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Name of Work: Providing of manpower for day to day maintenance /operation in Delhi Technological University, Bawana Road, Delhi [Electrical and Mechanical services]

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Engineering Cell
DELHI TECHNOLOGICAL UNIVERSITY
Shahbad Daulatpur, Bawana Road, Delhi – 110042
www.dtu.ac.in, Email Id:- cpo@dtu.ac.in Tel: 01127852188

NOTICE INVITING TENDER

Online e-Tenders are invited under Two-Bid system from Govt. agencies/PSUs only for (Item rate) Providing of manpower for day to day maintenance in Delhi Technological University Campus, Delhi. [Electrical and mechanical services (internal and external)] for a period of one (01) year on contract basis/outsourcing basis and the work may be extended to the subsequent years based on performance. Further details of the Notice Inviting Tender along with their terms and conditions and other documents can be seen/downloaded at/from the website <https://govtprocurement.delhi.gov.in>.

To participate in the e-tendering process of the Delhi Government, the bidder has to register with the NIC portal i.e. <https://govtprocurement.delhi.gov.in>.

Tender will be opened as per the schedule given below by the tender opening committee in the presence of the tenderers or their authorized representatives who wish to remain present on the same day and if any holiday on the day of opening, the tender will be opened on next working day of the university in the office of Chief Project Officer, Engineering Cell.

Tender document is also available for viewing on the website of Delhi Technological University, Delhi at www.dtu.ac.in.

Estimated Cost of Tender: **Estimated Cost: Rs 1,53,97,657/- (Rupees One Crore Fifty-Three Lakh Ninety-Seven Thousand Six Hundred Fifty Seven Only) for one year.**

Bid Schedule

Date of start and downloading tender
Earnest Money Deposit (EMD)	Rs. 3,07,953/- (Rupees Three Lakh Seven Thousand Nine Hundred Fifty Three Only)
Last date submission of tender (online)	13/07/2022 at 3.00 P.M.
Date and Time of opening Bid	26/07/2022 at 3.30 P.M.
Designation of the Authorized Officer and Address for Communication:	Chief Project Officer, Delhi Technological University Shahbad Daulatpur, Bawana Road, New Delhi – 110042.

Chief Project Officer
Delhi Technological University.



Engineering Cell DELHI TECHNOLOGICAL UNIVERSITY

Shahbad Daulatpur, Bawana Road, Delhi – 110042

www.dtu.ac.in, Email Id:- cpodtu@gmail.com Tel: 01127852188

GUIDELINES/PROCEDURE TO BE FOLLOWED IN INTRODUCTION OF ‘E’- PROCUREMENT SOLUTION

- 1. Payment of cost of tender documents:** The collection of cost of tender documents is dispensed away with, as there is no physical supply of tender documents and also to have absolute anonymity of bidder participating in e-procurement solution. The bidders can view/download the tender documents from the: <https://govtprocurement.delhi.gov.in>.
- 2. Submission of bids:** The bidders who are desire of participating in ‘e’- procurement shall submit their price bids in the standard formats prescribed in the Tender documents, displayed at <https://govtprocurement.delhi.gov.in>. The bidder should upload the scanned copies of all the required relevant certificates, documents, etc. in the: <https://govtprocurement.delhi.gov.in> in support of their price bids. The bidder shall sign on all the pages of tender document statements and certificates uploaded by him, owning responsibility for their correctness/authenticity
- 3. Payment of Bid Security (Earnest Money Deposit):** The EMD may be in the form of the Demand Draft through ECS/RTGS/NEFT Receipt of a scheduled bank issued in favour of Registrar, Delhi Technological University, Delhi or may be submitted through ECS/RTGS/NEFT direct to receipt account of Registrar DTU as detail given below.

Bank details for submission of EMD through RTGS/NEFT: -	
DTU EMD Account No.	30875679275 (Registrar, DTU)
Name of Bank	State Bank of India
Bank Address	DCE Campus, Shahbad Daulatpur, Bawana Road, Delhi-110042.
IFSC CODE	SBIN0010446
BRANCH CODE	10446
MICR CODE	110002438
SWIFT CODE	SBININBB544

This amount shall be refunded in case of rejection of the bid. Photocopy of the DD/PO/FDR if applicable, is required to be scanned and uploaded along with the bid, and the original DD/PO/FDR or proof of ECS/RTGS/NEFT shall be sent to DTU up to Last Date and Time for receipt of tenders through e-procurement solution.

In RTGS/NEFT mode of payment, bidders must mention their details in the format given below on their letter head mentioning complete address, Mobile no/ Telephone no./ E- mail ID etc along with the proof of payment to Bank.

(a)

Details of bidders(Applicant)	
Account no.	<NIT No.><Name of Work><Closing date and time of tender ><Bidders Name>
Address	< Bidders Address & Contact no. etc.>

(b) Proof of payment deposited in State Bank of India.

4. **Price Bid Opening**: The Price Bids will be opened online by the concerned officer/officers at the specified date & time, and the result will be displayed on the <http://govtprocurement.delhi.gov.in>, which can be seen by all the bidders who participated in the tenders.
5. **Processing of Tenders**: The concerned officer/officers will evaluate and process the tenders as done in the conventional tenders and will communicate the decision to the bidder online.
6. **Payment of Performance Guarantee**: The successful agency shall furnish a bank guarantee/FDR of the value 5% of the cost of tender for a period of sixty days beyond one year from a nationalized bank to ensure the satisfactory performance of item supplied. The performance guarantee is to be submitted at the time of deployment/installation/demonstration of equipment/manpower. In case the performance of the services is not found satisfactory, the amount of bank guarantee will be forfeited & credited in university account.
7. **Participation of Bidders at the time of opening of bids**: Bidders have two options to participate in tendering process at the time of opening of Bids: (i) Bidders can come at the place of opening of bids (electronically) as done in the conventional tender process. (ii). Bidders can visualize the process online.
8. **Participation Financial Rules for e-procurement**: The e-procurement system would be applicable for purchase of goods, outsourcing of services and execution of work as prescribed in GFRs.

