

# **MAHARAJA AGRASEN MEDICAL COLLEGE, AGROHA (HISAR)**

## **E-Tender Notice**

E-tender is invited for Supply, engineering, installation, testing, and commissioning of augmentation of 500KVA distribution transformer with 1000KVA and allied materials at M.A.M.C., Agroha (Hisar). Details may be seen at <https://etenders.hry.nic.in/nicgep/app> or [www.mamc.edu.in](http://www.mamc.edu.in)

(Tender ID:- 2021\_HRY\_191595\_1

Sd/  
Director

## MAHARAJA AGRASEN MEDICAL COLLEGE, AGROHA (HISAR)

### TENDER DOCUMENT

#### Ref. No. Tender/2021/Transformer

1	Name of Work	Supply, Engineering, Installation, Testing & Commissioning of augmentation 500KVA D/TF with 1000KVA and allied materials at MAMC, Agroha
2	Period of Work	120 days
3	Estimated Cost	35.5 lakh (Rs. Thirty five lakh fifty thousand)
4	Cost of Documents	Rs.2000/-(Rupees two thousand only) Non-Refundable
5	Earnest money to be deposited	Rs.71,000/- (Rs. seventy one thousand only) Refundable
6	Last Date &Time for submission of Tender	28/10/2021 up to 2:00PM
7	Date of opening of Technical Bids	29/10/2021 at 2:00PM
8	EMD & FEE	<b>Online as per tender portal</b>
9	Copy of NIT detailed below	PAGE 01 to 17
10	Annexure-A	DNIT (Technical Specification)
11	Annexure-B	General Terms & Conditions
12	Annexure-C	Instruction to Bidders
13	Annexure-D	List of Approved Manufactures
14	Notice Inviting Tender is available at Official website of M.A.M.C., Agroha i.e. <b>www.mamc.edu.in</b>	

## Annexure- A

### Technical Specifications

<b>Name of work:- Supply, Engineering, Installation, Testing &amp; Commissioning of augmentation 500KVA D/TF with 1000KVA and allied materials at MAMC, Agroha</b>					
Sr. No.	Description	Unit	Qty.	Rate to be quoted by the contractor (in rs.)	
				in figure	in word
1	Supply and erection of Modular case circuit breaker single pole/4 pole on existing wall/pedestal/Panel including bounding to earth and making necessary connections required to complete the job in all respect up to the entire satisfaction of the Engineer-in-charge of the work with enclosure box <b>(HSR 23.22.1)</b> 23.22.1.8 TRIPLE POLE MCCB 600 to 800 Amp, 50 KA	each	1		
2	SITC Four pole ON LOAD Manual change over switch in SS enclosure of following Ratings <b>(HSR 23.22.8)</b> 23.22.8.5 400 amp 415 volts	each	1		
3	Supply and erection of MS cable tray, duly pained as required including erection of the same on wall or ceiling with necessary fixture and other material required to complete the job in all respect up to the entire satisfaction of Engineer-in Charge of the work. <b>(HSR 23.23.6)</b> <b>23.23.6.1</b> MS perforated cable tray painted with powder coating 100 X 50 X2 mm	mtr.	10		
4	<b>23.23.6.2</b> MS perforated cable tray painted with powder coating 200 X 50 X 2 mm	mtr	70		
5	<b>23.23.6.3</b> MS perforated cable tray painted with powder coating 375 X 50 X 2 mm	mtr.	70		
6	Supply and erection of cable tray cover made of 1.25 mm thick GI sheet as required including erection of the same on existing cable tray duly pained as required including with necessary fixture and other material required to complete the job in all respect up to the entire satisfaction of Engineer-in Charge of the work. <b>(HSR 23.23.7)</b> <b>23.23.7.2</b> GI cable tray cover, suitable for cable tray 200 X 50 X2 mm	mtr.	70		
7	<b>23.23.7.3</b> GI cable tray cover, suitable for cable tray 375 X 50 X 2 mm	mtr.	70		
8	Supply and erection of suitable compression type brass cable glands for underground Cable <b>:(HSR.24.2.7)</b> <b>24.2.7.5</b> 120 sqmm to 185 sqmm Cable 3 to 3.5 Core	set	2		
9	<b>24.2.7.6</b> 240 sqmm to 185 sqmm Cable 3 to 3.5 Core	set	8		
10	<b>24.2.7.7</b> 300 sqm to 400 sqmm cable 3 to 3.5 core	set	6		
11	Supply and erection of aluminum lugs heavy duty including crimping etc. up to the entire satisfaction of the Engineer-in-charge of the work <b>(HSR 24.2.8)</b> <b>24.2.8.9</b> 95 sqmm	each	2		
12	<b>24.2.8.10</b> 120 sqmm	each	8		
13	<b>24.2.8.11</b> 150 sqmm	each	12		
14	<b>24.2.8.13</b> 240 sqmm	each	28		
15	<b>24.2.8.14</b> 300 sqmm	each	20		

