#### **Tender Document**

#### For

# Annual Routine Maintenance & Operation of four (4) nos. of 11/0.433 kV Electrical Sub-Stations, HT/LT lines, Street Lights and Other allied Electrical Installations at Central University of Rajasthan.

NIT No. : CURAJ/R/F.122/2020/1001

NIT Issue Date : 24.07.2020

Last Date of Submission : 17.08.2020 upto 2.00 PM Technical Bid Opening : 17.08.2020 at 3.00 PM



CENTRAL UNIVERSITY OF RAJASTHAN NH-8, Bandarsindri, Kishangarh, Dist.- Ajmer, Rajasthan – 305817 www.curaj.ac.in

## **INDEX**

S. No.	Content	Page No.
	PART-A 'Technical Bid'	
1.	Notice Inviting Tender	3
2.	Detailed NIT	4-7
3.	General Conditions of Contract	8-14
4.	Special Conditions of Contract	15-19
5.	Schedule of Works	20-23
6.	Form-8, Acceptance	24-25
7.	Performa of Schedule	26-28
8.	Form of Agreement & Integrity Agreement	29-34
9.	Annexure-I with Checklist with Technical Bid	35-36
10.	Financial Information (Annexure-II)	37
11.	Similar Work Experience (Annexure-III)	38
13.	List of works which are in hand (progress) (Annexure-IV)	39
14.	Self-Certificate for Track Record (Annexure-V)	40
15.	Form of Performance Guarantee (Bank Guarantee)	41-42
	(Annexure-VI)	
16.	Certificate from Principal Employer (Annexure-VII)	43
17.	List of approved makes (Annexure- VIII)	44-48
	PART-B 'Financial Bid'	
18.	Schedule 'A' (SH: Deployment of Manpower & Non-Comprehensive	49-50
	AMC of Electrical Substation Equipments)	
19.	Schedule 'B' (SH: Repairing of HT/LT Underground Cable)	51
20.	Schedule 'C' (SH: Supply of Materials for Electrical Maintenance	52
	Works).	

### **Notice Inviting Tender**

The Registrar, Central University of Rajasthan, NH-8, Bandarsindri, Kishangarh, Dist.-Ajmer, Rajasthan-305817 invites sealed **Item Rate Tender** from eligible registered/enlisted Contractor of CPWD, MES, BRO, State PWD or Public sector undertakings set up by the central or state government having successfully completed works of similar nature as per eligibility condition for the following works:

1.	Name of the Work	Annual Routine Maintenance & Operation of four (4) nos. of 11/0.433 kV Electrical Sub-Stations, HT/LT lines, Street Lights and Other allied Electrical Installations at Central University of Rajasthan.
2.	NIT No.	CURAJ/R/F.122/2020/1001 dated 24.07.2020
3.	Estimated Cost	95,65,000/-
4.	Earnest money deposit	1,92,000/-
5.	Time of completion	12 Months (Which may be extendable for further one more year).
6.	Last Time & Date of submission of Bid	17.08.2020 at 2.00 PM
7.	Time & Date of Opening of Tender	17.08.2020 at 3.00 PM

Date & Time for Opening of Financial bid: To be intimated later on to technically prequalified bidders. The tender document can be downloaded from the official website of the University: www.curaj.ac.in or Central procurement portal www.eprocure.gov.in at free of cost.

The Registrar reserves the right to reject any or all tender without assigning any reason(s) thereof.

Note: All subsequent corrigendum / amendments shall be published only on website and not in press. Hence participants are advised to always be in touch with our website until the tender / bid is finally opened.

Registrar Central University of Rajasthan

#### **DETAILED NOTICE INVITING TENDER**

#### Information and instructions to bidders for tendering

The Registrar, Central University of Rajasthan, NH-8, Bandarsindri, Kishangarh, Dist.-Ajmer, Rajasthan-305817 invites sealed **Item Rate Tender** from eligible approved/registered/enlisted Contractor of CPWD, MES, BRO, State PWD or Public sector undertakings set up by the central or state government having successfully completed works of similar nature as per eligibility condition.

1. **Name of Work:** Annual Routine Maintenance & Operation of four (4) nos. of 11/0.433 kV Electrical Sub-Stations, HT/LT lines, Street Lights and Other allied Electrical Installations at Central University of Rajasthan. The work is estimated to cost Rs. 95,65,000 /-. This estimate, however, is given merely as a rough guide.

#### 2. Eligibility Criteria

- 2.1 Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works as defined here under and of magnitude specified below: Experience of having successfully completed similar works for operation and maintenance during last 7 years ending last day of month previous to the one which application are invited should be either of the following:
  - a) Three similar completed works costing not less than 40% of estimated cost, for each work.
  - b) Two similar completed works costing not less than 60% of estimated cost, for each work.
  - c) One similar completed works costing not less than 80% of estimated cost, for each work.

(Documentary evidence to substantiate above fact must be submitted along with Annexure-III and submitted with technical bid.)

**Similar Nature of works means** Electrical Maintenance & Operation of HT/LT line/ Electrical Substations (up to 11 kV).

**Note:** Joint Ventures are not accepted.

- 2.2 The Bidder must submit a valid Electrical Contractor License for working as electrical contractor of 33kV/11kV/415 Volts substations issued by Govt. of Rajasthan /Govt. of India/State administration of the state in which the contractor is working.
- 2.3 The bidder should have had average annual financial gross turnover not less than Rs. 1.92 Crore on works during the last three financial years. Attested copy of audited balance sheets by chartered accountant along with audit report for the completed last three consecutive financial years should be submitted along with the bid document.

  However, in support of FY 2020-21, an attested and signed copy of provisional balance sheet will be acceptable. Year in which no turnover is shown would also be considered for working
- out the average.(Annexure-II)

  2.4 The bidder should have positive net worth and should not have incurred loss in more than two years during last five years ending 31st March 2020, duly certified by Chartered Accountant should be submitted along with the bid document. (Annexure-II)
- 3. The bidder have to submit a list of jobs in progress for Maintenance & Operation of electrical substation upto 33kV and brief details of the units scope of work, names and address (postal mail) of present clients. (Annexure-IV)

- 4. The track record of the contracting firm/Contractor should be clean and should not be blacklisted or not have any involvement in illegal activities or financial misappropriation / frauds etc by any Central/State Government/Public Undertaking/Institute on any account. A self-certificate on the Non-Judicial Stamp paper shall be attached. (Annexure-V)
- 5. The bidder should have registration with Employee provident Fund Commissioner and Employee state Insurance Corporation. Self-attested copy to be enclosed with the technical bid.
- 6. This Operation Maintenance contract will be valid for a period of one (01) year from the date of issue of work order. However the contract further may be extended for one more year or part thereof on same terms and conditions if the Contractor's performance is found satisfactory. The performance would be evaluated by the University authorities. Scope of work and cost of such extension may be mutually decided & rate of minimum wages will be considered and reimbursed, as applicable from time to time.

#### 7. Preparation & Submission of bids:

- The tender should be submitted in two parts i.e. Technical Bid and Financial Bid. Both the bids shall be placed in two separate envelope with due mentioning of name of work and bid type. Both Sealed Envelopes should be kept in a main/ bigger envelope with due mention of Name of work date & time of opening of bids. This is to be submitted in the Tender Box, Dispatch Section Room No 101, Ground Floor, Administrative Building, Central University of Rajasthan within the last date of submission as mentioned above. The University will not be responsible for any postal or other delay whatsoever. The offers submitted by Telegram/Fax/e-Mail shall not be considered. No correspondence will be entertained in this matter.
- 8. **Earnest Money Deposit:** The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of Rs. 1,92,000/- (Rs One Lakh Ninety Two thousand Only) by way of demand drafts only. The demand drafts shall be drawn in favour of "Central University of Rajasthan" payable at Bandarsindri/Kishangarh. The demand drafts for earnest money deposit must be enclosed in the envelope containing the technical bid. The EMD of the successful bidder shall become part of performance Guarantee and for unsuccessful bidder(s) it would be returned after award of the contract. Bid(s) received without EMD will be rejected

#### Note:

- a) The firm who are registered with Medium Small and Micro Enterprise Management (MSME) are exempted to submit the EMD (copy of registration must be provided along with technical bid). No other relaxation will be allowed.
- b) Tenders received without EMD will not be accepted.

#### 9. **Performance Guarantee:**

- The Contractor whose tender is accepted will be required to furnish performance guarantee of 5% (Five Percent) of the tendered amount within 10 days of issue of letter of award. This guarantee shall be in the form banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank or Government Securities or Fixed Deposit Receipt or Guarantee Bonds of any Scheduled bank or the State Bank of India in accordance with the prescribed form favoring Central University of Rajasthan payable at Bandarsindri/Kishangarh, District-Ajmer, Rajasthan.
- The performance Guarantee shall be valid upto the contract period plus 90 days beyond that. The said performance guarantee shall be returned to the contractor after satisfactory completion of contract period.
- In case the contractor fails to deposit the said performance guarantee within the 10 days from date of issue of letter of acceptance/work award, including the extended period if any, then the said performance guarantee shall be deducted from the bill.
- This EMD/Performance guarantee shall be forfeited if he/they fails to comply with any of the conditions of the contract. No interest shall be paid on the EMD/Performance guarantee.

#### 10. **Security Deposit:**

- 5% (Five Percent) of the tendered amount shall be deducted from the bill.
- The said security deposit shall be returned after satisfactory completion of warranty period.
- This security deposit shall be forfeited if he/they fails to comply with any of the conditions of the contract. No interest shall be paid on the security deposit.

#### 11. **Payment Clause**:

- Payment will be made on monthly basis after satisfactory completion of service and on presentation of bill along with the proof of central govt. minimum wages of every worker paid to him/her direct by Contractor through Bank or ECS or online transfer to his/her bank account of previous months.
- 2. No advance payment will be made. Income tax and all other statutory tax deduction will be made as per Govt. of India norms.
- 3. The amount of GST (if any) charged by the Contractor from the University on account of the services rendered by him, will be paid only after submission of copy of challan of GST with necessary supporting documents with next month bill.
- 4. No Running Account Bill shall be paid till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board {The Building and Other Construction Workers (Regulation and Conditions of Service) Act, 1996}, whatever applicable are submitted by the contractor to the Engineer-In-Charge at the time of start of work.
- 12. The bidder should have own testing equipments for the proper and timely execution of the work and he should submit a list of these equipments. Else, he should certify that he would be able to manage the equipments by hiring etc. and submit the list of firms with their consent from whom he proposes to hire. The name of equipments, Sr. No. of the equipment should be submitted.
- 13. Tenders submitted shall remain **valid for 90 days** from the date of opening for the purpose of acceptance and award of work.
- 14. Before tendering, the tenderer shall inspect the site to fully acquaint himself about the conditions in regard to accessibility of site, nature and extent of ground working conditions of site and movement of labour etc. required for the satisfactory execution of the work contract. No claim whatsoever on such accounts shall be entertained by the University in any circumstances after award of tender.
- 15. Except writing rates and amount, the tenderer should not write any conditions or make any changes, additions, alterations and modifications in the printed/downloaded form of tenders. If any changes, additions, alterations, modifications are detected in the submitted bid even at a later date when contract has been awarded, the contract will be liable to be void. The decision of Registrar, Central University of Rajasthan will be final & binding to the Contractor in this regard.
- 16. The authorized person of the contracting firm/ Contractor must put his/her signature on all the pages of the tender documents invariably in having accepted all the terms and conditions in respect of this tender work.
- 17. The Central University of Rajasthan reserves the right to accept or reject any or all tender bids without assigning any reasons whatsoever and this decision will be binding on all the parties.
- 18. The contractor shall not be permitted to bid for works in the CURaj responsible for award and execution of contracts, in which his near relative is posted as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazette officer in the CURaj. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
- 19. No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a

period of one year after his/her retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.