NOTICE INVITING TENDER

INSTRUCTIONS TO AGENCIES: -

1. GENERAL:-

The present tender is being invited to provide 01 Supervisor, Wiremen and Substation attendant cum DG Operator 27 Nos, Pump Operator 03Nos and 15 Khallsi for Maintenance Work for the purpose of DTU maintenance work in the whole office premise (DTU).

2. ELIGIBLE BIDDERS: -

2.1 All government agencies/PSUs may apply.

2.2 The prospective bidder should be registered with NIC so as to enable his/her bids through e-tendering.

3. QUALIFICATION OF THE BIDDERS: -

3.1. Bidder should be familiar for providing such kind of manpower based services.

3.2. The Bidder, to qualify for award of contract, shall submit a power of attorney authorizing the signatories of the bid to commit each member of the Partnership/ Consortium/Joint venture.

3.3. Bidder or members of a partnership joint venture or consortium shall submit a copy of PAN card No. under Income Tax Act.

3.4. Bidder must submit copies of all documents required, duly self-attested, along with technical bid of the tender.

3.5. Each Bidder (each member in the case of partnership firm/joint venture/consortium) or any associate is required to confirm and declare with his bid that no agent, middle man or any in term diary has been, or will be, engaged to provide any services, or any other item or work related to the award and performance of this contract. They will have to further confirm and declare that no agency commission or any payment which may be construed as an agency commission will be paid and that the tender price will not include any such amount. If the Delhi Technological University subsequently finds to the contrary, the University reserves the right to declare the Bidder as non-compliant and declare any contract if already awarded to the Bidder to be null and void.

3.6. Canvassing or offer of an advantage or any other inducement by any person with a view to influencing acceptance of a bid will be an offence under Laws of India. Such action will result in the rejection of bid, in addition to other punitive measures.

4. ONE BID PER BIDDER:-

Each bidder shall submit only one tender either by himself or as a partner in joint venture or as a member of consortium. If a bidder or any of the partners in a joint venture or any one of the members of the consortium participate in more than one bid, the bids are liable to be rejected.

5. COST OF BID:-

The bidder shall be at all costs associated with the preparation and submission of his bid and the University will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tender process.

6. VISIT TO UNIVERSITY: -

The interested bidder shall visit the university campus (Bawana Road) and make acquaint himself with the area and operational system. The costs of visiting shall be borne by the bidder. It shall be deemed that the agency has undertaken a visit to the University and is aware of the operational conditions prior to the submission of the tender documents.

7. TENDER DOCUMENTS: -

7.1. Tender Documents.

7.1.1. The bidder is expected to examine all instructions, forms, terms and conditions in the tender document. Failure to furnish all information required by the tender document or submission of a tender not substantially responsive to the tender document in every respect will be at the bidder's risk and may result in rejection of his bid.

7.1.2. The bidder shall not make or cause to be made any alteration, erasure or obliteration to the text of the tender document.

7.2. CLARIFICATION OF TENDER DOCUMENT: -

7.2.1. The bidder shall check the pages of all documents against page number given in indexes and, in the event of discovery of any discrepancy or missing pages the bidder shall inform the Office of Chief Project Officer, Delhi Technological University, Bawana Road, Delhi.

7.2.2. In case the bidder has any doubt about the meaning of anything contained in the tender document, the same may be clarified in the pre bid meeting. The bidders may also seek clarification from the office of the Chief Project Officer, Delhi Technological University, Bawana Road, Delhi not later than two weeks after the publication of the tender. Any such clarification together with all details on which clarification had been sought will be communicated to all bidders without disclosing the identity of the bidder seeking clarification.

7.2.3. Except for any such written clarification by the University, which is expressly stated to be an addendum to the tender document issued by the Chief Project Officer, DTU, no written or oral communication, presentation or explanation by any other employee of the University shall be taken to bind or fetter the University under the contract.

8. PREPARATION OF BIDS: -

8.1. Language.

The bids and all accompanying documents shall be in English or in Hindi. In case any accompanying documents are in other languages, it shall be accompanied by an English translation. The English version shall prevail in matters of interpretation.

8.2. Documents Comprising the Bid.

Tender document issued for the purposes of tendering as described in Clause 7.1 and any amendments issued shall be deemed as incorporated in the Bid.

8.2.1. The bidder shall, on or before the date given in the Notice Invitation to Tender, submit his/her bid online on e-procurement website.

8.2.2. One copy of the Tender document and Addenda, if any, thereto with each page signed and stamped shall be annexed to acknowledge the acceptance of the same.