16	S/E mark double walled corrugated (DWC) HDPE, pipe 10 Kg/Cm2 ,laid 0.75 Metre below ground level including digging and refilling of earth including cost of suitable size socket/coupler for HDPE pipe including the cost of labour and material required to complete the job in all respect up to the entire satisfaction of Engineer in charge of the work.( <b>HSR 24.5.2</b> ) <b>24.5.2.5</b> DWC/HDPE pipe 120/105 mm outer dial inner dia	mtr.	20		
17	<b>24.5.2.6</b> DWC/HDPE pipe 145/123 mm outer dial inner dia	Mtr.	10		
18	<b>24.5.2. 7</b> DWC/HDPE pipe 180/150 mm outer dial inner dia	mtr.	10		
19	Supply and erection of underground cable 1 meter below ground level covered with sand and bricks including necessary connections, digging and refilling of trenches:- ( <b>NS</b> ) LT XLPE power cable (armoured) 150 sqmm 3.5 core Aluminum conforming to IS 7098 (Part-1) : 2021, IS:8130- 2013, IEC 60502, IS: 5831-1984 standard with latest amendment thereof	mtr.	140		
20	Supply and erection of underground cable 1 meter below ground level covered with sand and bricks including necessary connections, digging and refilling of trenches:- ( <b>NS</b> ) LT XLPE power cable (armoured) 240 sqmm 3.5 core Aluminum conforming to IS 7098 (Part-1) : 2021, IS:8130- 2013, IEC 60502, IS: 5831-1984 standard with latest amendment thereof	mtr.	370		
21	Supply and erection of underground cable 1 meter below ground level covered with sand and bricks including necessary connections, digging and refilling of trenches:- ( <b>NS</b> ) LT XLPE power cable (armoured) 300 sqmm 3.5 core Aluminum conforming to IS 7098 (Part-1) : 2021, IS:8130- 2013, IEC 60502, IS: 5831-1984 standard with latest amendment thereof	mtr.	90		
22	S/E of underground cable, loose in existing pipe or trenches complete with necessary connections:- ( <b>NS</b> ) LT XLPE power cable (armoured) 120 sqmm 3.5 core Aluminum conforming to IS 7098 (Part-1) : 2021, IS:8130- 2013, IEC 60502, IS: 5831-1984 standard with latest amendment thereof	mtr.	70		
23	S/E of underground cable, loose in existing pipe or trenches complete with necessary connections:- ( <b>NS</b> ) LT XLPE power cable (armoured) 150 sqmm 3.5 core Aluminum conforming to IS 7098 (Part-1) : 2021, IS:8130- 2013, IEC 60502, IS: 5831-1984 standard with latest amendment thereof	mtr.	80		
24	S/E of underground cable, loose in existing pipe or trenches complete with necessary connections:- ( <b>NS</b> ) LT XLPE power cable (armoured) 240 sqmm 3.5 core Aluminum conforming to IS 7098 (Part-1) : 2021, IS:8130- 2013, IEC 60502, IS: 5831-1984 standard with latest amendment thereof	mtr.	140		
25	S/E of underground cable, loose in existing pipe or trenches complete with necessary connections:- ( <b>NS</b> ) LT XLPE power cable (armoured) 300 sqmm 3.5 core Aluminum conforming to IS 7098 (Part-1) : 2021, IS:8130- 2013, IEC 60502, IS: 5831-1984 standard with latest amendment thereof	mtr.	15		
26	Distribution Transformer Supply and erection ,testing and commissioning of transformer 1000KVA 11 /0.433 KV 3 phase 50 cycle copper wound outdoor type confirming IS 1180-( <b>Latest updated versions</b> ) Level -2 upto the entire satisfaction of the engineer of the work as per detail specification given as under with 3 year warranty:- Make Kirloskar/Crompton/SCHNIDER specified as below ( <b>NS</b> ) <b>Output / capacity- 1000KVA</b>	each	1		
	No load voltage ratio 11/0.433 KV				
	Cooling = ONAN				

Type of Tap Changer-Off load Off circuit				
Offload tap change range of +3% to -6% in steps of 3% each with a locking device.				
Vector Group- Dyn11				
The temperature rise shall not exceed the limits of 40° C (measured by resistance) for transformer winding and 35° C (measured by thermometer) in top oil above the ambient temperature when tested in accordance with relevant IS. The limits of temperature rise mentioned above will have to be satisfied by the manufacturer by carrying the Heat run test at the lowest negative tap by feeding losses corresponding to the rated current of the tap.				
Paint Shade to IS 5 (Epoxy)				
Rating & Diagram Plate with property of MAMC, Agroha, Make, Guarantee period etc. On serial no plate.				
Earthing terminal- 2 No.				
Lifting lugs = 4 NO				
Air release hole with plug				
Dehydrating Silika gel breather				
Prismatic oil level gauge				
Oil filling hole with plug on CONSERVATOR TANK				
Oil conservator with drain plug				
Thermometer pocket				
Jacking lugs				
Bottom drain cum filter valve				
Top filter valves				
4 Nos. Bi-Directional rollers				
Pressure relief device				
Dial type oil temp. Indicator with max. indicating pointer				
First filling of transformer oil confirming to IS: 335				
WTI with alarm & trip				
Weather proof (IP:55 enclosure) marshaling box and accessories				
Dial type winding temp. indicator (WTI) with contacts				
Dial type oil temp. indicator (OTI) with contacts				
Buchholz relay with alarm & trip				
Shut off valves for buchholz relay				
Magnetic oil level gauge				
Radiators- detachable ( for ratings 1000KVA)				
HV side: Outdoor type bushing /XLPE cable box/air insulated cable box				
LV side: Outdoor type bushing /XLPE cable box/air insulated cable box				
Loads losses @50% loading (IS 1180 L-3)- 2790watt				
Loads losses @100% loading (IS 1180 L-3)- 7770 watt				
Impedance the recommended percentage impedance is 5% with tolerance as per IS-2026				