- 20. Each and every page of all the tender documents, annexures, corrigendum/addendum (**if any**) and their annexures should be duly seal & signed and submitted with technical bid.
- 21. The tender will be awarded to the bidder who will be qualified in technical evaluation and found L-1 in financial bid.
- 22. **Financial bid** should contain only the Bidder's quoted rates in the given format, to be enclosed in **Envelope-II** super scribed with Name of Work. Financial offer shall be opened only of those who have submitted proper EMD and have qualified in the Technical Bid as per eligibility criteria and on submission of all the required documents.
- 23. This Notice Inviting Bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
  - The Notice Inviting Bid, all the documents including additional or special conditions, specifications and drawings, if any, forming part of the bid as uploaded online at the time of invitation of bid and rate quoted at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
- 24. The tender documents can be seen/ downloaded from the University website www.curaj.ac.in & CPP Portal and all future Corrigendum/Corrigenda will be uploaded on our website.
- 25. Before submitting the tender, please go through complete tender document and terms and conditions on which the work will be awarded and shall be executed by the successful tenderer.
- 26. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
  - (i) The notice inviting tender, form of agreement, Integrity pact, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
  - (ii) Standard C.P.W.D. Form as mentioned in schedule(s) consisting of: a. Various standard clauses with corrections up to the date stipulated in schedule(s) along with annexures thereto. b. C.P.W.D. Safety Code.
  - (iii) No payment for the work done will be made unless contract is signed by the contractor

#### GENERAL CONDITIONS OF THE CONTRACT

The following special instructions/ conditions are applicable to tenderer:

1. If the tenderer feels any other information necessary to make his offer complete, without changing or without having intent to modify / change any of the tender condition shall be submitted in a separate sheet.

Deviation/Any exclusion, deviation from specification shall be clearly spelt out and listed at one place in the offer only and tenderer shall substantiate the same with appropriate reasons. In absence of the same, it will be considered that tenderer has followed the specification fully in words and spirit.

#### 2. **Materials:**

2.1 The Contractor should maintain/promptly arrange the tools/tackles required for smooth execution of the work which will be included in quoted rates. No extra payment for the same will be made by the Central University of Rajasthan.

An indicative list of tools/tackles is mentioned hereunder: -

S.No.	Items	Min. Qty.
1	Megger – 1000/5000 volts	2 Nos.
2	Crimping tools	As required
3	Ratchet set	As required
4	Tool kit {D – Spanner, Ring Spanner (5-	As required
	40 No's each) }	
5	Pliers, tester & test lamps	As required
6	Earth tester	2 Nos.
7	Power meter /Multimeter Cum Clamp	5 Nos.
	tester	
8	High voltage discharge rod	As required
9	High voltage safety gloves	5 pairs
10	Torch, emergency light	6 Nos.
11	Electrical screw driver set	As required
12	Hand gloves, safety shoes and safety	As required
	belts	
13	First aid kit	6 Nos.
14	Vaccum cleaner	1 No.
15	Blower	2 Nos.
16	Tower ladder upto 40 feet safe working	01 No.
	height	
17	Ladder upto 20 feet safe working height	02 Nos.
18	Chopaya upto 20 feet safe working	02 Nos.
	height	
19	Temperature gun	01 No.
20	Allen Key, Pressure & Compound Gauge	01 Nos. each
	Manifold, Adjustment Range Set, Clamp	
	Meter, Gas Charging Line, Indoor Cover,	
	etc as required	

2.2 The consumable items like cotton waste, dungry cloth, emery paper, , CRC & CTC etc. and material required for regular housekeeping material like detergents, phenyl etc. (as & when required) shall be provided by the Contractor without any additional charges.

However any other tools despite of listed felt necessary for execution of the work would also have to be arranged by the contractor.

#### 3. Housekeeping:

The Contractor shall maintain the electrical installations (like electrical rooms of all the buildings, all the substations including yard area) clean and tidy inside as well as around the installations and substation buildings.

This shall also include sweeping, mopping, cleaning of cobwebs, removal of scrap generated during contract period, etc. in the substations building and regular removal of wild vegetation from substations yard.

All required materials for housekeeping like broom, cobweb broom, mop, bucket, soap, detergents, phenyl, etc. and tools for wild vegetation control shall be arranged by the Contractor. No rags and waste etc. shall be thrown near the building. This shall be deposited in the scrap yard and dustbins provided nearby, as per the department instructions. Also furniture and fixture therein shall be maintained.

#### 4. **Maintenance of records:**

- 4.1 The Contractor shall maintain all records such as log books, schedule of maintenance activity, complaint register, maintenance activity record, attendance register, work permit file, tags file, event register, test records for various tests conducted, material requisition book and other statutory registers for manpower employed etc. as per the performa certified/provided by Central University of Rajasthan. Records of major breakdown occurred during the contract period shall be maintained separately indicating its cause, location and type of repairs carried out. These all records shall be handed over to Engineer-In-Charge on time to time basis. The cost of stationery required for maintenance of the above record shall be borne by the Contractor.
- 4.2 Daily attendance of the staff shall be maintained by the Contractor and the Contractor shall make it available to Engineer-in charge of the Central University of Rajasthan as and when required.
- 4.3 The Contractor shall maintain a complaint/ fault register. As & when a complaint arises in respect of any electrical problem, the Contractor's employee shall enter the complaint in register & ensures remedial action proactively & instantly.
- 4.4 All required register will be issued by Engineer-in-charge duly marked in chronological order but the contractor will have to arrange all such registers/stationery etc. Nothing extra shall be paid on this account.
- 4.5 Each worker shall maintain a complaint diary and get the feedback recorded from the allottee's regarding attending the complaint. In case, it is found that the complaint has been attended unsatisfactorily, it will be considered as unattended. List of such complaints shall be submitted to the Engineer-in-Charge or his representative on daily basis.
- 4.6 The contractor or his supervisor shall maintain complaint register for recording the complaints.
- 4.7 The contractor and /or his authorized agent should see the site order/complaint book every day and get the compliance of instruction given by the JE/AE/Engineer-in-charge as per time schedule.

#### 5. **Inspection:**

Inspection will be carried out by the Engineer-in-Charge or any other authorized representative of the Central University of Rajasthan as and when required. The log book for the MRS, Load Substations, D.G. sets, Pump house, etc shall be submitted to the Central University of Rajasthan before submission of bill of every month for checking and certification.

6. It is the responsibility of the Contractor to hand over the entire system to the Engineer-In-Charge of the Central University of Rajasthan on completion of the contract period in working condition. The final handing over / taking over will be done after joint inspection by the Central University of Rajasthan and the Contractor on the completion of contract period.

#### 7. Safety

Specifications and standards: The operation and maintenance shall be in conformity with relevant Indian Standard specification, National Electric codes, Indian Electricity Rules.

The Contractor, his agents, representatives, workmen etc. shall strictly observe the orders pertaining to fire/LV/HV/EHV (Electrical) precautions prevailing within the restricted areas/electrical substations etc.

The Contractor, his agents, representatives, workmen etc. shall strictly adhere to the fire/electric shock precautionary measures while working near the explosive areas/HV/LV/Electrical substation areas. During such times, the workmen should be headed by their Electrical Supervisor as a precautionary measure. The regular team of the Contractor shall be very well aware of Cardio-Pulmonary Resuscitation, first aid etc. while working at height, Personal Protective Equipments (PPE) like safety belts, helmet, ladder and scaffoldings etc. shall be used as per the recommended safety guidelines.

#### 8. Accident or injury to workmen:

The Central University of Rajasthan shall not be responsible for any injury or loss of any workers of the Contractor that may take place while on work. Any compensation or expenditure towards treatment for such injury or loss of life shall be the sole responsibility of the Contractor. The Contractor is solely responsible for any damage or injury or accident that may occur to any of his personnel working under this contract. He/She will not claim any compensation from the Central University of Rajasthan.

#### 9. **Theft of Parts:**

Contractor shall be fully responsible for theft, burglary, fire or any mischievous deeds by his workers/ staff and shall replace the items under such category. Any loss occurred due to negligence and damaged caused by the contractor's staff to the spares provided by CURaj will be recovered from the Contractor. Security/ Safety of all installations in all substations will be the responsibility of Contractor.

The Contractor shall further keep the Central University of Rajasthan indemnified against any loss to the Central University of Rajasthan property and assets. The Central University of Rajasthan shall have further right to adjust and/or deduct any of the amounts as aforesaid from the payments due to the Contractor under this contract.

#### 10. **Deployment of Staff**:

10.1 The Contractor shall deploy the staff at Central University of Rajasthan site are deployed as per the given details. Central University of Rajasthan reserves the right to take interview of the deputies to be involved for this work.

Sr.	Category of Staff	Minimum Requisite Qualification & Experience
No.		
1	Electrical	Degree / Diploma in Electrical Engineering or ITI in
	Supervisor	Electrician trade.
	(Highly Skilled)	
		Degree with minimum one year relevant experience
		Or Diploma with minimum three years relevant
		experience Or ITI with minimum five years relevant
		experience.
		(Relevant Experience means experience in Electrical
		O&M in 11kV (or above) switch and allied equipment
		etc.)
2	Electrician/	ITI in concerned Trade with minimum three years
	Wireman/Mechanic	relevant experience.
	(Skilled)	
3	Pump Operator	ITI in concerned trade with minimum two year of
	(Skilled)	relevant experience.
4	Khalasi	10 <sup>th</sup> Pass with exposure to electrical work.
	(Semi-skilled)	

**Electrical Supervisor** should have to be made available for operation and breakdown maintenance work in shift and as & when required. He will be responsible and shall be supervising the system and other activities and record the findings in logbook. The Electrical Supervisor's residence should preferably be within 10Kms. from the University for the purpose of immediate availability in emergency.

- 10.2 The Contractor team/staff should be well dressed during the duty time which should be proper, clean and tidy. They should also carry necessary tools & equipments with them during duty time.
- 10.3 All necessary training & instructions to workmen should be given by the contractor before deputing them and they should know all control and power circuit of all HT and LT installations at CURaj before deputing.
- 10.4 The Contractor shall employ the required number of technical and non-technical manpower including relievers during contract period, the Contractor shall depute qualified, experienced and competent manpower as per the Deployment of Staff specified in the tender. For entry in University, Contractor shall submit the details for gate pass of all deputies.
- 11. The Contractor shall be fully responsible for any omission and commission of his staff as well as misdemeanor/ offensive and / or rude behavior towards any person within the campus and shall remove the person forthwith from the campus and shall not deploy him/ her in the campus in future and shall pay compensation to the aggrieved person if demanded. The decision of the Engineer-in-charge in this respect shall be final and binding of the Contractor. If the Contractor fails to comply with the above requirements the Engineer-in-charge shall have full authority to take appropriate action as deemed fit.