8.2.3 The contractor shall deposit Bid security (Earnest Money Deposit) for an amount of Rs. 3,07,953/- in the form of an Account Payee DD, Fixed Deposit Receipt from a commercial bank, or Bank Guarantee from a commercial bank in an acceptable form in favour of “**Registrar, Delhi Technological University**” or may be submitted through ECS/RTGS/NEFT direct to receipt account of Registrar DTU as detail given below:-

Bank details for submission of EMD through RTGS/NEFT: -	
DTU EMD Account No.	30875679275 (Registrar, DTU)
Name of Bank	State Bank of India
Bank Address	DCE Campus, Shahbad Daulatpur, Bawana Road, Delhi- 110042.
IFSC CODE	SBIN0010446
BRANCH CODE	10446
MICR CODE	110002438
SWIFT CODE	SBININBB544

The Bid security will remain valid for a period of Seventy-Five days beyond the final bid validity period. Bid securities of the unsuccessful bidders will be returned to them at the earliest after expiry of the final bid validity and latest on or before the 30th day after the award of the contract.

8.2.4. The Bidder (each member in case of joint venture/consortium/partnership firms) shall furnish the details regarding total number of works, which were similar in nature and complexity as in the present contract requiring supply of trained man power to provide maintenance Services.

8.3. Bid Prices: -

8.3.1. **Bidder shall quote the rates inclusive of all taxes & charges** in Indian Rupees for the entire contract on a ‘single responsibility’ basis such that the Tender price covers contractor’s all obligations mentioned in or to be reasonably inferred from the Tender document in respect of the Providing of manpower for day to day maintenance in Delhi Technological University Campus, Delhi. [Electrical and mechanical services (internal and external)] at Delhi Technological University. This includes all the liabilities of the contractor such as cost of uniform (if any), and identity cards of personnel deployed by the contractor and all other statutory liabilities like Minimum Wages, ESI, EPF contributions, which should be clearly stated by the contractor.

8.3.2. The rates and prices quoted by the Bidder shall be inclusive of GST.

8.3.3. The rate quoted shall be responsive and the same should be inclusive of all Statutory obligations such as Minimum Wages, ESI, EPF contributions, wages for leave reserve, service charges, all kinds of taxes etc. The offers of those prospective bidders which do not meet the statutory requirements are liable to be rejected.

8.3.4. Conditional bids/offers will be summarily rejected.

8.4. Form of Bid: -

The form of bid shall be completed in all respects and duly signed and stamped by an authorized and empowered representatives of the bidder. If the bidder comprises a partnership firm, consortium or a joint

venture, the form of bid shall be signed by a duly authorized representative of each member of participant thereof. Signatures on the form of bid shall be witnessed and dated. Copies of relevant power of attorney shall be attached.

8.5. Currencies of Bid and Payment: -

The Bidder shall submit his price bid/offer in Indian Rupees and payment under this contract will be made in Indian Rupees.

8.6. Duration of Contract:-

The contract shall be valid initially for one (01) year and the University reserves the right to curtail or to extend the validity of contract on the same terms and conditions for such period as may be agreed to.

8.7. BID SECURITY (Earnest Money Deposit):-

8.7.1. The contractor may deposit Bid security (Earnest Money Deposit) for an amount of Rs. 3,07,953/- in the form of an Account Payee ECS/RTGS/NEFT from a commercial bank, or Bank Guarantee from a commercial bank in an acceptable form in favour of “**Registrar, Delhi Technological University**” or may be submitted through ECS/RTGS/NEFT direct to receipt account of Registrar DTU as detail given above bank details. The Bid security will remain valid for a period of Seventy-Five days beyond the final bid validity period.

8.7.2. Any Tender not accompanied by Bid security shall be rejected.

8.7.3. Bid securities of the unsuccessful bidders will be returned to them at the earliest after expiry of the final bid validity and latest on or before the 30th day after the award of the contract.

8.7.4. Bid security of the successful bidder shall be returned on receipt of Performance Guarantee in the DTU and after signing the contract agreement.

8.7.5. Bid security shall be forfeited if the bidder withdraws his bid during the period of Tender validity.

Bid security shall be forfeited if the successful bidder refuses or neglects to execute the Contract or fails to furnish the required Performance Providing of manpower for day to day maintenance in Delhi Technological University Campus, Delhi. [Electrical and mechanical services (internal and external)] within the time frame specified by the Department.

8.8. Format and Signing of Bid:-

8.8.1. Tender will be accepted online through e-tendering platform. All the documents specified in the technical bid including photocopy of proof of Bid Security should be authenticated and scanned and are to be uploaded on the notified website.

8.8.2. The documents comprising the bid shall be typed or written in indelible ink and all pages of the bid shall be signed by a person or persons duly authorized to sign on behalf of the bidder. All pages of the bid, where entries or amendments have been made, shall be signed by the person or persons signing the bid.

8.8.3. The bid shall contain no alterations, omissions or additions except those to comply with instruction issued by the University, or are necessary to correct errors made by the bidder, in which case such corrections shall be initialed/signed and dated by the person or persons signing the bid.

9. Submission of Bids:-

9.1.1. The bidder shall submit Technical Bid and Financial bids through e-tendering. Lowest bidder shall provide hard copies of documents related to technical bid before award of the work.

