level of 50kA for 1sec., with cable entry & exit from bottom, base consisting of 100x50x6 mm channel, designed for 50 deg C ambient temperature.		
rane	All live accessible parts shall be shrouded, the busbar insulation shall be with heat shrinkable sleeves, SMC/DMC shrouds and Busbar supports shall be used, Padlocking facility shall be provided on all outgoing feeder doors and switch handles shall be lockable in OFF position. All MCCBs shall have rotary handles, extension terminals & phase barriers.		
	Control wiring shall be done with 2.5 sqmm flexible copper wire, double Compression type cable glands & removable cable gland plates shall be used.		
Incomers (For Mains Supply-1 & Mains Supply-2)	2 nos.of 400 Amp, 415 V, 4 pole, 35 kA Ics, Insulation voltage 690 V, MCCBs with standard accessories, electrically & mechanically interlocked having overload protection & short circuit protection.		
Metering (For Mains Supply-1 & Mains Supply-2)	2 nos. of Digital multifunction Meter, 6 nos. of suitable cast resin current transformers and 6 nos. of phase indicating lamps (Multiple LED type) switch.		
Input Change Over Switch (Between Mains Supply-1 & Mains Supply-2)	1 no. of 400 Amps, 415 Volts On load Manual Change Over Switch		
Busbar	Electrolytic aluminium as per IS 8623 of suitable length, for three phase and neutral, suitable for 415 V, 50 Hz, 500 Amp. Neutral will be of 100% capacity		
Outgoing Cable Change Over Switch	1 no. of 400 Amps, 415 Volts On load Manual Change Over Switch (For manually changing to second outgoing cable in case of first outgoing cable becomes fault)		

	SPECIFICATIONS	Compliance (YES/NO)	Deviation (If any)
	2. Distribution Board-A for Asiad		
Panel	Front operated, cubicle type, front access, dead back, made of 2.0 mm thick CRCA steel sheet, vertical free floor standing, dust and vermin proof, with IP-52 protection, powder coated with paint thickness of 50 60 micron, hinged and lockable doors, modular compartmentalized, complete with interconnections, tinned copper crimped lugs, earthing terminal, for use at 415 V, 3 phase, 4 wire, 50 Hz system and suitable for fault level of 50kA for 1sec., with cable entry & exit from bottom, base consisting of 100x50x6 mm channel, designed for 50 deg C ambient temperature.		
anei	All live accessible parts shall be shrouded, the busbar insulation shall be with heat shrinkable sleeves, SMC/DMC shrouds and Busbar supports shall be used, Padlocking facility shall be provided on all outgoing feeder doors and switch handles shall be lockable in OFF position. All MCCBs shall have rotary handles, extension terminals & phase barriers.		
	Control wiring shall be done with 2.5 sqmm flexible copper wire, double compression type cable glands & removable cable gland plates shall be used.		
Incomer	1 no.of 400 Amp, 415 V, 4 pole, 35 kA lcs, Insulation voltage 690 V, MCCB with standard accessories & microprocessor release		
Metering	1 no. of Digital multifunction Meter, 3 nos. of suitable cast resin current transformers and 3 nos. of phase indicating lamps (Multiple LED type) switch.		
Busbar	Electrolytic aluminium as per IS 8623 of suitable length, for three phase and neutral, suitable for 415 V, 50 Hz, 500 Amp. Neutral will be of 100% capacity		
	2 nos. of 200 Amps TPN MCCB, 25 kA Ics, Insulation voltage 690 V, MCCB with standard accessories		
	4 nos. of 100 Amps TPN MCCB, 25 kA lcs, Insulation voltage 690 V, MCCB with standard accessories		
Outgoing	5 nos. of 50 Amps TPN MCB, 10 kA Ics with thermal magnetic protective release		
	5 nos. of 50 Amps SPN MCB, 10 kA Ics with thermal magnetic protective release		
	5 nos. of 32 Amps SPN MCB, 10 kA Ics with thermal magnetic protective release		