- 12. In case of increase in minimum wages over the min. wage stipulated with effect from the date of submission of tender, on account of revision in VDA over the basic wage or increase in fair wages, the increase over the rate effective from the date of submission for the quantum of min. work force stipulated shall be reimbursed by the Department to the Contractor along with the corresponding EPF & ESI contributions i.e. Employer's contribution and GST tax to the extent of above corresponding payment on production of documents as required shall be reimbursed to the Contractor
- 13. The Contractor/agency shall submit list of staff & their duty timings to be furnished and any change must be informed to the Engineer-in-charge, Central University of Rajasthan accordingly before the changes is affected. The persons deployed by the Contractor for the services mentioned above shall be the employees of the Contractor for all intents and purposes and that the persons so deployed shall remain under the control and supervision of the Contractor.
- 14. The Contractor shall be solely responsible for payment of wages/salaries and allowances to their personnel as per the rules or act applicable under government order. All central, state, local laws & by laws applicable will be observed by the Contractor and the Central University of Rajasthan will be kept indemnified of such payable by the Contractor.
- 15. For performing the assigned work, the Contractor shall deploy medically and physically fit persons (Preferably below the age of 50). The Contractor shall ensure that the persons are punctual and disciplined and remain vigilant in performance of their duty. Persons so engaged by the Contractor shall be from amongst properly trained, of high integrity and good conduct, and shall be conversant in the local language i.e. Hindi. In no circumstances, persons below 18 years of age should be employed.
- 16. The Contractor shall make payment of wages to workers engaged by him by the stipulated date (before 7th of every month) irrespective of any delay in settlement of its bill by the CURaj for whatever reason. The Contractor shall at his own cost take necessary insurance cover in respect of the aforesaid services rendered to Central University of Rajasthan and shall comply with the statutory provisions of Contract Labour (Regulation & Abolition) Act, 1970; Employees State Insurance Act; Workman's Compensation Act, 1923; Payment of Wages Act, 1936; The Employees Provident Fund (and Miscellaneous Provisions) Act, 1952; Payment of Bonus Act, 1965; The Minimum Wages Act, 1948; Employer's Liability Act, 1938; and/or any other rules/ regulations and/ or statues that may be applicable to them. The Contractor shall indemnify the University against all claims which may be made upon the University whether under the aforesaid statutes or any other statute in force during the currency of this contract.
- 17. The Contractor shall deploy his persons in such a way that they get weekly rest. The working hours / leave, for which the work is taken from them, do not violate relevant provisions of Govt. of India norms. The Contractor shall arrange to provide reliever equally qualified in case of absence/leave/off etc. The Contractor shall in all dealings with the persons in his employment have due regards to all recognized festivals, days of rest and religious or other customs. In the event of the Contractor committing a default or breach of any of the provisions of the Labour Laws including the provisions of Contract Labour (Regulation and Abolition) Act, 1970 as amended from time to time or in furnishing any information, or submitting or filling any statement under the provisions of the said regulations and rules which is materially incorrect, he shall

- without prejudice to any other liability pay to the Registrar, Central University of Rajasthan, a sum as may be claimed by Registrar, Central University of Rajasthan.
- 18. Without taking prior approval from the Engineer-in -charge, no fittings/ materials will be removed/ altered for the purpose of repairs.
- Any unauthorized person (or visitor) shall not be allowed to come inside the electrical substations without the approval of Engineer-in-Charge or any other authorized representative of the University. Staff deployed at the Central University of Rajasthan shall get the temporary ID card and which shall be available with the concern at the time of duty. For the purpose of proper identification of the employees of the Contractor deployed for the work, the Contractor shall issue identity cards bearing their photographs/ identification etc.
- 20. Engineer-in-charge, Central University of Rajasthan shall be at liberty to carry out surprise check on the persons as deployed by the Contractor in order to ensure that persons deployed by him are doing their duties.
- 21. The Contractor shall ensure that the persons so deployed do not allow any property of the Central University of Rajasthan related to Equipment's to be taken out of the premises without a Gate Pass signed by the Engineer in-charge of the Central University of Rajasthan.
- 22. Saturday/Sundays/Holidays should be utilized primarily for the maintenance purposes, where shutdown is required, with prior approval of the Engineer-in- charge of Central University of Rajasthan.
- 23. Round the clock watch and ward of the equipments installed in electric sub-station buildings shall be the Contractor's responsibility and any loss or damage to the equipment shall have to be made good/ repaired/ replaced as per the original standards/ specification of the department, by the Contractor at his own cost and nothing extra shall be paid by the department.
- 24. No accommodation & transportation facility will be provided by the Central University of Rajasthan. However the sitting space, tables, chairs, almirahs, internet/telephone connection etc. Facility may be provided by Central University of Rajasthan after receiving the Contractor request.
- 25. **SUSPENSION:** The Central University of Rajasthan may give written notice of suspension to the Contractor, suspend all payments to Contractor hereunder if the later fails to perform any of its obligations under this contract, including the carrying out of the services provided that such notice of suspension (i) shall specify the nature of the failure and (ii) request the Contractor to remedy such failure within the period not exceeding fifteen (15) days, after such notice of suspension.
- 26. **TERMINATION:** Termination of the contract may be given after the occurrence of any of the events specified below:
  - a) If the Contractor fails to remedy a failure in the performance of their obligations.
  - b) If the Contractor fail to comply with any final decision reached as a result of arbitration proceedings.
  - c) If the Central University of Rajasthan, in its sole discretion and for any reason whatsoever, decides to terminate this contract.

- d) If the Contractor, in the judgment of the Central University of Rajasthan has engaged in corrupt or fraudulent practices in executing the contract.
- e) In case the contract is terminated, the balance amount of fee if any, paid earlier (advance) shall be paid back by the Contractor to Central University of Rajasthan within thirty days of termination letter, failing which the same shall be recovered by encashing the existing performance security deposit/guarantee submitted by Contractor.
- Contractor shall keep the Central University of Rajasthan indemnified against all claims whatsoever in respect of the employees deployed by the Contractor, in case any employee of the Contractor so deployed enters in dispute of any nature whatsoever, it will be the primary responsibility of the Contractor to contest the same. In case Central University of Rajasthan is made party and is supposed to contest the case, the Central University of Rajasthan will be reimbursed for the actual expenses incurred towards Counsel fee and other expenses, which shall be paid in advance by the Contractor to CURaj on demand. Further, the Contractor shall ensure that no financial or any other liability comes on Central University of Rajasthan in this respect of any nature whatsoever and shall keep Central University of Rajasthan indemnified in this respect.
- 28. The Central University of Rajasthan reserves the right to curtail or enhance the scope of work either by deletion of certain items entirely or by reducing/ increasing the quantities of certain items as required and reviewed by the University from time to time.
- 29. In the event of any query, dispute/ difference arising under the agreement or in connection herewith (except as to matters the decision of which is specially provided under the agreement) the same shall be referred to the sole arbitration by the Registrar, Central University of Rajasthan & his decision will be final and binding to the Contractor.
- 30. The Arbitrator may give interim awards and/or directions, as may be required, Subject to the aforesaid provisions the Arbitrator & Conciliation Act, 1996 and the rules made hereunder and any modification thereof from time to time being in force shall be deemed to apply to the arbitration proceedings under this clause.
- 31. **JURISDICTION:** Disputes of any nature that may be arise in connection with the execution of this order shall be governed by the laws of India and subject to the jurisdiction of courts situated in Ajmer/Jaipur only.
- 32. Contractor will ensure all preventive measures guidelines, instructions issued by the Govt. of India, State Government and University from time to time. For security purposes and for breaking the chain of transmission of COVID-19 Social distancing, sanitization and other preventive measures will be conducted as a sense of responsibility of the contractor.

#### SPECIAL CONDITIONS OF CONTRACT

#### 1. Specific Conditions for Schedule 'A' (SH: Deployment of Manpower)

A. List of minimum required man power to be deputed by the contract agency on purely temporary and contract basis working under the Pay-roll of the contractor as per the contract Labour (Regulation and Abolition) rules and Government stipulation from time to time.

S.No.	Manpower	Category	Qty.	Details requirement
1	Supervisor	Highly Skilled	1 Nos	1 Nos in G.S. (All Weekdays)
2	Electrician	Skilled	14 Nos	1 Nos in each shift at all four ESS
				(Working days, Saturdays,
				Sundays and all holidays).
3	Wiremen	Skilled	3 Nos	3 Nos in G.S. (All Weekdays)
4	Mechanic	Skilled	1 Nos	1 Nos in G.S. (All Weekdays)
5	Pump	Skilled	5 Nos	2 Nos in M.S. and 2 Nos in D.S.
	Operator			(Working days, Saturdays,
				Sundays and all holidays).
6	Khalasi	Unskilled	3 Nos	3 Nos in G.S. (All Weekdays)

#### **Shifts:**

General Shift (G.S), Morning Shift (M.S), Day Shift (D.S), Night Shift (N.S)

#### **B.** Penalty Clause for Deployment of Staff:

- (i) Each workman (of regular gang) will have to attend his duty regularly. In case of absence of any worker deduction will be made from the contractor's bill at the rate of daily wages of the worker.
- (ii) If a workman is absent for more than four (4) working days without intimation or approval of Engineer-in-Charge, Contractor should immediately make alternative arrangement by bringing additional manpower, failing which a penalty of Rs. 500/per day shall be imposed.
- (iii) If any staff of contractor is found missing/ absent from his duty place at any time during the period of his shift/duty hours, a penalty of Rs. 500/- shall be imposed.