27	<p><b>LT POWER FACTOR PANEL:-</b> Supply, installation, testing &amp; commissioning of cubical type panel dust &amp; vermin proof. free standing floor mounting made out of 2MM thick CRCA sheet with 75mmx40mmx6mm channel iron base frame painted with stove enameled power coated paint L.T. automatic power factor control panel 360 KVAR capacity suitable for automatic operation &amp; control of power factor within the set limits suitable for operation on 3 phase 4 wire 50 Hz 400/440 volts A.C. supply. Including the cost of following items. (NS)</p> <p>1 No. automatic power factor control relay of EE Co./ L.&amp; T. make.</p> <p>Power factor digital meter of AE/L&amp;T make.</p> <p>Incomer 800 amp. Triple pole molded case circuit breaker 50KA Make- L&amp;T, Havells, INDO-ASIAN</p> <p>A set of LED lamps (3 Nos.) phase indicating lamp of L &amp; T make.</p> <p>Iron clad bus bar chamber suitable for 800 amp. 440 volts having 4 No. copper bus bar of cross section 50 mm x 10mm duly tinned and insulated with PVC sleeves.</p> <p>Connection from incomer moulded case circuit breaker to bus bar by means of solid copper strip of requisite capacity duly tinned &amp; insulated with PVC sleeving.</p> <p>3 phase dry capacitor of simens /Neptune make (totald 360 KVAR) matching from 2 KVAR to 25 KVAR</p> <p>Required capacity 3 phase . Contactor independent for each capacitor of L&amp;T /Siemens / INDO-ASIAN make</p> <p>Required capacity 3 Pole MCB independent for each contactor Make- L&amp;T/Schneider / INDO -ASIAN</p> <p>indication LED Lamps 220 volts for ON indicator of respective capacitor of L&amp;T make</p> <p>push button ON/Off manual operation respective of L&amp;T make</p> <p>Earthing copper bus bar of cross section 32 mm x 5 mm duly tinned and insulated through the length of panel. The panel will be complete with all internal wiring with PVC copper wire, inter connection etc, in all respect with all labour and material require to complete the job in all respect including the cost of MCCB up to the entire satisfaction of the Engineer-in-charge of the work.</p>	each	1		
28	<p>Supply and erection of outdoor type end termination jointing box heat shrinkable type suitable for 95 Sqmm 3 core 11 K.V HT. XLPE cable with epoxy cast bushing including making necessary connection with all labour and material required to complete the job all in respect up to the entire satisfaction of the Engineer-in -charge of the work. Make: Denson/3M/ M –Seal (NS)</p>	each	1		
29	<p>Supply and erection of fencing for safety precaution made out with the help of 50mm x 50mm x6mm angle iron(The distance shall not be max. 950mm Horizontal and 25mm Vertical between to angle ) ,MS flat 50mm x 6mm ,(The distance shall not be max 800 mm vertical between to flat) MS jali wire gauge 3.5 mm duly painted with red enameled paint i/c one coat of red oxide .The fencing angle shall be embedded in ground with C:C mixture at least 90 cm in ground level including all labour and material required to complete the job at site. (NS)</p>	SQM	22		
30	<p>Supply and laying crushed stone aggregate 25 mm gauge around the D/TF (NS)</p>	cum Mtr	3.5		

31	<p>Supply, installation, testing and commissioning of ACB 1600 amp. 4 pole 50 KA of L&amp;T C- POWER, SR18G MDO /HAVELLS/L&amp;T / INDO ASIAN make in existing panel microprocessor based with L.S.I.G. protection manually draw out type manually operated complete with under voltage trip &amp; shunt-trip. ACB should have alarm for temp. rise 75 centigrade with LED indication so that ACB self trip more than at 95 centigrade and ICS =ICU =ICW 100% for 1 Second. Suitable for operation on 400/440 volts 3 phase , 4 wire 50Hz AC supply with 4 Nos or 6 Nos.. (NC+No) auxiliary contacts and comprising of :- (NS)</p> <p>Hand Trip</p> <p>On and off indicator</p> <p>Neutral link,</p> <p>1 Nos digital type ammeter 0- 1600 amp. Size 96mm x 96mm A.E. make /IMP make</p> <p>1 No. digital voltmeter 0-500 volts of size 96 x 96mm A.E. make /IMP make</p> <p>CT's of 15 VA burden &amp; accuracy class 0.5 and having rating of 1600/5 amp A.E make</p> <p>Indicating lamp , Red ,Yellow , Blue = 1 Set</p> <p>Connection: - connection with existing change over switch 1600 amp. 4 pole in existing panel with the existing bus- bar and cables.</p>	No.	1		
32	<p>S/E, testing and commissioning of indoor cubical type, dust and vermin proof LT panel free standing floor mounting made out of 16G. M.S. sheet with channel size 50 x 50 x 6mm iron base frame painted with strong synthetic light gray enamel paint suitable for operation on 3 phase 4 wire 50 cycles 400/440 volts A.C. supply including the cost of following items (NS)</p> <p><b>INCOMING:</b> Accommodating 1 no. On load change over switch 600 amps. four pole complete with suitable size of cable chamber to receive incoming/outgoing cable in sheet steel cubical panel</p> <p>ON &amp; OF indicator</p> <p>Neutral Link</p> <p>96 sqm. Flush mounting AVF digital meter 0-600 amp. , 0-500 volt Make- AE/IMP/ L&amp;T with control MCB and selector switch.</p> <p>A set of LED lamps (3 nos.) Phase indicating light.</p> <p>3 Nos. current transformer of AE /IMP /CONCARD make 15 VA burden an accuracy class 'C' and having rating 600/5 amp. For Meter.</p> <p>Bus bars of capacity of 800 amps. 415 Volts with 4 copper bars insulated with PVC sleeving suitable size of copper bars</p> <p>Solid copper connection of required capacity from MCCB to bus bars</p> <p><b>INCOMING/OUTGOING :</b> L.T panel should be having sufficient space for accommodating the following switches/ M. C.C.B's including the cost of the MCCB and metering system as required.</p> <p>600 Amp. triple pole MCCB 50 KA =1 No. incomer</p> <p>300 amp. Triple pole MCCB 35KA = 1 nos. outgoing</p> <p>100 amp triple pole MCCB 35KA = 3 No. Outgoing</p>	each	1		