	SPECIFICATIONS	Compliance (YES/NO)	Deviation (If any)
	3. Distribution Board-B for Asiad		
Panel	Front operated, cubicle type, front access, dead back, made of 2.0 mm thick CRCA steel sheet, vertical free floor standing, dust and vermin proof, with IP-52 protection, powder coated with paint thickness of 50 60 micron, hinged and lockable doors, modular compartmentalized, complete with interconnections, tinned copper crimped lugs, earthing terminal, for use at 415 V, 3 phase, 4 wire, 50 Hz system and suitable for fault level of 50kA for 1sec., with cable entry & exit from bottom, base consisting of 100x50x6 mm channel, designed for 50 deg C ambient temperature. All live accessible parts shall be shrouded, the busbar insulation shall		
	be with heat shrinkable sleeves, SMC/DMC shrouds and Busbar supports shall be used, Padlocking facility shall be provided on all outgoing feeder doors and switch handles shall be lockable in OFF position. All MCCBs shall have rotary handles, extension terminals & phase barriers.		
	Control wiring shall be done with 2.5 sqmm flexible copper wire, double compression type cable glands & removable cable gland plates shall be used.		
Incomer	1 no.of 400 Amp, 415 V, 4 pole, 35 kA lcs, Insulation voltage 690 V, MCCB with standard accessories & microprocessor release		
Metering	1 no. of Digital multifunction Meter, 3 nos. of suitable cast resin current transformers and 3 nos. of phase indicating lamps (Multiple LED type) switch.		
Busbar	Electrolytic aluminium as per IS 8623 of suitable length, for three phase and neutral, suitable for 415 V, 50 Hz, 500 Amp. Neutral will be of 100% capacity		
	2 nos. of 200 Amps TPN MCCB, 25 kA Ics, Insulation voltage 690 V, MCCB with standard accessories		
	4 nos. of 100 Amps TPN MCCB, 25 kA lcs, Insulation voltage 690 V, MCCB with standard accessories		
Outgoing	5 nos. of 50 Amps TPN MCB, 10 kA Ics with thermal magnetic protective release		
	5 nos. of 50 Amps SPN MCB, 10 kA Ics with thermal magnetic protective release		
	5 nos. of 32 Amps SPN MCB, 10 kA Ics with thermal magnetic protective release		

	SPECIFICATIONS	Compliance (YES/NO)	Deviation (If any)
	4. Main Panel for Noida		
Danal	Front operated, cubicle type, front access, made of 2.0 mm thick CRCA steel sheet, vertical free floor standing, dust and vermin proof with IP-52 protection, powder coated with paint thickness of 50-60 micron, hinged and lockable doors, modular compartmentalized, complete with interconnections, tinned copper crimped lugs, earthing terminal, for use at 415 V, 3 phase, 4 wire, 50 Hz system and suitable for fault level of 50kA for 1 sec, complete with top/bottom removable gland plates as required, double compression type cable glands, base consisting of 100x50x6 mm channel, designed for 50 deg C ambient temperature.		
Panel	All live accessible parts shall be shrouded, the busbar insulation shall be with heat shrinkable sleeves, SMC/DMC shrouds and Busbar supports shall be used, Padlocking facility shall be provided on all outgoing feeder doors and switch handles shall be lockable in OFF position. All MCCBs shall have rotary handles, extension terminals & phase barriers		
	Control wiring shall be done with 2.5 sqmm flexible copper wire, double compression type cable glands & removable cable gland plates shall be used.		
Incomer	2 nos. of 400 Amp, 415 V, 4 P, 35 kA lcs, Insulation voltage 690 V, MCCB with standard accessories		
Bus Coupler	1 no.of 400 Amp, 415 V, 3 P, 35 kA lcs, Insulation voltage 690 V, MCCB with standard accessories		
Metering	2 nos. of Digital multifunction Meter, 6 nos. of suitable cast resin current transformers and 6 nos. of phase indicating lamps (Multiple LED type) switch.		
Busbar	Electrolytic aluminium as per IS 8623 of suitable length, for three phase and neutral, suitable for 415 V, 50 Hz, 630 Amp. Neutral will be of 100% capacity		
	3 nos. of 100 AMPS, 4 P, 35 kA Ics MCCBs with 35 kA Ics , Insulation voltage 690 V with standard accessories (For 40 KVA UPS)		
Outgoing	1 no. of 100 AMPS, 3P, 35 kA Ics MCCB, Insulation voltage 690 V with standard accessories (For 12 KVA UPS)		
- 2.359	1 no. of 200 AMPS, 3P, 35 kA Ics MCCB, Insulation voltage 690 V with standard accessories (For Servo By Pass Panel)		
	3 nos. of 63 AMPS, 4P MCBs with 10 kA Ics. (For ACs)		