9.1.2. The Pre-Qualification Bid and Technical Bid should consist of the following documents: - (To be uploaded on notified website)

- a) Bid Security (Earnest Money Deposit) for an amount of 02% in the form of an Account Payee D.D., Fixed Deposit Receipt from a commercial bank, or Bank Guarantee from a commercial bank in an acceptable form in favour of **Registrar, Delhi Technological University** or may be submitted through ECS/RTGS/NEFT direct to receipt account of Registrar DTU as detail given above bank details and receipt of ECS/RTGS/NEFT. In RTGS/NEFT mode of payment, bidders must mention their details in the format given above on their letter head mentioning complete address, Mobile no/ Telephone no./ E- mail ID etc. along with the proof of payment to Bank and submit online.
- b) Scanned copy of Self-attested one recent passport size photograph(s) of the authorized person(s) of the firm/agency with name, designation, Office/Residential address and office Telephone numbers, whether the bidder is a sole proprietor/partnership firm and if partnership firm, names addresses and telephone numbers of Directors/Partners also;
- c) Scanned copy of Self-attested copy of PAN No. card under Income Tax Act;
- d) Scanned copy of Self-attested copy of G.S.T.I.N Registration Number;
- e) Scanned copy of Self-attested copy of valid Registration No. of the Agency/Firm;
- f) Scanned copy of Self-attested copy of valid Provident Fund Registration Number;
- g) Scanned copy of Self-attested copy of valid ESI Registration Number;
- h) Scanned copy of Self-attested copy of valid License and Number under Contract Labour Act.
- i) Scanned copy of Copy of document as stated in clause 2.1
- j) Scanned copy of Self-attested copy of ISO Certification.

9.1.3. The tender shall remain valid and open for acceptance for a period of 90 days from the last date of submission of tender.

9.2 Late and Delayed Tenders: -

9.2.1. Bids must be uploaded in the notified website not later than the date and time stipulated in the NIT. The University may, at its discretion, extend the deadline for submission of bids in which case all rights and obligations of the University and the Bidder will be the same.

9.2.2. Any bid received after the deadline for submission of bids, as stipulated above, shall not be considered and will be returned unopened to the bidder.

10.1 Bid Opening and Evaluation: -

10.1.1. The authorized representatives of the University will open the Pre- qualification/Technical Bids in the presence of the Bidders or of their representatives who choose to attend at the appointed place and time.

10.1.2. The bid of any bidder who has not complied with one or more of the conditions will be summarily rejected.

10.1.3. Conditional bids will also be summarily rejected.

10.1.5. Financial bids of only the technically qualified bidders will be opened for evaluation in the presence of qualified bidders.

10.2 Right to accept any Bid and to reject any or all Bids: -

10.2.1. The Delhi Technological University (DTU), is not bound to accept the lowest or any bid and may at any time by notice in writing to the bidders terminate the tendering process.

10.2.2. The DTU may terminate the contract if it is found that the agency is blacklisted on previous occasions by the any of the University's/Institutions/Local Bodies/Municipalities/Public Sector Undertakings, etc.

10.2.3. The DTU may reject the Bid in the event that the Bid is accepted but the successful bidder fails to furnish the Performance Security or fails to execute the contract agreement.

11.1.. Award of Contract: -

11.1.1. The Delhi Technological University, will award the contract to the successful evaluated bidder whose bid has been found to be responsive and who is eligible and qualified to perform the contract satisfactorily as per the terms and conditions incorporated in the bidding document.

11.1.1. Delhi Technological University, will communicate the successful bidder by facsimile confirmed by letter transmitted by Registered post that his bid has been accepted. This letter (Hereinafter and in the condition of contract called the ("Letter of Offer") shall prescribe the amount which Department will pay to the contractor in consideration of the execution of work/services by the contractor as prescribed in the contract.

11.1.2. The successful bidder will be required to execute an agreement in the form specified in Annexure-IX within a period of 30 days from the date of issue of Letter of Offer.

11.1.3. The successful bidder shall be required to furnish a Performance "Providing of manpower for day to day maintenance in Delhi Technological University Campus, Delhi. [Electrical and mechanical services (internal and external)]" within 15 days of receipt of 'Letter of Offer' for an amount of 3% of tendered amount in the form of an Account Payee DD, Fixed Deposit Receipt from a commercial bank, or Bank Guarantee from a commercial bank from a commercial bank in an acceptable form (Annexure-X) in favour of "**Registrar, Delhi Technological University**". The Performance Providing of manpower for day to day maintenance in Delhi Technological University Campus, Delhi. [Electrical and mechanical services (internal and external)] shall remain valid for a period of sixty days beyond the date of completion of all contractual obligations. In case the contract period is extended further, the validity of Performance shall also be extended by the contractor accordingly.

11.1.4. The successful bidder should submit the SOP (Standard Operating Procedures) within two weeks of award of work.

11.1.5. Failure of the successful bidder to comply with the requirements of above clauses shall constitute sufficient grounds or the annulment of the award and forfeiture of Bid Providing of manpower for day to day maintenance in Delhi Technological University Campus, Delhi. [Electrical and Mechanical services (internal and external)].

**GOVERNMENT OF NCT OF DELHI
DELHI TECHNOLOGICAL UNIVERSITY
NOTICE INVITING TENDER**

C.P.W.D. – 7/8

BRANCH: Electrical

DIVISION: DTU Engineer Cell

Item Rate Tender & Contract for Works

Name of work: - Providing of manpower for day to day maintenance in Delhi Technological University Campus, Delhi. [Electrical and mechanical services (internal and external)]

- (i) To be submitted by 3.00 P.M. hours on _____ to Chief Project Officer, Delhi Technological University, Shahbad Daultapur, New Delhi (time) (date)
- (ii) Eligibility criteria to be opened at 3:30 PM on _____ in the office of Chief Project Officer, Delhi Technological University, Shahbad Daultapur, New Delhi. Price Bid shall be opened at 03:30 PM on _____ in the office of Chief Project Officer, Delhi Technological University, Shahbad Daultapur, New Delhi.