# 2. **Specific Conditions for Schedule 'A'** (SH: Non-Comprehensive AMC of Electrical Substation Equipments)

- A. The maintenance of the Electrical Substations Equipments shall be carried out entirely as per tender document and CPWD Specifications for Electrical Works with correction slips up to the date shall be followed. For the items which are not covered under CPWD specifications; the special conditions /Indian Electricity Rules/ B.I.S. specifications shall apply. In this regard the decision of Engineer-in- charge shall be final.
- B. Wherever any reference is made of any Indian Standard, it shall be taken as reference to the latest edition with all amendments / revision issued thereto up to the date.
- C. The Contractor's Engineer shall visit the site for attending the Electrical Substations not less than twelve times during the contract period (minimum once in a month) and shall inspect the Electrical Substations thoroughly.
- D. During every monthly visit, the Engineer shall carry out the checks as recommended by manufacturer standards or as per directions of Engineer-In-Charge and submits the detailed

- Inspection Report of the installation. During the visit the Engineer has to check and ensure the smooth functioning of the all Installations at Electrical Substations. The check report shall also be submitted on every breakdown calls.
- E. During the schedule inspection, if any fault/malfunctioning of any part/equipment is noticed, the same should be brought in the knowledge of the Engineer-in-Charge, so that timely action can be taken for its rectification.
- F. Any maintenance or minor work (especially for material supplied by contractor) done will be guaranteed by contractor for a minimum period of 6 months from the date of completion. Any defect arising in the work in guarantee period due to faulty workmanship and faulty materials will be rectified by contractor at his own cost.
- G. No cartage or transportation shall be payable by the department on account of visits or any consumables and tools etc. at site.
- H. The contractor shall be fully responsible for rectifying the defect, which may happen during the use up to Twelve months from the date of completion of the work. The decision of Engineer-in-Charge in this regard shall be final & binding. In case the contractor fails to carry out the said repairs, rectifications, replacement within the specified time, the department shall get the repairs / rectifications / replacement as considered necessary at the cost of the contractor by recovering the cost from the performance guarantee/security deposit. In case additional expenditure is incurred by the department on this account, the same shall be borne by the contractor.
- I. Contractor shall ensure that emergency spares are available in the premises of CURAJ. Further, the spares required for breakdown of major maintenance work shall be arranged according to time required for attending the job as decided by the Engineer in Charge.
- J. All the equipment shall be provided General Maintenance, as per manufacturers schedule or indicative schedule provided in this tender document "Schedule of Work" or as per directions of Engineer in charge.
- K. The operation and maintenance shall be uninterrupted service if any breakdown is attributed on part of contractor suitable recovery shall be made as per decision of engineer in charge.
- L. It is to be understood that irrespective of what has been provided in the conditions, the contractor / service provider shall be fully responsible for detailed engineering, repairing/installation, testing and commissioning of all the equipments to its desired performance. The critical equipments like Transformers, HT-LT panels, VCB, ACB, etc. shall be energized by the in presence of the Engineer-in-Charge after due repair / replacement and will provide a certificate of satisfaction regarding sound and satisfactory installation/commissioning of the work.

#### M. The Annual Maintenance Contract is "Non - Comprehensive" and includes the following:

- I. All type of labour cost, Service Engineer visit charge and sundry material for any type of maintenance / repair work to be carried out for this project.
- II. The cost of repair/replacement of any type of spare parts/component is not covered under this contract, the same shall be paid to the contractor only on chargeable basis. Such works are to be carried out only after approval of University authorities for which the Contractor will have to submit the Inspection report with estimated cost for repair work.
- III. The contractor has to carry out Preventive Maintenance of Electrical Substation Equipments (once in year) as detailed under: (Please refer clause 'N' of this schedule for brief details of equipments)
  - Overhauling, Servicing and testing HT VCB 11 KV with all electrical and mechanical checking testing and commissioning etc. as reqd.
  - Overhauling & servicing of LT ACB's i/c all electrical and mechanical testing and commissioning etc. as required

- Calibration and testing of IDMT relay on HT panel 11 KV VCB (Two over current and one earth fault) etc. as reqd.
- Dehydration and filtration of transformer oil and testing of 'BDV, 50 KV oil testing set inclusive of Transportation charges of equipment at site as reqd.
- Supplying & Replacing of Silica gel in the existing breather of transformer complete as reqd.
- Servicing of HT/ LT/ APFC panels including checking connections, tighting the connections cleaning/removing dust with blower etc. as required.

N. The brief details of Electrical Substation Equipments are as under:

Substations	VCB	ACB	Transformer
ESS No.01	800 A- 04 Nos(CG)	630 A – 11 Nos (L&T)	1000KVA- 02
	1250A A – 01 Nos (Schneider)	1600A- 03 Nos (L&T)	Nos (CG)
ESS No.	800 A- 04 Nos (Schneider)	3200A – 04 Nos (Schneider)	2000KVA- 02 Nos
19.1	1250A A – 03 Nos (Schneider)	2000A – 10 Nos (Schneider)	(Kirloskar Electric)
		1250A – 06 Nos (Schneider)	
		800A – 03 Nos (Schneider)	
ESS No.	800 A- 04 Nos (Schneider)	3200A – 04 Nos (Schneider)	2000KVA- 02 Nos
19.2	1250A A – 03 Nos (Schneider)	2500A – 04 Nos (Schneider)	(Kirloskar Electric)
		2000A – 07 Nos (Schneider)	
		1250A – 07 Nos (Schneider)	
ESS No.	800 A- 02 Nos (Schneider)	1600A – 02 Nos (Schneider)	1000KVA- 01 Nos
20.7	1250A A – 03 Nos (Schneider)	1000A – 03 Nos (Schneider)	(Kirloskar Electric)
		800A – 05 Nos (Schneider)	
Outdoor	1250 A – 01 Nos (CG Lucy)		100KVA
	630 A – 02 Nos (CG Lucy)		(Indian Transformer)

#### O. Breakdown and Emergency works:

- (i) The substation and all other installations are critical and will be functioning round o'clock 365 days in a year on all holidays and Sundays. The contractor shall have to take care of exigencies that may be encountered promptly.
- (ii) It's the duty of contractor to provide 24\*7 service and in the event of breakdown it's the duty of contractor/expert to reach the site at the earliest and should restore the system to normal working conditions within 12 hrs (for minor breakdown under the scope of this contract & not requiring expenditure approval from University authorities), failing to which a penalty will be imposed on the contractor @ Rs. 1000/per day or as per decided by Engineer-In-Charge.

#### 3. **Specific Conditions for Schedule 'B'** (SH: Repairing of HT/LT Line Underground Cable)

- (a) Any maintenance or minor work done will be guaranteed by the contractor for a minimum period of 3 months from the date of completion. Any defect arising in the work in guarantee period due to faulty workmanship and faulty materials will be rectified by the contractor at his own cost.
- (b) The work shall be carried out by the contractor within 7 days after giving the requirement (work order) otherwise penalty @ 0.5 % per day of work order amount for delay of work subject to maximum of 10% shall be recovered from contractor's bill.

(c) If the work is not completed as per schedule of supply/work order. The University shall get it done from any other vendor at the quoted cost of the new vendor without giving any notice to that effect, and the expenditure thus made shall be recovered from the contractors bill/deposit.

## 4. **Specific Conditions for Schedule 'C'** (SH: Supply of Material for Electrical Maintenance Works)

- (a) The material shall be as per CPWD specifications with up to date correction slip and ISI specifications wherever mentioned and as approved by Engineer-in charge (list of approved make Annexure-VIII).
- (b) In the event of any variation between CPWD specifications and that in the IS Code the former shall take precedent over the later. In the event of variation between the nomenclature of item as per schedule of quantities and specifications, the former shall prevail.
- (c) Material will be supplied by the contractor within 7 days after giving the requirement (work order) otherwise penalty @ 0.5 % per day of work order amount for delay of work subject to maximum of 10% shall be recovered from contractor's bill.
- (d) The contractor may be asked to furnish the manufacturer's certificate that the material supplied satisfy the requirements of the relevant specifications.
- (e) The Engineer-in-Charge shall be at liberty to test respective sample (s) of each item of schedule of quantity in any approved laboratory as decided by him. The sample for testing shall be provided by the contractor. If the test proves satisfactory and the material is accepted, the testing charge in respect of satisfactory test shall be borne by the University. All over expenditure required to be incurred for making available the sample, conveyance and packing etc. shall be borne by the contractor himself. In case any sample of particular lot fails in testing the contactor shall be bound to replace the entire lot with fresh material of prescibed specifications and the rejected lot shall only be returned to the contractor after fresh lot is supplied. Testing charges in respect to failed sample will be borne by the contractor himself.
- (f) Rejected materials shall have to be removed by the contractor at his own cost within a week of the instructions of doing so. Also go down rent as decided by Engineer-in-Charge shall be charged by the department.
- (g) In case of any dispute regarding rejection of quality of materials the decision of Engineer-incharge shall be final and binding upon the contractor.
- (h) Conditional tenders are liable to be summarily rejected.
- (i) The rates shall be quoted only in the schedule of quantities attached with the tender (financial bid) and nowhere else i.e. letter heads etc.
- (j) Royalty, octroi, terminal tax etc. at prrevalent rates shall have to paid by contractor himself and the rates quoted by him shall include these duties, GST and nothing extra on this account shall be payable.
- (k) The contractor shall himself arrange for raw materials required by him. No recommendation letter shall be issued by the department/office.
- (l) If the supplies are not commenced and completed as per schedule of supply/work order. Supplies will be arranged from other vendor/agency at the quoted cost of the new supplier without giving any notice to that effect, and the expenditure thus made shall be recovered from the contractors bill/deposit.

- (m) The supply shall be made at the Central University of Rajasthan maintenance store at Service Centre or any other location under the jurisdiction of CURaj, as per directions of Engineer-In-Charge.
- (n) The make of material shall be same as that of actually installed/fixed at site. In case of any dispute the decision of Engineer-in-Charge shall be final with regards to make/brand of material.
- (o) For materials used in this work, the record shall be maintained at site in a standard Performa to watch quality and consumption of the material.
- (p) Payment of materials in maintenance works will be made to contractor on the basis of DSR 2018 rate plus extra percentage quoted by him in Schedule of Financial Bid. Those materials not appearing in DSR 2018 will be paid on the basis of cash memo/bills of authorized suppliers. Over the basic rate and GST mentioned in cash memo/bill, the contractor will be given 10% extra. This extra percentage will cover contractor's profit, cartage, wastage and all other overheads & unforeseen expenses. University has the right of verify market rate with respect to cash memo/bills brought by the contractor and can make payment based on the least market price rather than cash memo/bills.

Place:	Signature of Bidder:
Name:	

#### **SCHEDULE OF WORKS**

#### A. Day to Day Electrical Maintenance:

- 1) Providing services for general & preventive maintenance of electrical system for the entire campus including attending complaints for replacing of electrical fitting and fixtures e.g. florescent lights, PL/ CFL/ LED lights, Fans (exhaust/ ceiling/ wall mounted), switch / sockets, external / street lights, Operation of 11kV four nos substations with allied equipments like ACB /OCB, MLTP, APFC panel, capacitor panel, DG sets, HT / LT cables etc. and operation & monitoring the air conditioning, water coolers, room air conditioning etc. Undertakes preventive and breakdown maintenance upto there understanding of heating / cooling systems to keep the entire electricity supply system efficient and functional to the entire satisfaction and Round the clock Maintenance & Operation and attending of emergent complaints as per terms and conditions of tender document and as per direction of the Engineer-in-charge. (i/c weekends & holidays)
- 2) In case of electric breakdown (minor/major), the staff of the contractor shall trace & rectify the same and ensure the healthiness of the system at the earliest, accordingly the status shall be reported to the Engineer-in-charge well in time.
- 3) All the information of any event, incident, activity, planning, etc. shall be provided to the Engineer-in-charge, Central University of Rajasthan.
- 4) The scope of work also includes co-ordination with the AVVNL from where the present power at 33kV is taken. If there is a deficiency in power supply from AVVNL or there is a failure or breakdown in power etc. the Contractor should ensure that the power is restored at the earliest possible time. Such co-ordination activity will be deemed to be covered under the Price quoted by the Contractor.
- 5) Care should be taken so that the system does not lead to major breakdown and in case the system goes into fault, it should be rectified within the shortest time period.
- 6) Meter reading of AVVNL meter shall be carried out as per approved format. Also the area and path to that meter shall kept clean and accessible.