	SPECIFICATIONS	Compliance (YES/NO)	Deviation (If any)
	5. Servo Bypass Panel for Noida	•	
Panel	Front operated, cubicle type, front access, made of 2.0 mm thick CRCA steel sheet, vertical free floor standing, dust and vermin proof, with IP 52 protection, powder coated with paint thickness of 50-60 micron, hinged and lockable doors, modular compartmentalized, complete with interconnections, tinned copper crimped lugs, earthing terminal, for use at 415 V, 3 phase, 4 wire, 50 Hz system and suitable for fault level of 50kA for 1 sec, complete with top/bottom removable gland plates as required, double compression type cable glands, base consisting of 100x50x6 mm channel, designed for 50 deg C ambient temperature.		
	All live accessible parts shall be shrouded, the busbar insulation shall be with heat shrinkable sleeves, SMC/DMC shrouds and Busbar supports shall be used, Padlocking facility shall be provided on all outgoing feeder doors and switch handles shall be lockable in OFF position. All MCCBs shall have rotary handles, extension terminals & phase barriers.		
	Control wiring shall be done with 2.5 sqmm flexible copper wire, double compression type cable glands & removable cable gland plates shall be used.		
Carua Punasa	2 nos. of 200 AMP, 4P Manual Change Over Switch (COS)		
Servo Bypass	1 no. of 200 AMP, 4P, 35 kA Ics MCCB , Insulation voltage 690 V with standard accessories		

	SPECIFICATIONS	Compliance (YES/NO)	Deviation (If any)
	6. AC Panel for Noida		
Panel	Front operated, cubicle type, front access, made of 2.0 mm thick CRCA steel sheet, vertical free floor standing, dust and vermin proof, with IP-52 protection, powder coated with paint thickness of 50-60 micron, hinged and lockable doors, modular compartmentalized, complete with interconnections, tinned copper crimped lugs, earthing terminal, for use at 415 V, 3 phase, 4 wire, 50 Hz system and suitable for fault level of 50kA for 1 sec, complete with top/bottom removable gland plates as required, double compression type cable glands, base consisting of 100x50x6 mm channel, designed for 50 deg C ambient temperature.		
	All live accessible parts shall be shrouded, the busbar insulation shall be with heat shrinkable sleeves, SMC/DMC shrouds and Busbar supports shall be used, Padlocking facility shall be provided on all outgoing feeder doors and switch handles shall be lockable in OFF position. All MCCBs shall have rotary handles, extension terminals & phase barriers.		
	Control wiring shall be done with 2.5 sqmm flexible copper wire, double compression type cable glands & removable cable gland plates shall be used.		
Incomer	1 no.of 200 Amp, 415 V, 3P, 35 kA Ics, Insulation voltage 690 V, MCCB with standard accessories		
Busbar	Electrolytic aluminium as per IS 8623 of suitable length, for three phase and neutral, suitable for 415 V, 50 Hz, 300 Amp. Neutral will be of 100% capacity		
Outgoing	6 nos. of 63 AMPS, 4P, 10kA Ics MCB. (For ACs)		

Price Bid Format (Annexure-III)