Signature of officer issuing the documents _____

Designation: - Chief Project Officer. Engineering Cell, DTU campus

TENDER

I/We have read and examined the notice inviting tender, schedule A, B, C, D, E & F. Specifications applicable, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions 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 President of India within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, 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 conditions so far as applicable. We agree to keep the tender open for Ninety (90) days from the due date of submission thereof and not to make any modifications in its terms and conditions.

A sum of as per NIT has been Receipt Treasury Challan/Deposit at call receipt of a Scheduled Bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank as earnest money. If I/we fail to furnish the prescribed performance guarantee within prescribed period, I/we agree that the said President of India or his successors in office shall 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 President of India or his successors in office 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, upto 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 Clauses 12.2 and 12.3 of the tender form.

I/We hereby declare that I/we shall treat the tender documents and other records connected with the work as secret/confidential documents and shall not communicate information/derived therefrom 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.

I/We hereby declare that I/We shall treat documents and other records connected with the work as secret/ confidential documents and shall not communicate information /derived therefrom 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 Contractor
Postal Address

Witness:

Address:

Occupation:

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the DTU for a sum of

Rs. _____(Rupees _____)

The letters referred to below shall form part of this contract Agreement: -

- a)
- b)
- c)

For & on behalf of the DTU.

Signature _____

Dated Designation _____

PROFORMA OF SCHEDULES
(FOR MAJOR COMPONENT)

SCHEDULE 'A'

Schedule of quantities for Electrical Works as per Page No.

SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

S. No.	Description of item	Quantity	Rates in figures & words at Which the material will be charged to the contractor	Place of issue
NIL				

SCHEDULE 'C'

Tools and plants to be hired to the contractor

S. No.	Description	Hire charges per day	Place of Issue
NIL			

SCHEDULE 'D'

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

SCHEDULE 'E'

Reference to General Conditions of Contract: General Conditions of Contract 2014 read along with correction slips/amendments issued up to the last date of submission of tender including extension, if any.

Name of work	Construction of Design Centre at main Campus of Delhi Technological University, Bawana Road. (Composite work)
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Estimated cost of work

Estimated Cost	Rs. 1,53,39,657/-
Earnest Money	Rs. 3,07,953/-
Performance Guarantee :	3% of tendered and accepted value of the work.
Security Deposit	2.5% of Gross Amount of bill.

SCHEDULE 'F' (GENERAL RULES & DIRECTIONS)

Officer inviting tender: Chief Project Officer, DTU, Bawana Road Delhi,

Definitions:

Engineer-in-Charge	The Chief Project Officer, DTU, Bawana Road, Delhi
Accepting Authority	Vice Chancellor, DTU, Bawana Road, Delhi.
Percentage on cost of materials and Labour cover all to overheads and profits	15%
Standard Schedule of Rates	1. CPWD DSR2016-(E&M)
Department	Delhi Technological University.
Standard CPWD Contract Form GCC 2014	CPWD Form 7 & GCC 2022 read along with correction slips/amendments issued up to the last date of submission of tender including extension, if any.

Clause 1

Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance	07 (Seven) days
Maximum allowable extension beyond the period provided in (i) above	3 (Three) days with late fee @ 0.1% per day of the PG amount.

Clause 2

Authority for fixing compensation under clause 2	Vice Chancellor, DTU, Bawana Road, Delhi.
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Clause 2A

Whether Clause 2A shall be applicable	No
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Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start	10 (Ten) days or date of handing over of site whichever is later
---	--

Clause-5

Time allowed for execution of work- 12 (Twelve) months

Authority to decide:

(i)	Extension of time :-	Vice Chancellor, DTU, Bawana Road, Delhi.
(ii)	Rescheduling of mile stones :-	Vice Chancellor, DTU, Bawana Road, Delhi.
(iii)	Shifting of date of start in case of delay in handing over of site:	Vice Chancellor, DTU, Bawana Road, Delhi.

Clause 6, 6A

Clause applicable - (6 or 6A)	6A (Computerized measurement book to be submitted by agency)
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Clause 7

Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment.	As Applicable
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Clause 7A

No running Account Bill shall be paid for the work till the applicable registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge.	As Applicable
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Clause 10A

List of testing equipment to be provided by the contractor in the lab at each site of work as per [TABLE-1] of Annexure-I attached.

Clause 10 B (ii)

Whether Clause 10 B (ii) shall be applicable	Yes
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Clause 10 C

Component of labour expressed as percent of value of work	As Applicable
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Clause 10 CA: - Not-Applicable

Clause 10 CC

Schedule of component of other materials, Labour, POL etc. for price escalation:-
 Component of Electrical materials (Except materials covered under clause 10CA)
 Component of labour expressed as percent of total value of work.
 Component of P.O.L. expressed as percent of total value of work.

} Not Applicable

Clause 11

Specifications to be followed for execution of work	CPWD Specifications 2009 volume- I & II read along with up to date correction slips/amendments issued up to the last date of submission of tender including extension, if any.
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Clause 12

Type of work

It is an Maintenance work. Restriction of completion cost up to 1.25 times of tender cost shall be applicable.

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2, 12.3 : Please refer below

12.2. & 12.3	Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building work	50% (Fifty percent only)
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12.5	i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work	100% (One Hundred percent only)
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Clause 16

Competent Authority for deciding reduced rates.	Vice Chancellor, DTU, Bawana Road, Delhi.
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Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site:- All plants, equipments and machinery required for smooth and efficient progress of work as per direction of Engineer-in-Charge.