	<p><b>CONNECTIONS</b> : - Solid copper connection of required capacity Change over switch to incomer M.C.C.B., Incomer MCCB to bus bar and from M.C.C.B. to outgoing cable having provision for connecting at least eight cables including the cost of suitable size Al. Thimble., brass cable glands</p> <p>The panel should be completed with all inter wiring with PVC copper wire and testing etc. rotary handle in each MCCB to be provided.</p>				
33	<p>S/E, testing and commissioning of indoor cubical type, dust and vermin proof LT panel free standing floor mounting made out of 16G. M.S. sheet with channel size 50 x 50 x 6mm iron base frame painted with strong synthetic light gray enamel paint suitable for operation on 3 phase 4 wire 50 cycles 400/440 volts A.C. supply including the cost of following items (NS)</p> <p><b>INCOMING:</b> Accommodating 1 no. ON load change over switch of 300 amp. Four pole complete with suitable size of cable chamber to receive incoming/outgoing cable in sheet steel cubical panel.</p> <p>ON &amp; OF indicator</p> <p>Neutral Link</p> <p>96 sqm. Flush mounting AVF digital meter 0-300amp. , 0-500 volt Make- AE/IMP/L&amp;T with control MCB and selector switch.</p> <p>A set of LED lamps (3 nos.) Phase indicating light.</p> <p>3 Nos. current transformer of AE /IMP/concord make 15 VA burden an accuracy class 'C' and having rating 300/5 amp. For Meter.</p> <p>Bus bars of capacity of 400 amps. 415 Volts with 4 copper bars insulated with PVC sleeving size of copper bars 40mm x 5mm.</p> <p>Solid copper connection of required capacity from MCCB to bus bars.</p> <p><b>INCOMING/OUTGOING:</b> L.T panel should be having sufficient space for accommodating the following switches/ M. C.C.B's including the cost of the MCCB and metering system as required.</p> <p><b>300 amp. Triple pole MCCB 35KA = 1 nos. incomer</b></p> <p><b>100 amp. Triple pole MCCB 35 KA = 3 nos. Outgoing</b></p> <p><b>CONNECTIONS</b> : - Solid copper bus bar connection of required capacity change over to incomer MCCB, incomer MCCB to bus bar., bus bar to outgoing MCCB and M.C.C.B. to outgoing cable having provision for connecting at least six cables including the cost of suitable size Al. Thimble., brass cable gland.</p> <p>The panel should be completed with all inter wiring with PVC copper wire and testing etc. rotary handle in each MCCB to be provided.</p>	each	1		

**Note: Rate to be quoted including all taxes.**



## ANNEXURE-B

### General Terms & Conditions

1. The e-tender is invited for Supply, Engineering, Installation, Testing & Commissioning of augmentation 500KVA D/TF with 1000KVA and allied materials at MAMC, Agroha. The tender documents can be downloaded from the Institute website [www.mamc.edu.in](http://www.mamc.edu.in).
2. Qualification of the Bidder:-
  - 2.1 All bidders shall provide the Qualification Information, Forms of Bid and the affidavits / Undertakings. The scanned copy of affidavit shall have to be submitted in technical bid and on Completion of Technical Evaluation the original affidavit should be submitted by the bidders. The Affidavit in original shall form part of the agreement.
  - 2.2 All bidders shall provide following information and documents with their bids :
    - a) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business, written power of attorney of the signatory of the Bid to commit the Bidder.
    - b) Total monetary value of similar nature work performed during each of the last three years.
    - c) Experience in works of similar nature and size for each of the last three years and details of work underway or contractually committed, and clients who may be contacted for further information on these contracts.
    - d) Reports on the financial standing of Bidder, such as profit and loss statements / auditor's reports for the past three years.
  - 2.3 Bids from Joint ventures are not acceptable.
  - 2.4 Qualification Criteria:- To qualify for award of the contract, each bidder in its name should have in the last three years as referred:
    - a) Average Annual financial turnover during the last 3 years, ending 31st March of the previous financial year, should be at least equal to the estimated cost.
    - b) Experience of having at least one similar completed work in last three years costing not less than estimated cost.Following shall be applicable to the above:-
    - a) Cost of work shall mean gross value of the completed work including the cost of materials supplied by the Govt. / Client, but excluding those supplied free of cost. This should be certified by an officer not below the rank of Executive Engineer/ Project Manager or equivalent (calculated on the basis of 8% value added compounded per year).
    - b) The applicant should have minimum Average Annual financial turnover during the last 3 years, ending 31<sup>st</sup> March of the previous financial year, should be at least equal to the estimated cost. This should be duly audited by a Chartered Accountant.
  - 2.5 Sub-contractors' experience and resources shall not be taken into account in determining the Bidder's compliance with the qualifying criteria.
  - 2.6 Even though the bidder met the above qualifying criteria, they are subject to be disqualified if they have:
    - Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or.

- Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures, poor quality work etc.
- Participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

The bidder who had abandoned the work or his contract was rescinded or was terminated due to non completion of work/ or any other default on the part of the contractor in any contracts during last three years, shall be considered as non performer and no work will be allotted to him. No specific order for debarment shall be needed for this purpose.

3. The application for tenders must be accompanied with the copy of GST & PAN Numbers, valid copy of Empanelled with Govt.
4. The Contractor should have registered with ESIC & Labour department as Contractor. He will be fully responsible for any mishappening with the manpower.
5. The tender must be accompanied with the Earnest Money in a separate envelope in the shape of Bank Draft in favor of Director, M.A.M.C., Agroha (Hisar). Tender without Earnest Money will not be considered and will be rejected out rightly.
6. The DNIT, Terms & Conditions is available at official website of MAMC, Agroha i.e. [www.mamc.edu.in](http://www.mamc.edu.in).
7. The Director, MAMC, Agroha reserves the right to reject the tenders without assigning any reason and no claim on this account will be accepted.
8. The 10% Security, GST, T.D.S., Labour Cess as per Govt. rules charged by Govt. from time to time and 0.5% Water charges if used and Electricity charges as per actual Metered consumption shall be paid by the Contractor / recovered from each running bills. The 10% security may be got released by the Contractor after 90 days of defect free completion of work including, testing, commissioning and clearance by Engineer-In-charge on furnishing of 3% security in the shape of performance Bank guarantee. The security so deducted will be refunded after completion of warranty period subject to good performance of the equipment. No interest will be paid on the security so deposited.
9. Conditional tenders and tender without Earnest Money will be rejected.
10. In case of dispute between Contractor and the Institute, the arbitrator will be appointed by MAMC, Agroha, whose decision will be final and binding on both the parties.
11. The jurisdiction for all dispute related to this tender will be Court, Hisar.
12. If the date of opening of tender happens to be holiday, the tender will be opened on the next working day at the same times as already specified.
13. All the works are to be carried out as per Haryana PWD Specifications/as per instructions of consultant / Engineer-in-Charge at site.
14. Black listed Contractors/partners/proprietor will not be allowed to participate in Tenders (Affidavit is to be given by the Contractor/partner/proprietor in regard with no blacklisting/any litigation).
15. The specific rates for non-schedule items must be quoted in words and figures.
16. Taxes whatsoever may be paid on materials in respect of this contract and service tax shall be payable by the contractor. MAMC, Agroha (Hisar) will not entertain any claim on this account.
17. The interested tenders are requested to visit the site at M.A.M.C., Agroha during office hours i.e.

up to 3:00 p.m. on any working day to have all information they want to collect and also to have on the spot assessment /clarifications. However the visit will be at their own cost and department will not bear any expenditure on this account.

18. All other terms & conditions are as per DNIT and successful contractor will have to make an agreement with MAMC regarding the work before start of work.
19. The Contractor / Agency should submit an Affidavit that the firm has not been debarred /black listed by any Govt. Department / Autonomous body / society.
20. Work will be completed in 120 days (the completion schedule will be 120 days from the issue of work order).
21. In case of Non completion of work within the stipulated time, a penalty equaling 10% of the cost of work shall be levied upon the contractor.

## **ANNEXURE - C**

### **INSTRUCTIONS TO BIDDERS**

1. The scope of work shall consist of cost of all material, labour tools and plants, water and electricity bill etc., engineering, supervision, Installation, calibration, adjustment as required for commissioning of the equipment. The term complete installation shall mean, not only major items of the plant and the equipments covered by the specifications, but also incidental sundry components necessary for complete execution and satisfactory performance of installation with all labour charges, whether or not specifically mentioned in the tender documents which shall be provided by the contractor at no extra cost.
2. Nothing shall be paid for the damage by rain, floods or any other act of God.
3. The whole work shall be carried out strictly in accordance with Haryana PWD Specifications 1990 with up to date amendment/correction slips up to entire satisfaction of the Engineer-in-charge.
4. Nothing shall be paid for unforeseen delays on account of non-availability of any kind of material drawing or design.
5. The contractor shall provide suitable measuring arrangement at site for various articles brought by him.
6. In this contract schedule of rates, only essential portion of items have been written but it will deem to cover the entire items fully described in Haryana Common Schedule of rates.
7. No claim will be entertained from the contractor in case of any mistake in description, rates or unit occurs in any of the items taken in this schedule while composing this on account of typing or comparison and over –sighting. If there is any mistake, the same shall be rectifiable at any stage as per Haryana common Schedule of rates.
8. Approximate quantities have been given in the contract schedule of rates and these may vary at the time of actual execution of the work. The payment will however be made according to the actual work done by the contractor.
9. The amount of work can be increased or decreased as per requirement of site and contractor will have no claim on this account.
10. The items given in the contract schedule of rates can be changed by the Engineer-in –charge and its execution will be binding on the contractor.
11. In the event of any extra or additional work being carried out under orders in writing of the Engineer-in-charge of the work in connection with any type of work the same shall be measured as laid down in the respective schedule of H.S.R. 2021, any amendment thereof.
12. No claim on account of fluctuation in prices due to any reasons whatsoever will be considered.
13. The department reserves the option to take away any items of the work or any part thereof at any time during the currency of the contract and re-allot it to another contractor with due notice to the contractor without liability of compensation.
14. The successful contractor shall have to sign an affidavit to the effect that he has no relation or connection with the firm/contractor blacklisted by Govt. of Haryana /Govt. of India from time to time.