#### **B.** Schedule of activities for various equipments:

- 1) During shift operation of the substations, it is the duty of the available staff to monitor the installations, parameters and take safe remedial action that does not require disconnection of the apparatus.
- 2) A check should be made for the locks & doors in the substation are in good condition, no leaks have developed in the building roof, the ventilating systems are working normally. The checks shall also be made for the prescribed safety aids are in place and in good condition. The earthing connection intactness, packing of the cables entering or leaving a cable trench or tunnel within the premises are intact, the equipment ventilating louvers clean, the access roads leading to the oil filled apparatus are unobstructed and maintain approach for the firefighting. For any extra requirement (which is not in contract) the Contractor shall inform the University official well in time. The other important checks/observations to be made are as under.
- 3) The log books shall be maintained properly and every page shall be numbered. No page shall be torn off at any time. No rough work shall be done in the log books. All cutting/ overwritings shall be signed by the Contractor or his authorized representative and shall be counter-signed by the Engineer-in-charge in the log books. If these are not done, the same shall not be acceptable to the Engineer-in-charge.

A. General checks/ observations:	B. Mechanical checks/ observations:
1) Cleanliness.	1) Indications of the operating circuits including
2) Any sign of cracking and chipping of	associated system.
bushings/insulators, oil leakages and integrity	2) Checking of foundation bolts, structure etc.

	of the oth	er v	isible parts of s	switchy	ard and	3)	Tightnes	ss of	termin	al c	onnection,	piping
indoor equipments from safe distance.					junctions	s and	bolted jo	ints.				
3)	Temperatur	re	measurement	of	critical	4)	Health o	of co	rrosion p	rotec	tion treatme	nt and
equipments.				take rem	edial	action.						
4)	Alarms	&	indications	$\circ f$	indoor	5)	This she	all i	nclude t	ouch	une/Markin	o and

minor painting.

#### C. Lifts operations:

- 1) Staff of the Contractor employed on the work shall be capable of operation / running of the lifts and to attend the minor electric faults.
- 2) In case of any breakdown in the lift, the staff of the Contractor shall take immediate action such as reporting to the lift maintaining company and taking their complaint number, reporting to the Electrical Supervisor & Engineer-in-charge to bring back the lifts in operation.
- 3) The log books shall be maintained properly and every page shall be numbered. No page shall be torn off at any time. No rough work shall be done in the log books. All cutting/ overwritings shall be signed by the Contractor or his authorized representative and shall be counter-signed by the Engineer-in-charge in the log books. If these are not done, the same shall not be acceptable to the Engineer-in-charge.

#### **D.** General Maintenance Schedule:

equipments/installations

1. 11 KV Ring main unit

S. No.	Item of Maintenance	Periodicity
1.	Outside cleaning	weekly
2.	Check inside of the doors/covers for dust deposit, water ingress,	Monthly/ as &when
	contamination, pest etc. and clean thoroughly.	required
3.	Check protector cap fitted on SF6 filling valve	Quarterly
4.	SF6 gas indicator in 'Green' zone.	Quarterly
5.	Proper earth connection	Quarterly
6.	Check for operation & interlocks	Quarterly
7.	Checks for correct setting of protective device and prepare record	Quarterly
8.	Check external labels, fixings and cables connections etc.	- Quarterly

Testing Kits and other accessories required for testing & calibration shall be arranged by the Contractor.

2. Battery & DC supply system:

S.No.	Items of Maintenance	Periodicity
1.	Outside visual inspection	Every shift
2.	Battery charger voltage / current reading	Every shift
3.	Ventilation and lighting system in battery room	Daily
4.	Intactness of containers	Daily
5.	Sulphation and buckling of plates	Dailly
6.	Corrosion traces	Daily
7.	Cleaning of battery equipment	Monthly
8.	Visual inspection of electrical connections	Monthly

21

9.	Petroleum jelly application	Monthly
10.	DC distribution board terminal connections	Monthly
11.	Battery charger servicing	Yearly
12.	Boost charging	As and when required
13.	Checking earth connection	Yearly

#### 3. Internal & External Trench (within substation area)

S. No.	Items of maintenance	Periodicity
1.	Physical Checks and Cleaning	Quarterly
2.	Rain Water drain	As Required

## 4. **Distribution Transformers:** Transformers at substations have been installed to feed the

Various loads of that area.

S. No.	Item of Maintenance	Periodicity
1.	Winding temp of power transformer	Daily
2.	Recording of electrical parameters like voltage, current, freq. etc.	Daily
3.	Recording of neutral currents and load balancing in the three phases, if feasible.  As and when required	
4.	Checking of Earthing system continuity, healthiness and rectification if required.	Yearly
5.	Thorough cleaning for dust, dirt and moisture etc. The cast coils (HT & LT) shall be cleaned by hot air blower.	
6.	Checking of terminal loose connections if any and tightening the same, foundation health.	Yearly

#### L.T. TTA Isolator, Main Normal Panel, Emergency Panel & External MDB:

The LT panels are being fed by the distribution transformers and distributing power to various loads of that area. LT TTA are having Incoming & Outgoing Air Circuit Breakers (ACBs), Main panel & Emergency panel are having Outgoing MCCBs, control and protection devices, Control Transformers, control wiring, Busbars, panel heaters, enunciators and measuring instruments (including multifunctional meters), and instrument transformers etc. The periodic maintenance activities shall be as given below:

S. No.	Item of maintenance	Periodicity
1.	Outside cleaning of panels	Weekly
2.	Checking healthiness of contacts (auxiliary & main) surface, mounting of contacts spring.	Yearly/as and when required
3.	Checking healthiness of control relays, contactors, wiring, fuses and isolating contacts/jaws, meters etc.	Yearly
4.	Operational Checks	Yearly

L.T. Bus duct: The substation is provided with LT air insulated/ sandwich bus ducts for power transfer between transformers and Panels. The health of bus duct is to be regularly monitored and maintained periodically as given below.

S. No.	Item maintenance	Periodicity
1.	IR value	Yearly
2.	Checking of gaskets, seals for cracks & damages, expansion rubber bellow etc.	Yearly
3.	Cleaning (for dust & dirt, ingress of water) and checking gaps of bus bars at flanges	Yearly
4.	Minor paint touch ups, if required	Yearly

#### **Automatic Power Factor Correction Panel (APFC):**

APFC panel having ACB, MCCB/MCB and contactor control for power factor improvement has been provided at some of the load centre substations. The schedule of maintenance activities shall be as under:

S. No.	Item maintenance	Periodicity
1.	Physical checks, outside cleaning	Weekly
2.	V, I, f & temp. monitoring	Daily
3.	Operational checks of switch gears	Yearly
4.	s Healthiness of capacitors & capacitor current measurement	Quarterly
5.	Thorough Cleaning, tightness, etc.	Yearly

#### 5. **DG Sets:**

#### Work to be done on daily basis:

Checking & measurement of specific gravity, water level, battery voltage, cleaning of battery terminal, lub. oil level, fuel level, coolant level, as required. Running of DG sets at least for 10 minutes every day in winter/rainy season, physical inspection of DG set & AMF panel, general cleaning. General inspection of cooling towers, pumps etc. as required.

A log Book is to be maintained on regular basis by the Contractor duly signed by the Electrical Supervisor. The log book should contain minimum following data entry or as specifies by the manufacturer.

- Specific Gravity of battery
   Voltage of battery
- 3) Electrical parameters of the DG set like Current, voltage, frequency, p.f. etc.
- 4) Diesel level
- 5) Lub. oil level.
- 6) Coolant level
- 7) Running hours of the DG set
- 8) Consumption of diesel.

#### **CPWD - 8**

#### **Central University of Rajasthan**

STATE RAJASTHAN

#### **Item Rate Tender & Contract for Works**

**Tender for the work of:** "Annual Routine Maintenance & Operation of four (4) nos. of 11/0.433 kV Electrical Sub-Stations, HT/LT lines, Street Lights and Other allied Electrical Installations at Central University of Rajasthan."

- (i) To be submitted by 02.00 PM on ............. at office of Registrar, Central University of Rajasthan.
- (ii) Technical Bid to be opened in presence of tenderers who may be present at 03.00 PM on ....... by the authorized representatives of Central University of Rajasthan.

Issued to: -	M/s
Signature of of	ficer issuing the documents
Designation:	
Date of Issue:	

#### **TENDER**

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F. specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, special conditions, Schedule of Rate & other documents and Rules referred to in the condition of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the University within the time specified in Schedule "F", viz., schedule of quantities and in accordance with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such condition so far as applicable.

I/We agree to keep the tender open for ninety (90) days from the due date of opening and not to make any modification in its terms and conditions.

A sum of rupees as mentioned in NIT is hereby forwarded in demand draft in favour of Registrar, Central University of Rajasthan as earnest money. If I/We fail to furnish the prescribed performance guarantee of tender form within prescribed period. I/We agree that the University, without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/we fail to commence work as specified, I/we agree that University shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the

works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in clause 12.2 and 12.3 of the tender form.

Further I/We agree that in case of forfeiture of earnest money or both earnest money and performance guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in Central University of Rajasthan in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-In-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information derived there from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the state.

Dated	Signature of Tenderer/Contractors	
	Postal Address*	
Witness**: Address**:	Telephone No.* Fax E-Mail	
Occupation**:(*) To be filled in by the Tenderer/Contractors. (**) To be filled in by the Witness.		
AC	CCEPTANCE	
The above tender (as modified by you as provid accepted by me on behalf of Central University		
The letter referred to below shall form part of th	nis agreement:-	
a)		
b)		
c)		
Signature  Dated	Registra	r
	Central University of Rajasth	ıan

#### PROFORMA OF SCHEDULES

SCHEDULE 'A'

Schedule of Quantities as per sheet attached

#### SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

Sl. No.	Description of Item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of Issue
1	2	3	4	5
1.	NIL	NIL	NIL	NIL

#### **SCHEDULE 'C'**

Tools and Plants to be hired to the contractor

Sl. No.	Description	Hire charges per day	Place of issue
1	2	3	4
	NIL	NIL	NIL

#### SCHEDULE 'D'

Extra schedule for specific requirements/ documents for the work, if any.

-NIL-

#### **SCHEDULE 'E'**

Reference to General Conditions of Contract.

**Name of work:-** "Annual Routine Maintenance & Operation of four (4) nos. of 11/0.433 kV Electrical Sub-Stations, HT/LT lines, Street Lights and Other allied Electrical Installations at Central University of Rajasthan."

i. Estimated cost of work : Rs. 95,65,000/-

ii. **Earnest Money Deposit** : Rs. 1,92,000/- (To be returned after receiving

Performance guarantee.)

iii. Performance guarantee : 5% of tendered amount.iv. Security Deposit : 5% of tendered amount.