Clause 36 (i)

S. N.	Minimum qualification of Technical Representative	Discipline	Designation (Principal technical / Technical representative)	Minimum experience	Number	Rate at which recovery shall be made from the contractor I the event of not fulfilling provision of Clause 36(I)	
						Figures	Words
1	Graduate Engineer Or Diploma Engineer	Electrical	Project/Site Engineer and Billing Engineer	2 Years	1	Rs. 18,000/- (Per month)	Rs. Eighteen thousand per month
				5 Years	1		

Assistant Engineer retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

Diploma holder with minimum 10 years 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.

GENERAL CONDITION AND SPECIAL CONDITION OF CONTRACT

1. The special condition of contract as laid down in subsequent paragraphs are in addition to the general conditions of contract (GCC) CPWD 2014 or latest issue of CPWD with entire corrigendum issued taken in to account. To download the general contract condition 2014 (i.e. GCC-2014) following link may be followed: [www.cpwd.gov.in>download>GCC-2014](http://www.cpwd.gov.in/download/GCC-2014). However in case there is a conflict between the GCC and special conditions of contract. The conditions which are in the best interest of the University or the conditions given in special/ additional condition shall prevail. The decision of competent authority in DTU, dispute, shall be final and bidder/ successful bidder. Further although all care has been taken to adhere to all govt. statutes and directions in case by any chance, any of the special condition violates any of the govt. statutes, it will be the equal responsibility of the bidder to immediately bring the same to the notice of the authorities at Delhi Technological University.
2. The agency shall in no case lease/ transfer/ sublet the services at Delhi Technological University to any other agency without proper permission from the University in writing.
3. The agency will take appropriate action for getting proper license/ permission from the concerned Govt. authorities for its various operation wherever applicable within its scope.
4. In the event of failure and/ or neglecting to perform any duties assigned to the agency to the entire satisfaction of the University, the University shall have the right to have such duties and obligation performed and discharged by such other party/ parties, as the University may deem fit, and shall be entitled to recover from the firm all costs and expenses incurred towards getting such work done from other party/ parties.
5. No other person except the “Agency” staff shall be allowed to enter the premises and the agency will not entertain outsiders or extend any service to them within the University premises. Outside visitor(s), guest or unnecessary telephone shall not be permitted.
6. The agency shall be directly responsible for any/ all disputes arising between it (agency) and its employees and keep the university indemnified against all losses, damages and claim arising thereof.

Periods of Contract

7. The period of **contract is 12 months** from the date of signing of the agreement and may be extended on mutually agreed terms and conditions subject to satisfactory performance. In order to evaluate the performance and services of the contracting agency, (the contractor will have probationary period of three months). The contract for the remaining month will be confirmed only if the services are found satisfactory during the probationary period. In case of termination for any reason whatsoever during the probation period, all dues as applicable and approved by the competent authority under law will be cleared expeditiously subject to govt. provision/ procedures and constraints within Delhi Technological University
8. **Compliance of statutory obligations.** Following statutory obligation will be complied with-
 - (a) The contracting agency will be required to comply with all statutory obligations from time to time emanating from this contract, such as, (i) payment of wages as per minimum wages Act of Delhi Government in force from time to time; (ii) contributions towards employees provident fund; and (iii) contributions towards ESI.
 - (b) In the event of violation of any contractual or statutory obligations by the contracting agency, the agency shall be fully and solely, responsible for the same. Further, in the event of any action, claim, damages, suit initiated against the university by any individual, agency or government authority due to act of the contracting agency, the agency shall be liable to make good/ compensate such claim for damages to the university. As a result of the act of the firm, if the University is required to pay any damages to reimburse to the university such amount along with other expenses incurred by the university or the university reserves the right to recover such amount from the payment(s) due to the agency while settling its bills or form the amount of security deposit of the firm lying with the university.
9. Wages to be paid to staff by the agency. following conditions shall apply with regard to wages to be paid:-
 - (a) The contracting agency will be required to make payment of wages to the staff provided by it at the university's campus as per minimum wages Act of Delhi Govt. in force from time to time. As and when these wages are revised by the govt. he contracting agency shall accordingly make payment of wages to their workers as per revised rates and claim reimbursement from the university accordingly.
 - (b) The contraction agency will ensure payment of wages to the staff deployed by it at the University's campus by

seventh day of every month positively, irrespective of the fact whether the payment of its bill submitted to the university has been released by the university or not by that date. if seventh day of a particular month happens to be holiday, the agency may be required to make payment of wages to its staff on a working day prior to the seventh day of such month.