15. Any item of work not provided in the contract schedule of rates, if required to be executed will be paid as per Haryana schedule of rates 2021.
16. Before energizing the system for any type of electric installation the following tests /certificate should be given by the contractor:-
  - a. Earth resistance test.
  - b. Insulation test.
  - c. Polarity test.
  - d. CEI inspection/test (where ever mandatory required)
17. All cable connections with main switches and MCCB shall be through dowel or any other reputed make tinned copper/Al lugs/thimbles duly crimping tools & earthing connection be also made solidly.
18. All recess chases and holes made for wiring or other purpose shall be filled up properly and wholly and brought to its original finish to the satisfaction of the Engineer-in-charge.
19. The route, diagram in duplicates on suitable size of tracing cloth for cables/installation made shall have to be supplied immediately after completion of work.
20. The contractor has to strictly follow the fair wages clause.
21. The Contractor must have valid license from the Chief Electrical Inspector, Govt. Of Haryana.
22. The contractor shall be required to give the insulation test certificate applicable type test as per latest IS /specification and routine test conducted by the manufacturer of all materials like PVC underground cable, transformer, panels and allied materials involved in the scope of work.
23. The tests should be conducted in the presence of the representatives of M.A.M.C. deputed by Director/ Engineer-in-charge.
24. The items/materials brought at site of work should be ISI marked/specified make and as per the list approved appended in the DNIT. In case there in any dispute regarding its quality then the same will be got checked from any approved laboratory at his own cost by the contractor within 10 days from the date of order given by the Engineer-in-charge in writing.
25. Recovery of Income Tax, GST, Electricity charges & security etc. will be made from the contractor in running /final bill on the gross amount as per instructions of Govt.
26. Analysis of rates for non schedule item i.e. items which are not provided in the schedule of rates, shall be based on the rates of materials and wages of labour provided in the HSR – 2021/minimum wages act in case such rates of materials and wages of labour not mentioned in HSR- 2021, but involved in the non – schedule items, the rate should be determined as per actual lowest market rates at the time of execution of work. The contractor shall be required to provide in original such voucher which shall be subject to verification by the Engineer – in – charge, if deemed necessary. The rates for non-schedule items shall be computed on the basis of voucher rate plus contractor profit of 10% and approved by the competent authority.
27. All M.S. parts /accessories (except of earthing work) to be installed for overhead /underground works are required be galvanized/ powder painted with approved color as desired by Engineer-in-charge after due primer coat. This work is essential irrespective of items issued by the Department or otherwise.
28. Contractor shall comply with the provision of Apprentice Act 1961 and the rules and order issued there under from time to time and if he fails to do so his failure will be breach of

- contact. The Engineer-in – charge may at his discretion cancel the contract shall also be liable to peculiar liabilities arising on A/c of violation of provision of act by him.
29. Transformer, H.T/L.T. Panel, cables and Electrical items shall be got inspected /approved by the Engineer-in-charge or his authorized representative before installation at site. Inspecting authority /approving Authority may get test/inspect the above item at the works of manufactures firm on the cost of the Contractor i.e. pre-dispatch inspection.
  30. Contractor shall be responsible for getting the electrical installation inspected from Chief Electrical Inspector, Haryana/ Pollution Control Board, Haryana, wherever applicable and he will also make necessary payment of fees for this purpose MAMC will however render necessary assistance to the contractor in this regard.
  31. All testing charges of various equipments if required by any electricity authorities/ Pollution Control Board shall be borne by the contractor.
  32. The contractor shall submit original manufacturer test reports, type test, routine test as per applicable IS in respect of Transformer, HT/LT panel, cable and major materials.
  33. After completion of the work, a complete drawing showing connections to the various equipments is to be prepared by the contractor and to be submitted to the department along with the final bill of the work.
  34. The contractor shall not be entitled for any payment on account of work done by him till he signs the contract agreement.
  35. MAMC is not responsible for arranging any material whatsoever and contractor will have to complete the work within time. Non – availability of material OR delay in consignment will not be entertained to as an excuse for extension for time for completion of work except any force majeure.
  36. If any make of the items is not specified /miss-specified, any ambiguity or inconsistency that can be clarified from the Engineer-in-charge of the work and the decision of the Engineer will be final.
  37. The tender shall remain valid for 90 days from the date of opening with the issue of allotment letter to the contractor within the validity period, the contractor agreement will stand concluded even without signing of the contract agreement .In case the contractor fails to commence the work, his earnest money will be forfeited and action under clause 2 &3 will also be taken against him. In case the contractor withdraws or amend his offer before allotment letter his earnest money will be forfeit. He will also be liable to be debarred /black listed in both the cases.
  38. Tender quotations which are dependent upon the quotations of other tender shall be summarily rejected.
  39. The actual quantities of the work completed successfully and accepted shall be paid.
  40. AUTHORITY OF THE PERSON SIGNING THE CONTRACT ON BEHALF OF THESUPPLIER:-The person who has signed these Tender papers (including the terms and conditions) has got authority to sign on behalf of the supplier. It is discovered at any time that the person so signing had no authority to do so, the purchaser without prejudice to any other right or remedy available to him may, cancel the contract and hold such person liable to the purchaser for all costs and damages arising from the cancellation of the contract including any loss which the purchaser may sustain on account of such purchase.