CLAUSE 10C : Not Applicable
CLAUSE 10CA : Not Applicable
CLAUSE 10CC : Not applicable

#### SCHEDULE 'F'

	Central University of Rajasthan, Bandarsindri, NH-8.	
Officer Inviting Tender	Registrar	
	amendments upto date of receipt of tender shall read with NIT	
General Rules & Directions	General Conditions of Contract for CPWD Works -2014 with	

#### **Definitions:**

(i)	Engineer-in-Charge	Executive Engineer, Central University of Rajasthan, Bandarsindri, NH-8.
(ii)	Accepting Authority	Registrar, Central University of Rajasthan,

	Bandarsindri, NH-8.
(iii) Standard Schedule of Rates	
(iv) Department	Central University of Rajasthan
(v) Standard CPWD contract Form	GCC 2014, CPWD form 8 as modified and corrected upto the last date of issue of tender.
Clause 1	
i) Time allowed for submission of performance guarantee from the date of issue of letter of acceptance.	10 days
ii) Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided.	7 days
Clause 2	
Authority for fixing compensation under clause 2. Clause 2 (A).	Registrar, Central University of Rajasthan.
Whether clause 2 (A) shall applicable	No
Clause 5	
Number of Days from the Date of issue of letter of	
acceptance for reckoning date of start.	15 days
	I
Time allowed for execution of work	Twelve Months
Authority to decide:	
(i) Extension of time	Registrar, Central University of Rajasthan, Bandarsindri, NH-8.
(ii) Rescheduling of mile stones	NA
Clause 6, Clause applicable - (6 or 6A):	Clause 6
Clause 7 Clause 7A	NA NA
Whether clause 7A shall be applicable	NA
Clause 8A	Applicable
Contractor to Keep Site Clean	Applicable
Clause 10 B (ii)	
Whether Clause 10 B (ii) shall be applicable	No
Clause 10 CA	Not Applicable
Clause 10CC	12 Months
Schedule of component of other materials, Labour,	12 11 2
POL etc for price escalation.	
Component of Civil (except materials covered under clause 10CA) / Electrical construction Materials expressed as percent of total value of work.	XmNIL%
Component of Labour – Expressed as percent of total value of work.	Y%
Component of POL – Expressed as percent of total	

value of work.	ZNIL%
Clause 11	
Specifications to be followed for	CPWD General specifications for electrical
execution of work	works Part-I (Internal) 2013 & (HVAC-2017),
	as amended upto date and additional
	conditions Specifications.
Clause 12	
12.2 & 12.3: Deviation limit beyond which clauses 12.2	NA
& 12.3 shall apply for building/electrical work.	
12.5 :	
(i) Deviation limit beyond which clauses 12.2 & 12.3	NA
shall apply for foundation work (except work).	
(ii) Deviation Limit for items in earth work subhead of	NA
DSR or related items	
Clause 16	Registrar, Central University of Rajasthan
Clause 18	
List of mandatory machinery, tools & plants to be	As applicable to be arranged by the contractor
deployed by the contractor at site	
Clause 19	Applicable
Payment of Wages	
Clause 25	
Constitution of Dispute Redressal Committee (DRC)	Competent Authority to appoint DRC
DRC shall constitute one Chairman and two members	Honorable Vice Chancellor
	Central University of Rajasthan
Clause 31	
Water shall be supplied by Central University of Rajastha	an free of cost.

#### Clause 36(i)

Requirement of Technical Representative(s) and recovery Rate

				\ /		•	
S.No.	Min	Discipline	Designation	Minimum	Number	Rate at which recovery	
	Qualification of			Experience		shall be made	from the
	Technical			_		contractor in	the event of
	Representative					not fulfilling provision of	
						clause 36(i)	
						Figures	Words

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

**Clause 42**RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

Sl No. item	Description of	Rates in figures and words at which recovery shall be made from the Contractor	Excess beyond permissible variation	Less use beyond the permissible variation
-------------	----------------	--	-------------------------------------	---

NIL

#### FORM OF AGREEMENT

(To be executed on non-judicial stamp paper of Rs.500/-)

Agreement No:	Dated:
	ance & Operation of four (4) nos. of 11/0.433 kV Electrical Other allied Electrical Installations at Central University of Rajasthan.
THIS AGREEMENT is made on	day of (month),(year) between
	Bandarsindri, Tehsil-Kishangarh, District- Ajmer,
<b>Rajasthan, Pin-305817</b> , hereinafter called Udemands or requires, includes their successions.	University, (which expression shall, wherever the context so cessors in office and assigns) on the one part and called the Contractor (which expression shall wherever the
Maintenance & Operation of four (4) nos. of Lights and Other allied Electrical Installation Acceptance	at certain works should be executed viz. Annual Routine of 11/0.433 kV Electrical Sub-Stations, HT/LT lines, Street ons at Central University of Rajasthan and has by Letter ofaccepted the quotation/offer submitted by the earn completion of such works at a total contract price of
Now THIS AGREEMENT WITNESSET	TH as follows:
<ol> <li>In this agreement, words and expre assigned to them in the conditions of</li> </ol>	essions shall have the same meaning as are respectively contract hereinafter referred to.
<ul> <li>2. The following documents shall be a agreement viz:</li> <li>a)This Form of Agreement</li> <li>b) The Letter of Award dated</li> <li>c) NIT document</li> <li>d) Priced Schedule/ Schedule of Que) General Conditions of Contract</li> <li>f) Special Conditions of Contract a</li> </ul>	uantities.
g) All Annexures to NIT	<b>1</b>

h) CPWD Specifications/GCC with upto date correction as applicable.

The aforesaid documents shall be taken as complementary and mutually explanatory of one another, but in the case of ambiguities or discrepancies, shall take precedence in the order set out above.

- 3. In consideration of the payment to be made by the University to the contractor as hereinafter mentioned, the contractor hereby covenants with the University to execute, complete and maintain the works in conformity in all respects within the provisions of the contract.
- 4. The University thereby covenants to pay to the contractor in consideration of the execution, completion and maintenance of the works at contract price at the time and in the manner prescribed by the contract.

In WITNESS whereof the parties hereto have caused their respective common seals to be here into affixed (or have herewith set their respective hands and seals) the day and year first above written.

Signed, Sealed And Delivered By	Signed, Sealed And Delivered By		
For and on behalf of	For and on behalf of		
	Central University of Rajasthan Bandarsindri, Kishangarh Ajmer, Rajasthan		
By:	By:		
Name			
Designation			
In the presence of	In the presence of		
WITNESS	WITNESS		
1.	1.		
2.	2.		

#### To be signed by the bidder and same signatory competent / authorised to sign the relevant contract on behalf of Central University of Rajasthan

#### **INTEGRITY AGREEMENT**

This Integrity Agreement is made at on thisday of20  BETWEEN
Central University of Rajasthan through Registrar, Central University of Rajasthan, bandersindri, Dist-Ajmer. (Hereinafter referred as the 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)  AND
(Name and Address of the Individual/firm/Company)
Through
(Details of duly authorized signatory)
Hereinafter referred to as the "Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)
Preamble
WHEREAS the Principal / Owner has floated the Tender (NIT No)
(hereinafter referred to as "Tender/Bid") and intends toward, under laid down organizational procedure, contract for
Here in after referred to the "Contract".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

#### **Article 1: Commitment of the Principal/Owner**

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
  - (c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code(IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

#### **Article 2: Commitment of the Bidder(s)/Contractor(s)**

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the Negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
  - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
  - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s)into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or on-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
  - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
  - e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a wilful misrepresentation or omission of facts or submission offake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

#### **Article 3: Consequences of Breach**

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the Contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- 2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

#### **Article 4: Previous Transgression**

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can bed is qualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractors deemed fit by the Principal/ Owner.
- 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

#### **Article 5: Equal Treatment of all Bidders/Contractors/SubContractors**

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subContractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-Contractors/sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

#### **Article 6- Duration of the Pact**

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, CPWD.

#### **Article 7- Other Provisions**

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

#### **Article 8- LEGAL AND PRIOR RIGHTS**

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

(For and on behalf of Principal/Owner)	(For and on behalf of Bidder/Contractor)
WITNESSES:	
1(signature, name and address)	2(signature, name and address)
Place:	
Dated:	

#### **ANNEXURE-I**

(to be submitted with Technical Bid on letter head of firm)

To, The Registrar Central University of Rajasthan. Bandarsindari, Kishangarh

Sub: Submission of Tender for the work of "Annual Routine Maintenance & Operation of four (4) nos. of 11/0.433 kV Electrical Sub-Stations, HT/LT lines, Street Lights and Other allied Electrical Installations at Central University of Rajasthan."

I/We acknowledge that University is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by University. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, University shall have unqualified, absolute and unfettered right to disqualify the tender/bidder and reject the tender/bid is accordance with terms and conditions of the tender/bid.

Yours faithfully	
(Duly authorized s	signatory of the Bidder)

## CHECKLIST OF DOCUMENTS REQUIRED (Should be submitted on the letter head of WITH TECHNICAL BID. Tenderer)

Name of the Contractor/Agency/Firm:	
Address & Contact number:	
Name of authorized person, who has signed the tender:	
Phone No./Mobile No.:	
Email Id:	

S.No.	Documents Required	Compliance (to be mentioned in Yes/No as attached )
1.	Details of EMD (DD no. and Amount)	
2.	Copy of Permanent Account Number	
3.	Copy of GST Registration Certificate	
4.	Copy of EPF and ESI registration number	
5.	Copy of audited balance sheets & Profit Loss statement for last three financial years (Annexure –II)	
6.	Copy of work completion certificates from clients regarding the quality and duration of services rendered during last seven years. (Annexure-III)	
7.	Copy of work orders from clients regarding the work awarded during last seven years. (Annexure-III)	
8.	Copy of work orders of on-going works at other sites. (Annexure-IV)	
9.	A self certificate showing the track record of contracting firm/Contractor on the company letter head. (Annexure-V)	
10.	List of testing equipments owned or certification of hiring the equipments with the list of firms with their consent letter.	
11.	Valid Electrical Contractor license issued by Govt of India/ State Govt.	
12.	Copy of documents for proof of registration with Govt./Semi Govt. Organization.	
13.	Each and every page of all the tender documents, annexures, corrigendum/addendum ( <b>if any</b> ) and their annexures should be duly seal & signed and submitted with technical bid.	
14.	Any other documents mentioned in the Tender document.	

Authorized Signatory of Bidder(s) with Seal

### ANNEXURE – II

## FINANCIAL INFORMATION (to be submitted with Technical Bid)

I. **Financial Analysis -** Details to be furnished duly supported by figures in balance sheet/profit & loss account duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

S.No.	Descriptions	
1.	Average Annual Turn Over of last three financial years ending upto 31 <sup>st</sup> March 2020	
2.	Profit/Loss of last three financial years ending upto 31st March 2020	

Signature of Bidder(s) with Seal

Signature of Chartered Accountant with Seal

## ANNEXURE – III (to be submitted with Technical Bid)

### Details of works of similar type executed by the bidder

S.No	Name of Company/ Organization with full address, phone, email and name of contact person	Work Descripti on	Cost of work in crores	Date of commenceme nt as per contract	Stipula ted date of comple tion	Actual date of complet ion	Ref. & Date of the Order	No. & Date of completio n certificate attached.	Remark s
1	2	3	4	5	6	7	8	9	10

Signature of Bidder(s) with Seal

- Indicate gross amount claimed and amount awarded by the Arbitrator.
- Completion certificate to be attached.
- Supporting documents like notice of award, schedule of qualifying works shall also be attached.