	Price Bid Format (Annexure-III)				
SN	Item Description	Unit	Qty	Unit Rate (Rs.)	Amount (Rs.)
	CIT ASIAD				
	Electrical Panels, Distribution boards for	Asiad	1		
	Design, Manufacture & Supply of Switchboard for Asiad as per Specifications mentioned at Annexure II S.No.1	No.	1		
	Design, Manufacture & Supply of Distribution Board-A for Asiad as per Specifications mentioned at Annexure II S.No.2	No.	1		
	Design, Manufacture & Supply of Distribution Board-B for Asiad as per Specifications mentioned at Annexure II S.No.3	No.	1		
4	Installation of Panels from S. No. 1 to 3	Lot	1		
5	Supplyof TPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link, busbar populated with following MCCBs/MCBs Incomer: 1 no. of 200 Amp MCCB with over current and short circuit thermal magnetic releases, 3P, 415V, BC-16 kA Outgoing: 4 nos. of 100 Amp TP MCB, BC-10 kA	Nos.	2		
6	Supplyof TPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link, busbar protection with following MCBs Incomer: 1 no. of 100 Amp 415V TPN MCB, BC-10 kA Outgoing: 4 nos. of 50 Amp TP MCB, BC-10 kA	Nos.	2		
7	Supplyof SPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link populated with following MCBs Incomer: 1 no. of 100 Amp 240V DP MCB, BC-10 kA Outgoing: 14 nos. of 32 Amp SP MCB, BC-10 kA	Nos.	4		
8	Supply of TPN DB, made of 16 SWG CRCA sheet, IP-42, powder coated, double door, with DIN channel, earth link, neutral link, busbar populated with following MCBs Incomer: 1 no. of 100 Amp 415V TPN MCB, BC-10 kA Outgoing: 6 nos. of 32 Amp TP MCB, BC-10 kA	Nos.	2		
9	Supplyof TPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link, busbar populated with following MCBs Incomer: 1 no. of 100 Amp 415V TPN MCB, BC-10 kA Outgoing: 18 nos. of 32 Amp SP MCB, BC-10 kA	Nos.	2		
10	Supplyof SPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link populated with following MCBs Incomer: 1 no. of 40 Amp 240V DP MCB, BC-10 kA Outgoing: 10 nos. of 16 Amp SP MCB, BC-10 kA	Nos.	3		
	Supplyof SPN DB, made of 16 SWG CRCA sheet, IP-42 Protection, powder coated, double door, with DIN channel, earth link, neutral link populated with 2 no. of 40 Amp 240V DP MCB, BC-10 k/	Nos.	3		
12	Installation of SPN & TPN DB from S. No. 6 to 12	Lot	1		
13	Earthing (Supply & burying of 600mm x 600mm x 3.0mm copper plate, vertically for earthing with its top at least 5 meters below ground level complete with 20 mm G.I. pipe for watering funnel, 300 mm square C.I. frame with hinged cover, masonry housing, alternate layers of coke and salt at least 150 mm thick all-round including excavation and back filling etc. complete in all respects.)		8		
14	Supply of 50 X 6 mm GI Strip	RMT	70		
	Testing and Commissioning of complete Electrical Supply Distribution and Cabling System at CIT Asiad	Lot	1		
	Electrical Cables for Asiad		1		
16	Supply of PVC insulated flexible single core 1.5 Sqmm sheathed copper wire	RMT	720		
17	Supply of PVC insulated flexible single core 2.5 Sqmm sheathed copper wire	RMT	360		
18	Supply of PVC insulated flexible single core 4 Sqmm sheathed copper wire	RMT	180		
19	Supply of PVC insulated flexible single core 6 Sqmm sheathed copper wire	RMT	1200		
20	Supply of PVC insulated flexible single core 10 Sqmm sheathed copper wire	RMT	550		
	Laying of PVC insulated flexible single core copper wire of Size from 1.5 Sqmm to 10 Sqmm in Ms conduit pipe / cable trunks (excluding the cost of supply of MS conduit pipe / cable trunks)	RMT	3000		
	Termination of PVC insulated flexible single core copper wire of Size from 1.5 Sqmm to 10 Sqmm including cost of heavy duty copper lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	100		