41. TESTS AND INSPECTION: The material shall be inspected and tested by the purchaser or his authorized agent before dispatch unless dispensed with in writing by the purchaser. The Supplier shall give to the purchaser at least 10 days advance notice from the date of readiness of material for such inspection and test.  
METHOD OF TESTING: The Purchaser or his authorized agent shall have the right to put all the material or part thereof to such tests as he may think fit and proper. The supplier shall not be entitled to object on any ground whatsoever to the method of testing by the purchaser or his authorized agent.  
REMOVAL OF REJECTED MATERIAL: If any material is rejected by the Purchaser or his authorized agent after tests and inspection or by the consignee, the material so rejected shall be removed from the premises of rejection by the supplier at his own cost. Such rejected material shall under all circumstances lie at the risk of the Supplier from the moment of such rejection; and if such material is not removed by the Supplier within a period of 5 days, from the date of notice given by the consignee/Purchasing Department for lifting of such material, Purchaser or his authorized Agent or consignee may dispose of such material in any way at the Supplier's risk and cost and retain such portion of the proceeds as may be necessary to cover any expense incurred in connection with such disposal and shall also be entitled to recover handling and storage charges for the period during which the rejected material is not removed.  
POST RECEIPT INSPECTION: The material after receipt in the stores of the MAMC shall be subjected to inspection for its conformity to the specification by a representative of the MAMC in the presence of representative of the contractor/supplier after issuance of e-mail notice/telephonic communication to the supplier/ contractor. In case the firm fails to depute a representative on the specified date, the MAMC would be free to get the material checked in the absence of firm's representative for which the firm would have no reason to protest at any stage and would be fully responsible of the outcome.
42. Contractor must carefully study the technical specifications and general terms and conditions before preparation of tender. All terms and conditions of NIT and Corrigendum shall be applicable.
43. All tenders/offers will be regarded as constituting an offer or offers open to acceptance in whole or in part until the last date of validity as prescribed in the notice inviting tenders or as indicated by the Contractor in his tender/offer, whichever be later.
44. The price must be quoted in Indian Rupees and any mistake in calculating the rupee price will not justify the claim for increase in prices
45. Authenticated documents to prove authority of signatory (legal power of attorney in favor of signatory) must be uploaded. Memorandum of article and Memorandum of association of the firm, if applicable, shall also be uploaded with the tender
46. The deviations in Technical & Commercial terms and Conditions, if any, must be brought out clearly failing which it will be presumed that the same are acceptable in to-to.
47. Contractor/s shall submit their offer in an ambiguous free wording failing which MAMC interpretation will be final
48. The revision of price bid after opening of Part-I i.e. technical and commercial part of the tender is not allowed. In case of withdrawing the same within the validity period, EMD shall be forfeited
49. Arithmetical Errors: - in case of any inconsistency in the prices furnished, the purchaser shall be entitled to consider the lowest prices for the purpose of evaluation and award of contract.

All arithmetical errors will be rectified on the basis of the unit price or total price (in figures and in words) whichever is more beneficial to the purchaser/MAMC.

50. Material offered should be strictly according to the technical specification attached with the tender documents as laid down in Annexure-A & Annexure-D to the Terms and conditions of the contract. Unless a deviation in the specifications given in Annexure 'D' is pointed out by the Contractor specifically, it will be presumed that Offer/tender conforms to the specifications as laid down in Annexure 'A' & 'D'.

In case of any ambiguity in the MAMC technical Specification, the provision of relevant IS with latest amendment will prevail. The Director, MAMC shall be the deciding authority in such cases.

51. EMD is liable to be forfeited in case of evidence of cartel formation by the bidder(s). The provision for penal action in case of cartel formation by the bidders shall be as per clause No. 9 of policy (guidelines) issued by the State Govt. vide G.O No. 2/2/2010-41 BII dated 28.5.2010.

52. The Contractor must submit a hard copy of all the documents related to part-I ( i.e. techno-commercial terms and conditions, where the tender is invited in two parts) uploaded on the site for the said tender duly certifying that these documents are same as uploaded on designated website, within 4 days of opening of part-I. (All affidavit & undertakings should be submitted in original with hard copy).

53. Submission of Quality Assurance Procedure:-The Vendor / Contractor at the time of submission of the drawings for approval from MAMC is also required to submit a Quality Assurance Procedure (QAP) of the materials to be supplied for review and approval. In this QAP, the vendor / contractor shall clearly indicate the quality measures being taken by the manufacturer to maintain the quality of the finished product. The drawings/QAP once approved shall not be required to be submitted for approval again.