# ANNEXURE – IV (to be submitted with Technical Bid)

### LIST OF WORKS WHICH ARE IN HAND (PROGRESS)

S.No	Name of Work	Name & particulars of Dept. where work is being executed	Value of Work	Position of works in progress (Date of start & completion)	Remarks
1	2	3	4	5	6

# ANNEXURE – V (To be submitted with Technical Bid)

# SELF DECLARATION CERTIFICATE (To be submitted on Non-Judicial Stamp Paper)

I hereby certify that the firm has not been ever blacklisted by any Central / State Government / Public Undertaking / Institute on any account.				
also certify that firm will execute the work as per the specification given by Institute and also abide al he terms and conditions stipulated in tender.				
I also certify that the information given in the bid is true and correct in all aspects and if in any case at a later date it is found that any detail/s provided are false and incorrect, any contract given to the concern firm or participation may be summarily terminated at any stage, the firm will be blacklisted and Institute may imposed any action as per rules.				
Date:	Name:			
Place:	Business Address:			
	Signature of Bidder:			
	Seal of the Bidder:			

### ANNEXURE – VI

## FORM OF PERFORMANCE SECURITY (GUARANTEE) BANK GUARANTEE BOND

In consideration of the President of India (hereinafter called "The Government") having offered to accept the terms and conditions of the proposed agreement between
We
2) We
3) We, the said bank further undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any court or Tribual relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.
4). We
5) We

ning whatsoever which under the law relating to sureties would, but for this provision, have effect of solelieving us.
) This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
) We
) This guarantee shall be valid upto Unless extended on demand by Government lotwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs (Rs only) and unless a claim in writing is lodged with
s within 6 Months of the date of expiry or the extended date of expiry of this guarantee all our liabilities
nder this guarantee shall stand discharged. Dated the day of
for
(indicate the name of Bank)

# ANNEXURE – VII (to be submitted with Technical Bid)

### FORM – V See Rule 21(2)

### FORM OF CERTIFICATE BY PRINCIPAL EMPLOYER

Certificate that I have engaged the applicantundertake to be bound by all the provisions of the Contract and the Contract Labour (Regulation and Abolition) Cent applicable to me in respect of the employment of contract labour (Regulation) and Abolitical Centract labour (Regulatio	et Labour (Regulation and Abolition) Act, 1970 tral Rules, 1971, in so far as the provisions are
Name Of Work: - Annual Routine Maintenance & Opera Sub-Stations, HT/LT lines, Street Lig Central University of Rajasthan.	ation of four (4) nos. of 11/0.433 kV Electrical ghts and Other allied Electrical Installations at
	Registrar Central University of Rajasthan
Place: Date:	

### **ANNEXURE-VIII**

### LIST OF APPROVED MAKES

- 1. Specifications to be followed for execution of work: CPWD specification with Up to date correction slips and direction of the Engineer-in-charge and relevant IS codes.
- 2. Type of Work:- Maintenance work
- 3. Item wise tentative Approved Make List (The decision of Engineer-In-Charge shall be final in this regard).

Sr. No.	Item Description	Make and Model
1.	Providing <u>46inch</u> length LED 16/18 Watt tube rod with inbuilt driver in existing fitting. (Having lifespan of 17520 continuous burning hours)	
2.	Providing <u>48inch</u> length LED 20 Watt tube rod with inbuilt driver in existing fitting. (Having lifespan of 17520 continuous burning hours)	Philips/ Bajaj/ Surya/ Corvi/ Wipro/ GM/
3	Providing 7 Watt LED lamp (PL type) with suitable driver in existing fitting. (Having lifespan of 17520 continuous burning hours)	Syska/ Osram
4.	Providing 9 Watt LED lamp (PL type) with suitable driver in LED existing fitting. (Having lifespan of 17520 continuous burning hours)	
5.	Providing High frequency electronic ballast for existing 9/11/13/18 Watt CFL.	
6.	Providing following size PL lamp in existing fitting.	Philips/ Bajaj/ Surya/
a.	11 Watt, 2 pin PL lamp	Wipro / Syska/ Osram
b.	13 Watt, 4 pin PL lamp	Wipio/ Byska/ Ostalli
c.	18 Watt, 4 pin PL lamp	
d.	36 Watt, 4 pin PL lamp	
7.	Providing FSU starter for existing fluorescent lamp fixture.	Philips/Havells/ Syska/ Osram
8.	Providing energy efficient / energy saving direct fit (Retrofit) 14Watt LED light for existing holder / fixture as required.	Philips/ Bajaj/ Surya/
9.	Providing energy efficient / energy saving direct fit (Retrofit) 7 Watt LED light for existing holder / fixture as required.	Wipro/ Syska/ Osram
10.	Providing backelite unbreakable lamp/bulb holder for holding CFL, Bulb etc.	GM / Philips/ Anchor/Havells/ Syska/ Osram
. 11.	Providing energy efficient 18/20Watt LED strip fitting duly prewired including making connection etc. as required.	Philips/ Bajaj/ Surya/ Corvi/ Wipro / GM/ Syska/ Osram
. 12.	Providing 5/6A piano type (basic model) switch on the existing switch box/cover including connections etc. as required switch 5A	
. 13.	Providing 15/16A piano type (basic model) switch on the existing switch box/cover including connections etc. as required switch	SSK
14.	Providing 5pin 5Amp (basic model) socket outlet on the existing switch box/cover including connections etc. as required.	SSK
15.	Providing 6pin 15Amp (basic model) socket outlet on the existing switch	

	box/cover including connections etc. as required			
16.	Providing modular switch on the existing modular plate & switch box			
	including all accessories as required-			
A	5/6Amps			
В	15/16Amps			
17.	Providing modular socket outlet on the existing modular plate & switch box	SSK EL		
	including all accessories as required-			
A	5/6Amps			
В	15/16Amps			
18.	Providing stepped type electronic fan regulator on the existing modular plate switch box			
19.	Supplying following Modular base & cover plate on existing modular metal boxes etc. as required.			
A	Modular base & cover plate for 2 module			
В	Modular base & cover plate for 3 module			
С	Modular base & cover plate for 6 module	NorthWest / SSK /		
20.	Supplying following Modular base & cover plate on existing modular metal boxes etc. as required.	Legrand		
A	Modular GI box for 2 module			
В	Modular GI box for 3 module			
С	Modular GI box for 6 module			
21.	Providing socket size flush type 120/280 watt rotary 5 step fan regulator			
	Providing piano type bell push / one way switch on the existing switch box/	SSK EL		
22.	cover			
23.	Providing ISI marked 16Amp Bakelite unbreakable 3 pin plug top			
	including all accessories as required.	Anchor/ Cona/ Vinay		
24	Providing ISI marked 6Amp Bakelite unbreakable 3 pin plug top including all accessories as required.			
	Supplying following rating "C" curve, 10kA / 16KA breaking capacity			
	"AC" MCB with positive isolation of breaking capacity not less than 10 KA			
25.	(B/ C/ D tripping characteristic) ISI marked IS 8828(1996)]/ conforming to			
23.	IEC 60898 in existing board/sheets Miniature Circuit Breaker suitable for			
	inductive load of following poles in the existing MCB DB etc. as required.			
A	Four Pole, 100Amps, 415 volts, MCB			
В	Four Pole, 63Amps, 415 volts, MCB			
C	Four Pole, 40Amps, 415 volts, MCB	Sahnaidan/I aamand /		
D	Double Pole, 63Amps, 240 volts, MCB	Schneider/ Legrand / ABB / Havells		
E	Double Pole, 40Amps, 240 volts, MCB	ADD / Havelis		
F	Double Pole 32Amps, 240 volts, MCB			
G	Single Pole, 6A, 240 volts, MCB			
Н	Single Pole, 0A, 240 volts, MCB Single Pole, 10A, 240 volts, MCB			
I	Single Pole, 16A, 240 volts, MCB Single Pole, 16A, 240 volts, MCB			
J	Single Pole, 16A, 240 volts, MCB Single Pole, 25A, 240 volts, MCB			
K	Single Pole, 23A, 240 volts, MCB Single Pole, 32A, 240 volts, MCB			
17	Providing following rating quick make and quick break current limiting			
26.	MCCB at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS	Schneider/ Legrand /		
۷٠.	60947-2 / IEC 60947-2 with front face and centralized adjustable, line load	ABB / Havells		
	1 00547-27 IEC 00547-2 with from face and centralized adjustable, line load			

	interchangeability, having positive isolation capability, provision for UVR,	
	shunt trip, earth fault trip, push (test) to trip etc. in the existing MCB DB	
	etc. as required-	
A	4 pole (TP+N) MCCB,125A,36KA	
B	4 pole (TP+N) MCCB, 250A,36KA	
C	4 pole (TP+N) MCCB, 400A, 50KA	
D	3 Pole (TP), MCCB, 630Amp, 50kA	
27.	Providing running capacitor of 230V/ 275V, 50Hz rating of 2.5/ 2.8 mFD as required.	Usha/ Punsumi/ Priya/ Capital/ JEC/ AMCAP/ CONCAP
28.	Providing fan ball bearing 6201 1Z	SKF/ NBC
29.	Providing fan ball bearing 6202 1Z	SKF/ NBC
30.	Providing socket size flush type 120/280 watt rotary 5 step fan regulator	SSK EL
31.	Providing 1.5 sqmm, ISI marked, FRLS PVC insulated, single core copper conductor cable	
22	Providing 2.5 sqmm ISI marked, FRLS PVC insulated, single core copper	
32.	conductor cable	
33.	Providing 4.0 sqmm ISI marked, FRLS PVC insulated, single core copper	
33.	conductor cable	
34.	Providing 6.0 sqmm ISI marked, FRLS PVC insulated, single core copper	
34.	conductor cable	PolyCab/ Finolex/ RR
35.	2Cx 1.5 sqmm ISI marked, FRLS PVC insulated, flexible round / flat	Kable
33.	copper conductor cable	
36.	2Cx2.5 sqmm ISI marked, FRLS PVC insulated, flexible round / flat	
50.	copper conductor cable	
37.	4Cx16sqmm, ISI marked, FRLS PVC insulated, flexible round / flat copper	
37.	conductor cable	
38.	4Cx25sqmm, ISI marked, FRLS PVC insulated, flexible round / flat copper	
	conductor cable	
39.	Providing Aluminium ring / pin type lug for cable of following sizes-	
A	16 sqmm	
В	25 sqmm	
C	50 sqmm	
D	95 sqmm	
Е	120 sqmm	
F	150 sqmm	Comex/Comed
G	185 sqmm	
40.	Providing Copper ring / pin type lug for cable of following sizes-	
A	1.5 sqmm	
В	2.5 sqmm	
C	4.0 sqmm	
D	6.0 sqmm	
41.	Providing vacuum pressure impregnated copper ballast suitable for existing	
	70Watt Metal halide lamp fitting.	Philips/Bajaj/Surya/
42.	Providing 70Watt, Metal Halide lamp in existing fitting.	Osram
43.	Providing High frequency electronic ballast for existing 1x150Watt Metal	
πЭ.	Halide light fitting	