		1		<u> </u>	1
23	Supply of PVC insulated flexible single core 16 Sqmm sheathed copper wire	RMT	300		
24	Supply of PVC insulated flexible single core 25 Sqmm sheathed copper wire	RMT	160		
25	Supply of PVC insulated flexible single core 35 Sqmm sheathed copper wire	RMT	70		
26	Laying of PVC insulated flexible single core copper wire of Size from 16 Sqmm to 35 Sqmm in MS conduit pipe / cable trunks (excluding the cost of supply of MS conduit pipe / cable trunks)	RMT	500		
27	Termination of PVC insulated flexible single core copper wire of Size from 16 Sqmm to 35 Sqmm including cost of heavy duty copper lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	50		
28	Supply of 650/1100V grade, 4 core, 240 sqmm, aluminium conductor, XLPE insulated, GI wire/strip armoured, PVC overall sheathed as per IS 1554 part I. power cable	RMT	250		
29	Laying of 4 core, 240 sqmm, aluminium conductor, XLPE insulated, GI wire/strip armoured power cable underground/ on cable tray/ in riser / in false ceiling / flooring (excluding the cost of supply of cable tray/ in riser)	RMT	250		
30	Termination of 4 core, 240 sqmm, aluminium conductor, XLPE insulated, GI wire/strip armoured power cable including cost of heavy duty Aluminium lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	10		
31	Supply of 25mm dia, 16 SWG MS Conduit pipe of with all fittings & Accessories.	RMT	150		
32	Supply of 32mm dia, 16 SWG MS Conduit pipe of with all fittings & Accessories.	RMT	150		
33	Supply of 40mm dia, 14 SWG MS Conduit pipe of with all fittings & Accessories.	RMT	150		
34	Supply of 50mm dia, 14 SWG MS Conduit pipe of with all fittings & Accessories.	RMT	200		
35	Laying of MS conduit pipe of size from 25 mm dia to 50 mm dia in concealed manner.	RMT	650		
36	Supply of perforated MS slotted cable trays duly painted including the cost of hangers, hooks, fastener etc for suspension from ceiling and of size 40 x 150 mm x 40 mm x 2 mm	RMT	50		
37	Supplyof Ladder type cable trays including the cost of hangers, hooks, fastener etc and of size 150 mm wide, 25x75x25 mm channel, 2 mm thick	RMT	50		
38	Laying and Fixing of cable trays	RMT	100		
39	Supply of 300 X 50 mm MS Box section type cable trunking made out of 16 SWG. CRCA. sheet, painted complete with fixing arrangements and other accessories	RMT	110		
40	Supply of 150 X 50 mm MS Box section type cable trunking made out of 16 SWG. CRCA. sheet, painted complete with fixing arrangements and other accessories	RMT	50		
41	Supply of Junction Boxes 325 X 325 X 65 mm for MS Box section type cable trunking made out of 16 SWG. CRCA. sheet, painted complete with fixing arrangements and other accessories	Nos.	40		
42	Laying and fixing of MS Box section type cable trunking made out of 16 SWG CRCA. Sheet to be laid in concealed manner	RMT	110		
	CIT NOIDA				
43	Design, Manufacture & Supplyof Main Panel as per Specifications mentioned at Annexure II S.No.	No.	1		
44	Design, Manufacture & Supply of Servo Bypass Panel as per Specifications mentioned at Annexul II S.No.5	No.	1		
45	Design, Manufacture & Supply of AC Panel as per Specifications mentioned at Annexure II S.No.6	No.	1		
46	Installation of Panels from S. No. 43 to 45	Lot	1		
47	Supplyof TPN 12 Way Vertical DB, populated with FP 100 Amp MCCB as incomer and 32 Amp SP MCB (27 Nos.) and 63 Amp TP MCB (9 Nos.) as outgoing.	No.	2		
48	Supply of TPN 6 Way DB populated with FP 100 Amp MCCB as incomer and 20 Amp SP MCB (16 No.) as outgoing.	No.	1		
49	Fixing of TPN/SPN DBs	Nos.	3		