- i) Tests being performed on the raw material purchased by manufacturer for manufacturing of the finished product.
- ii) Tests being conducted during manufacturing of the product (In process testing).
- iii) Tests which shall be done on the finished product at the time of pre-dispatch inspection.
- iv) Test results assured by the vendor.
- v) Tests procedure followed for the inspection with full details of test setup etc.

The Inspection shall be carried out on the basis of the approved QAP. All the details provided by the vendor / contractor shall be verified by MAMC / Third Party during the inspection and if any deviation is found from the approved documents, it will be noted in the inspection report

54. Only those firms who have not been blacklisted by any State Govt. or any State/Central Govt. Power Utility in India on the date of issuance of NIT shall be entitled to submit the tenders. The firm shall submit an affidavit of non-blacklisting on the non-judicial stamp paper of the appropriate value duly attested by Notary public

55. There will be three envelopes submitted by the Contractors, one envelope containing earnest money and one containing the tender documents and other containing technical and



commercial i.e. rates/premium only . In the first instance, the envelope of earnest money will be opened. In case, no earnest money is received, the envelope containing tender documents will not be opened and rejected out rightly.

56. Safe custody of all machinery and equipment supply by the contractor shall be his own responsibility till the final taking over by the M.A.M.C., Agroha. The contractor shall be fully responsible for any loss of equipments and his manpower/labour during execution of this work.
57. The contractor shall operate the D/TF and AMF/ATS Panel for a period of 15 days after it is energized the date of taking over the equipments shall be reckoned after its trouble free operation during the running period.
58. Warranty:- Contractor shall provide guarantee for the smooth functioning of the equipment/material as under:
  - a) 36 months for the transformer
  - b) 12 months for other equipment provided under the contract.

In case of any defect during warranty period item/equipment shall be replaced free of cost within a reasonable period as decided by the Director MAMC. However the proportionate amount of the bank guarantee will be refunded (as per Clause 8) after completion of warranty period.

## Annexure-D

### LIST OF APPROVED MANUFACTURERS FOR DIFFERENT MATERIALS TO BE USED IN THIS PROJECT FOR ELECTRICAL WORKS

Details of Materials	Manufacturers Name
M.S. Conduits and Accessories	BEC/NIC/STEEL CRAFT (ISI), Jindal or equivalent ISI Mark
P.V.C. conduits and Accessories	Akg, Finolex, Polycup
Electrical Accessories, Batten Holder, Pendent Holder, Ceiling Rose, Bell Pus Switches and Sockets etc. (ISI Marked)	HAVELLS/ANCHOOR/SSK/GM
Bakelite Sheet	Hylam / Formica / Sunlam (ISI Marked)
Call Bell & Buzzer	Havells/Anchor / SSK /
PVC Wires (Copper Conductor)	Finolex / Havells / RR KABIL/KEI
P.V.C. Underground Cables with Aluminium / copper conductor	RR KABIL / HAVELLS / Plaza /KEI/UNIVERSAL
H.T. (XLPE Cable with Aluminium Conductor)	Universal / HAVELLS / KEI
L.T. (XLPE Cable with Aluminium Conductor) (I.S.I. Marked)	HAVELLS/KEI/ Universal /RRKABIL/POLYCAB (ISI MARKED)
P.V.C. Pipe (6 Kg. pressure) (ISI Marked)	AKG / FINOLEX / RAVINDRA/POLYPACK
G.I. Pipe and M.S. Pipe (Medium) (ISI Marked)	Tata / JINDAL/RAVINDRA
IC Switches CAT-A	HAVELLS/L&T / INDO ASIAN / Siemens
CAT-B (ISI Marked)	Standard / HAVELLS/L&T/ INDO ASSIAN/SIEMENS
CAT-C (Conforming to IS)	BRITE/CAPITAL/HAVELLS/L&T/INDO ASSIAN/SIEMENS
MCB (ISI Marked)	INDO ASIAN / SIEMENS / SCHNIDER / HAVELLS /L&T/VETO/LEGRAND
Enclosures (Standard Size only)	Makes as per MCB <sup>5</sup>
ELBC <sup>5</sup> (ISI Marked)	INDO ASIAN / SIEMENS / SCHNIDER / HAVELLS /L&T/VETO/LEGRAND
MCCB <sup>5</sup>	INDO ASIAN / SIEMENS / SCHNIDER / HAVELLS /L&T/LEGRAND
Telephone Wires	Delton / FINOLEX /HAVELLS/POLYCAB
Cable Lugs	DOWELLS / ACTION /crimping type
Coaxial Cable	Delton / Dauphin/ FINOLEX
Telephone Tag Block	KRONE
Energy Meter	SECURE, L&T, GENUS
Terminal Blocks	ELMEX
Indicating Lamps	L&T/HAVELLS
Cable Glands	Chromium plated Brass heavy duty glands, weatherproof with rubber washers and gaskets of Comet make HMI
Modular MS /GI box not less than 1.5mm thickness	L&T /INDO ASIAN /LEGRAND /HAVELLS/GM
MS /GI box not less than 1.5mm thickness	L&T /INDO ASIAN /LEGRAND /HAVELLS/GM
AI I Modular accessories	L&T /INDO ASIAN /LEGRAND /HAVELLS/GM/SSK
Ceiling fan/ Exhaust fan	HAVELLS/CROMPTON/ORIENT/USHA

In the absence of above – mentioned makes, the Engineer-In -charge will be empowered to suggest & approve another make of equivalent quality which is as available in the market.

Sign of Contractor with Seal

Director