45. Providing ele 70W/150W/2  46. Providing No halide / Halog A 250 Watt B 400 Watt Providing vac / HPSV / Met HPSV/Metal A 250 Watt B 400 Watt  47. / HPSV / Met HPSV/Metal A 250 Watt B 400 Watt  48. Providing Ca HPMV/ Meta A 12 mfd B 16 mfd P & F of IP 6 extruded alun on LED to ac lamps supplic high efficiency standards. Sy maintained. It engineer choi A High Power I B High Power I Providing fol A 25 mm dia. Is B 25 mm PVC C 32 mm dia. Is D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm B 720 Providing 1.50	ermal / High Output High pressure 150Watt Metal halide lamp extronic ignitor suitable for Metal halide lamp in existing 150W/400W light fitting ormal / High Output High pressure sodium vapour/ Metal gen lamp as required.  Extractional required copper ballast suitable for HPMV tall halide lamp luminaire as required-halide lamp  Expansional required required required for power factor improvement in existing HPSV/ all halide lamp fixture as required.  Expansional required requir	CG / Bajaj / Wipro / GE / Surya / Havell's
45. 70W/150W/2 46. Providing No halide / Halog A 250 Watt B 400 Watt Providing vac 47. / HPSV / Met HPSV/Metal A 250 Watt B 400 Watt B 400 Watt B 400 Watt A 12 mfd B 16 mfd P & F of IP 6 extruded alur on LED to ac lamps supplie high efficient standards. Sy maintained. It engineer choi A High Power I B High Power I B Providing fol A 25 mm dia. Is B 25 mm PVC C 32 mm dia. Is D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm B 32mmX12mm Providing 1.52	cormal / High Output High pressure sodium vapour/ Metal gen lamp as required.  cuum pressure impregnated copper ballast suitable for HPMV tal halide lamp luminaire as required-halide lamp  apacitors for power factor improvement in existing HPSV/ al halide lamp fixture as required.  5 / IP66 protected High Power LED Flood Light system with minium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED ed with pre-wired cable of 1 mtr. Integrated Driver shall be each with general process of the process o	
A 250 Watt B 400 Watt Providing var 47. /HPSV / Met HPSV/Metal A 250 Watt B 400 Watt B 400 Watt B 400 Watt B 16 mfd B 16 mfd P & F of IP 6 extruded alur on LED to ac lamps supplie high efficiency standards. Sy maintained. I engineer choid A High Power I B High Power I B Providing fol A 25 mm dia. IS B 25 mm PVC C 32 mm dia. IS D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm B Providing 1.52	cuum pressure impregnated copper ballast suitable for HPMV tal halide lamp luminaire as required-halide lamp  apacitors for power factor improvement in existing HPSV/al halide lamp fixture as required.  5 / IP66 protected High Power LED Flood Light system with minium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED and with pre-wired cable of 1 mtr. Integrated Driver shall be bey having efficiency > 85% and in compliance to IEC stem life of 25,000 Burning Hours with 70% of initial Lumens Light output in Cool white or Warm White Colour as per	
A 250 Watt B 400 Watt Providing vac / HPSV / Met HPSV/Metal A 250 Watt B 400 Watt  Providing Ca HPMV/ Meta A 12 mfd B 16 mfd P & F of IP 6 extruded alun on LED to ac lamps supplic high efficiency standards. Sy maintained. It engineer choi A High Power I B High Power I Providing fol A 25 mm dia. Is B 25 mm PVC C 32 mm dia. Is D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm B Providing 1.52	cuum pressure impregnated copper ballast suitable for HPMV tal halide lamp luminaire as requiredhalide lamp  apacitors for power factor improvement in existing HPSV/al halide lamp fixture as required.  5 / IP66 protected High Power LED Flood Light system with minium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED and with pre-wired cable of 1 mtr. Integrated Driver shall be bey having efficiency > 85% and in compliance to IEC stem life of 25,000 Burning Hours with 70% of initial Lumens Light output in Cool white or Warm White Colour as per	
B 400 Watt Providing var 47. /HPSV / Met HPSV/Metal A 250 Watt B 400 Watt  48. Providing Ca HPMV / Meta A 12 mfd B 16 mfd P & F of IP 6 extruded alun on LED to ac lamps supplic high efficiency standards. Sy maintained. It engineer choi A High Power I B High Power I Providing fol A 25 mm dia. IS B 25 mm PVC C 32 mm dia. IS D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm B 752 Providing 1.5	halide lamp luminaire as required- halide lamp  apacitors for power factor improvement in existing HPSV/ al halide lamp fixture as required.  5 / IP66 protected High Power LED Flood Light system with minium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED and with pre-wired cable of 1 mtr. Integrated Driver shall be any having efficiency > 85% and in compliance to IEC stem life of 25,000 Burning Hours with 70% of initial Lumens Light output in Cool white or Warm White Colour as per	
Providing vac / HPSV / Met HPSV/Metal A 250 Watt B 400 Watt  48. Providing Ca HPMV/ Meta A 12 mfd B 16 mfd P & F of IP 6 extruded alun on LED to ac lamps supplie high efficient standards. Sy maintained. engineer choi A High Power I B High Power I Providing fol A 25 mm dia. IS B 25 mm PVC C 32 mm dia. IS D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm B 720 Providing 1.50	halide lamp luminaire as required- halide lamp  apacitors for power factor improvement in existing HPSV/ al halide lamp fixture as required.  5 / IP66 protected High Power LED Flood Light system with minium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED and with pre-wired cable of 1 mtr. Integrated Driver shall be any having efficiency > 85% and in compliance to IEC stem life of 25,000 Burning Hours with 70% of initial Lumens Light output in Cool white or Warm White Colour as per	
A 250 Watt B 400 Watt  48. Providing Ca HPMV/ Meta A 12 mfd B 16 mfd P & F of IP 6 extruded alun on LED to ac lamps supplie high efficiency standards. Sy maintained. In engineer choi A High Power I B High Power I Providing fol A 25 mm dia. Is B 25 mm PVC C 32 mm dia. Is D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm B 752 Providing 1.5	apacitors for power factor improvement in existing HPSV/al halide lamp fixture as required.  5 / IP66 protected High Power LED Flood Light system with minium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED and with pre-wired cable of 1 mtr. Integrated Driver shall be bey having efficiency > 85% and in compliance to IEC stem life of 25,000 Burning Hours with 70% of initial Lumens Light output in Cool white or Warm White Colour as per	
B 400 Watt  Providing Ca HPMV/ Meta A 12 mfd B 16 mfd P & F of IP 6 extruded alun on LED to ac lamps supplie high efficience standards. Sy maintained. I engineer choi A High Power I Providing fol A 25 mm dia. IS B 25 mm PVC C 32 mm dia. IS D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm B Providing 1.52	5 / IP66 protected High Power LED Flood Light system with minium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED and with pre-wired cable of 1 mtr. Integrated Driver shall be bey having efficiency > 85% and in compliance to IEC stem life of 25,000 Burning Hours with 70% of initial Lumens Light output in Cool white or Warm White Colour as per	
48. Providing Ca HPMV/ Meta  A 12 mfd  B 16 mfd  P & F of IP 6 extruded alur on LED to ac lamps supplied high efficiency standards. Sy maintained. It engineer choice are supplied by the supplied high power I believed by the supplied by th	5 / IP66 protected High Power LED Flood Light system with minium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED and with pre-wired cable of 1 mtr. Integrated Driver shall be bey having efficiency > 85% and in compliance to IEC stem life of 25,000 Burning Hours with 70% of initial Lumens Light output in Cool white or Warm White Colour as per	
B 16 mfd P & F of IP 6 extruded alun on LED to ac lamps supplied high efficiency standards. Sy maintained. It engineer choid A High Power I B High Power I Providing fol A 25 mm dia. IS B 25 mm PVC C 32 mm dia. IS D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm B 72	ninium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED ed with pre-wired cable of 1 mtr. Integrated Driver shall be by having efficiency > 85% and in compliance to IEC stem life of 25,000 Burning Hours with 70% of initial Lumens Light output in Cool white or Warm White Colour as per	
P & F of IP 6 extruded alur on LED to ac lamps supplie high efficiences standards. Sy maintained. In engineer choic A High Power I Providing fol A 25 mm dia. IS B 25 mm PVC C 32 mm dia. IS D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm B 72	ninium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED ed with pre-wired cable of 1 mtr. Integrated Driver shall be by having efficiency > 85% and in compliance to IEC stem life of 25,000 Burning Hours with 70% of initial Lumens Light output in Cool white or Warm White Colour as per	
extruded alur on LED to ac lamps supplied high efficiency standards. Sy maintained. It engineer choices are supplied by the standards of the standards. Sy maintained of the standards of the sta	ninium housing, toughened glass diffuser with suitable lenses hieve various beam angles, 240V, 50Hz - High Power LED ed with pre-wired cable of 1 mtr. Integrated Driver shall be by having efficiency > 85% and in compliance to IEC stem life of 25,000 Burning Hours with 70% of initial Lumens Light output in Cool white or Warm White Colour as per	
A High Power I B High Power I Providing fol A 25 mm dia. IS B 25 mm PVC C 32 mm dia. IS D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm Providing 1.52		4
B High Power I Providing fol A 25 mm dia. IS B 25 mm PVC C 32 mm dia. IS D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm Providing 1	LED Flood Light 90W	
Providing fol  A 25 mm dia. Is  B 25 mm PVC  C 32 mm dia. Is  D 32 mm PVC  Proving follo  A 25mmX12mm  B 32mmX12mm  Providing 1	LED Flood Light 120W	
A 25 mm dia. IS B 25 mm PVC C 32 mm dia. IS D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm Providing 1.52	lowing size PVC conduits & bend	
B 25 mm PVC C 32 mm dia. Is D 32 mm PVC Proving follo A 25mmX12mm B 32mmX12mm Providing 1.52	SI marked, PVC conduit	
C 32 mm dia. IS D 32 mm PVC Proving follo A 25mmX12mr B 32mmX12mr Providing 1	•	
D 32 mm PVC Proving follo A 25mmX12mr B 32mmX12mr Providing 1.	SI marked, PVC conduit	
Proving follo A 25mmX12mm B 32mmX12mm Providing 1		Any ISI mark
A 25mmX12mr B 32mmX12mr Providing 1	wing sizes ISI marked (IS: 14927 P - II) PVC casing capping.	
B 32mmX12mr Providing 1.3		
Providing 1.		
18mmX9mtr	kV grade, ISI marked, electrical insulating tap roll of size:	
	IkV grade, ISI marked, water proof electrical insulating tap 8mmX20mtrs.	Any ISI mark
54. Providing 11. 18mmX20mt	kV grade, ISI marked, HT electrical insulating tap roll of size: rs.	
and all requir	I marked ding dong/musical chime bell suitable for 230Volt ed accessories as required.	Anchor/ Cona/ Vinay / GM
	panel contractors of following ratings for the existing LT	
A Upto 63 Am	required accessories as required-	Any ICI mosts
i Red	required accessories as required-	Any ISI mark
ii Yellow	required accessories as required-	·
iii Blue	required accessories as required-	·

iv	Black	
В	Upto 250 Amps	
i	Red	
ii	Yellow	
iii	Blue	
iv	Black	
57.	Providing din bar for following rating distribution boards as required-	
i	For 4 way (4 + 12) TPN, Double door Vertical DB	Schneider/ Legrand /
ii	For 4 way (4 + 12) TPN, Double door Horizontal DB	ABB / Havells
iii	For 6 way SPN distribution board	