- (c) It will entirely be the responsibility of the contracting agency to keep itself updated with the govt. regulations regarding ESI and PF benefits to the employees and abide by it. No payment shall be released without submission of relevant documents to the satisfaction of Delhi technological University regarding compliance of govt. regulations relating to ESI and EPF.
 - (d) It will be the responsibility of the contracting agency to maintain all documents/ registers as mandated under any of the govt./statutory regulations and the agency shall be liable to produce all such records to the university if called for.
 - (e) It will be the responsibility of the contracting agency to pay Bonus to the workers at the prescribed rate as Delhi Govt. Act.
10. Penalty for poor or insufficient services. The contracting agency would be expected to maintain high standards of services. Any series lapse noticed shall be liable to penalty as laid down in these documents. On recurrence of such lapses, the university may impose a penalty or take appropriate action as may be decided by the competent authority. Separate service-wise penalties have been described in respect of each services covered under the present tender scheme. However, following general penalties shall apply to all the services and these will be in addition to the penalties laid down for each of the services. the competent authority at Delhi Technological University shall be the final authority to impose or waive off any of these penalties as laid down:-
- (a) In the case of unplanned absence of any person deployed for the purpose of this contract, if no suitable replacement is provided within 5 working hours then a deduction will be made from the payment of INR- 500/- per incident of default.
 - (b) In case any tool equipment (not including material/ consumable) that has been specified in list is not provided at time of commencement at the site or at any time is not found at site without a valid reason, deduction of 2000/- shall be made from the margin payable.
 - (c) In case of non-compliance of statutory obligation with regards to the EPF & ESIC payable to the manpower, the exact specified sum shall be recovered from the margin of the agency.
 - (d) In event of any structural damage/injury caused due to proven negligence of staff, work man, labour deployed will be debited from the margin of the agency.
 - (e) non-attendance or non-rectification of faults coming under the scope of work of this contract within the on duty (official operating hours) time lines agreed shall result in penalty as decided by Engineer-In-Charge shall be made from the margin payable to the agency.
 - (f) A penalty as decided by Engineer-In-Charge per default from the margin payable in the following cases:-
 - Incase manpower is no improper uniform/shoes
 - If any other person is found on duty other than those mentioned in the approved list.
 - In case any of the agency employees are found without respective agency I-cards.
 - Any agency employees chewing/smoking tobacco or found drunk/ drinking while on duty.

Documents and Formats

- 11. The contracting agency shall be required to develop, except where already laid down, all the documents and formats as may be necessitated by Govt. regulations or as may be necessitated as per the scoop of work. This must be done within the first fortnight of signing of the agreement and the release of the first payment shall be subject to satisfactory completion of the same.

Security and discipline

- 12. for reasons of security and discipline, the firm shall ensure the following:-
 - (a) the firm shall submit the name of supervisor and other members of employed by him in the following format before commencement of the AMC/ work

S no	Name	DOB & age	Qualification	Address	Photo	Identity proof submitted
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- (b) The firm shall submit police verification of all his men before commencement of the AMC/work.
- (c) Addition, replacement or change of any member shall be intimated along with the information at (a) above which shall be accepted only after submission of police verification.
- (d) Dress—the bidder shall lay down a strict dress code and an appropriate mane plate for identification card for each of his staff.

Termination of the contact

- 13. The period of contact is 12 months (extendable subject to satisfactory completion), however, contract can be terminated by either party, i.e. Delhi Technological University or contracting agency, by giving three months notice, extendable by mutual agreement till alternate arrangements are made. However, Delhi technological University reserves the right to terminate the contract without giving any notice in case the firm commits breach of any of the terms of the contract. Delhi Technological University’s decision in such a situation shall be final and binding on the firm.
- 14. If the successful bidder withdraws or the services provided by the successful firm are not found satisfactory within the probationary period of three months from the date of commencement of the contact, Delhi Technological University reserve the right to terminate the contract without giving any warning notice and initiate appropriate procedures for carrying out the work as appropriate at the risk and cost of the concerned firm even if the risk and cost value is higher than the value of award to the firm and also forfeit the complete security deposit.

Terms of payment

- 15. Monthly payments will be made on submission of bills in this regard with proofs of deposit of contribution of workers as regards EPF & ESI. Payment will be released only after inspection and completion of all documents and signature as per laid done frequency.

Jurisdiction

- 16. Any dispute arising out of this tender shall be under the jurisdiction of courts in Delhi only.

GENERAL TERMS AND CONDITIONS

- 1 Work shall be carried out as per CPWD Specifications wherever applicable. Safety procedure as indicated in CPWD Specifications of Electrical work and Sub Station work should be followed.
- 2 The rates quoted shall be inclusive of wages of Electrician/ E&M Operator /Wireman/Khallasi etc i/c relievers, cleaning material, uniform and all taxes and duties etc. as applicable. However service tax, ESI/EPF will be reimbursed to the contractor, on production of proof of deposit of the same with respected govt. department.
- 3 The contractor shall take all precautions for safety of the workmen. If any accident/mis-happening occurs the department shall not be responsible for the same. If any compensation is to be paid to the victim, the firm shall pay the same and no claim in this account shall be entertained by the department.
- 4 All the cleaning material i.e. soap, duster, PVC tape roll etc. shall be arranged by the contractor at his own cost for cleaning of Electrical Installation & fans, switch gears, DB.
- 5 In case the department staff is posted or due to some other reasons, the department reserve the right to terminate the contract in full or part thereof.
- 6 The contractor shall furnish name & contact number of the persons, who should be contacted during emergency.
- 7 No T&P shall be issued to the contractor.
- 8 The contractor shall Provide Biometric Attendance Machine in support of the attendance of the staff and the same shall be got periodically checked from JE (E) / AE (E) concern. Failure to which suitable recovery will be made from the contractor bill as decided by the Engineer-in-charge. Nothing Extra shall be paid on Account of Biometric Machine installation and maintenance
- 9 The contractor shall prepare a “Monthly” duty chart with name and duty hours stated therein. The same shall be submitted to the JE (E) / AE (E) concern at least seven days in advance.
- 10 In case of any damage to any equipment due to negligence of the contractor’s staff the same will have to be made good by the contractor at his cost. Failure to which suitable recovery will be made from the contractor bill as decided by the Engineer-in-charge.
- 11 Before the start of contract, the contractor is bound to submit the following details alongwith supporting papers of the workers proposed Sub Head wise to be engaged by him. After receipt of confirmation of their suitability from Engineer-in-charge or his authorized representative, they shall be deployed on duty.
 - (A) Name & Postal Address with I.D. proof
 - (B) Police Verification Certificate
 - (C) Photograph with specimen signature.
 - (D) Qualification and experience.
 - (E) Bank Accounts Details
 - (F) ESI/EPF Details