50	Supply of Aluminium conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 3 1/2 core X 150 sq mm cable (Main Incomer)	RMT	85		
51	Supplyof Aluminium conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 3 1/2 core X 120 sq mm cable (For AC and Servo)	RMT	45		
52	Supply of copper conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 4 core X 25 sq mm cable (For 40 KVA UPS)	RMT	45		
53	Supply of copper conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 4 core X 16 sq mm cable (For 12 KVA UPS)	RMT	45		
54	Supply of copper conductor 4 core X 6 sq mm cable (For ACs in UPS Room)	RMT	20		
55	Supply of copper conductor 3 1/2 core X 35 sq mm cable (For 12 KVA UPS Output)	RMT	30		
56	Supply of copper conductor 1 core X 16 sq mm cable (for Earthing)	RMT	30		
57	Termination of 3.5 core, 150 sqmm, aluminiumconductor, XLPE insulated, GI wire armoured power cable including cost of heavy duty Aluminiumlugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	12		
58	Termination of 3.5 core, 120 sqmm, aluminiumconductor, XLPE insulated, GI wire armoured power cable including cost of heavy duty Aluminiumlugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	8		
59	Termination of 3.5/4 core, 6 sqmm to 35 sqmm, copper conductor, XLPE insulated, GI wire armoured power cable including cost of heavy duty copper lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	12		
60	Termination of PVC insulated flexible single core copper wire of Size 16 Sqmm including cost of heavy duty copper lugs, double compression glands, insulation tape and all requisite material for completion of termination	Nos.	10		
61	Laying of XLPE insulated armoured, served, sheathed 1100 volts grade 3 1/2 core X 150 sq mm aluminiumcable in the existing trench between HRDI Main Panel at Ground Floor to the UPS Room Mail Panel at Ground Floor . On surface the cable run shall be fixed by GI clamps etc. of suitable size or on existing cable tray complete in all respect. The armouring of the cable shall be properly connected with the earth conductor includingfixing of palm or pin type copper tin plated cable socket (lug) to the cable leads, insulating with tape and making connections with brass / nickel plated double compression gland complete in all respects includingsupply of clamps, lugs, tape and compression glands etc.	RMT	85		
62	Laying of aluminiumconductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 3 1/2 core X 120 sq mm cable (For AC and Servo)	RMT	45		
63	Laying of copper conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 4 core X 25 sq mm cable (For 40 KVA UPS)	RMT	45		
64	Laying of copper conductor XLPE insulated as per IS 7098, armoured, served, sheathed 1100 volts grade 4 core X 16 sq mm cable (For 12 KVA UPS)	RMT	45		
65	Laying of copper conductor 4 core X 6 sq mm cable (For ACs in UPS Room)	RMT	20		
66	Laying of copper conductor 3 1/2 core X 35 sq mm cable (For 12 KVA UPS Output)	RMT	30		
67	Laying of copper conductor 1 core X 16 sq mm cable (for Earthing)	RMT	30		
68	Earthing (Supply & burying of 600mm x 600mm x 3.0mm copper plate, vertically for earthing with its top at least 3 meters below ground level complete with 20 mm G.I. pipe for watering funnel, 300 mm square C.I. frame with hinged cover, masonry housing, alternate layers of coke and salt at least 150 mm thick all-round including excavation and back filling etc. complete in all respects.)	No.	1		
69	Supply of 50 X 6 mm GI Strip	RMT	4		
70	Testing and Commissioning of Electrical Supply Distribution System at CIT Noida	Lot	1		
			Tota	ıl Package Rate = Rs.	

Makes of Items (Annexure-IV)

S.No.	Item	Make
1	MS Conduit	AKG / BEC
2	MS Conduit Accessories	RAMA / Noble
3	PVC insulated Copper wire	Finolex / National / Delton / Polycab / Swadeshi
4	XLPE Armoured Cable	RPG / Finolex / Fort Gloster / Havells / Swadeshi
5	Cable Lugs	Dowells / Asian
6	Cable compression glands	Peeco / Comet
7	Miniature Circuit Breaker	Merlin Gerin / GE / Siemens / L&T Hager
8	MCCB	Merlin Gerin NS / GE / Siemens VL / L&T / ABB
9	TPN DB & SPN DB	Legrand / Merlin Gerin / Siemens / L&T / ABB
10	Contactors / Timers / Relays / Change over Switch	Siemens / ABB / Merlin Gerin / L&T / HPL
11	Cast resin Current Transformer	Gilbert / Maxwell / AE / C&S
12	Digital Measuring Meter	Rishab / Siemens / AE / Indotech / HPL
13	Indication Lamp (LED)	L&T / Siemens

Annexure-V

NO DEVIATION CERTIFICATE

"No deviation from tender conditions of tender enquiry and scope of service	ces
mentioned in BOQ".	

Signature and Seal of the Tenderer