Before start of work the agency has to got approved detail of workers from Engineer-in-Charge & has to take over the site from J.E. in charge of site.
- 12 The contractor shall replace the staff, in the event of misconduct by him.
- 13 The contractor/ Firm is advised to visit the site of work before quoting the rates, in order to ascertain the quantum and location of works.
- 14 It shall be entirely the responsibility of the contractor to ensure that no unlawful act is done by his persons while on duty. In case any theft/ loss of departmental property takes place due to the negligence or carelessness of his personnel, the contractor will be held responsible and shall make good the same. The aforesaid terms and conditions shall be read in conjunction with the general rules and directions for the guidance of Contract form PWD -8.
- 15 **Terms of payment and other facilities for workers.**
- 15.1 The contractor is bound to distribute the salary/ wages to his worker by 7th of each month, positively, by NEFT / ECS as feasible and the report for the same shall be submit to this office. The minimum wages shall be as per Delhi Govt. notification issued from time to time.

- 15.2 The contractor shall deduct worker subscription towards Provident Fund and ESI, as per rules, he shall deposit the same along with his contribution into the respective accounts of the worker and submit the detail to this office for verification.
- 15.3 On completion of the work or completion of 12 months (from the date of start of the work) whichever is earlier, the contractor shall have to disburse bonus as per Delhi Govt. rates for casual labour to the each worker employed in this work and will submit the proof of having disbursed the bonus, before the release of the final payment.
- 15.4 The contractor shall take all precaution for safety of the workmen. If any accident / miss-happening occurs, the department shall not be responsible for the same. Consequently any compensation payable shall be at the contractor cost.
- 15.5 (A) The contractor shall provide one set of summer uniform (shirt and paint) along the badge encrypted with worker, designation and name of agency within 15 days from the start of work. Failing which recovery @ Rs. 200/- per worker per month shall be made from the contractors bill.
(B) Worker should come on duty, wearing proper uniform. If any worker found without uniform a recovery @ Rs. 20/- per day per worker shall be made from the contractor's bill.
- 15.6 Recovery shall be made at the following rate if Electrician/ Fire Operator/ Fireman/ E&M Operator /Wireman/ Khallasi etc found absent from his duty.
a) Electrician/ Fire Operator/ Fireman/ DG Operator /Wireman etc @ 1300/- per worker per shift
b) Khallasi @ 1150/- per worker per shift.

The duty of staff shall be decided by Engineer in charge time to time for smooth rectifying the complaints and operating the system. Inventory as per physically available at site with JE & shall be handed over by the JE(E).

16 Terms of Payment for the contractor

- 16.1 The healthiness of the complete system shall be evaluated on the method detailed in additional terms and condition of individual Sub Head.

16.2 Production of Bill.

Contractor shall provide one no. mobile in Residence Enquiry is displayed and inform to client department. Contractor shall not change the mobile no during the agreement stipulated period. If mobile is found switch off for more than 4 hours, recovery shall be made @ Rs 100/- per mobile No.

The contractor has to take over the site from JE-in-charge. After completion of work contractor has to hand over the site to J.E. in charge of site

Any other addition/alteration in the existing installation shall be covered in the scope of the work and operation & maintenance of the same shall be included in scope of this agreement. Nothing extra will be paid on this account. ESI & EPF shall be reimbursed on actual basis on production of documentary evidence.

The contractor shall provide the major T&P in any one of the sub head for carrying out day to day maintenance work. The contractor shall make his own arrangement of tools for maintenance of Sub Station/Electrical Installations equipments & following T&P shall always be available at the site of work by the contractor:-

- a) Tong tester
 - b) Gloves- 4 Sets
 - c) First Aid Box
 - d) Crimping Tool Kit
 - e) Meggar (5kV HT and 500 Volts LT)
 - f) Spanner Set
 - g) Screw Driver set
 - h) LN Keys set
 - i) Earth Tester
 - j) Blower
 - k) Hammer, Drill Machine & Spade
 - l) Different size of aluminum ladder for maintaining the campus street light of different height and fans & fittings.
 - m) Every wireman/operator should have pliers, screw driver of different size, tester for day to day maintenance work.
- Before start of contract these T&P materials must be kept in a lockable box, if same is not available at site recovery for the same @ Rs. 100/- per day shall be deduct from the contractor bill maximum upto Rs. 1000/- per month.

Internal Electrical installations & External Lights

1. Persons engaged in maintenance works should be competent for the type of work involved.
2. Safety procedures as indicated in appendix E to the General Specification for internal work [Part-I: Internal 2005/ 2013] should be duly followed.
3. The number of items to be maintained in a bldg. may be many like fittings, fans, DBs, Earth sets, etc. In order to achieve compliance to the prescribed periodicities for the various activities on them as per the schedule each of these items may be divided into convenient numbers, to carry out the respective activities in sub periods in a cyclic [sequential] order. For example if DB's are to be checked every month and there are 50 DBs in a building these may be checked @ two-three DBs everyday in a sequential order so that all DBs are checked in a month.
4. Maintenance activities carried out as per these schedules should be noted in the maintenance register. When tests are carried out the test results should be recorded with appropriate identification reference. [For example: SDB 7 earth pit No. 4 R/M- wing A etc.]
5. The voltages of supply, total load, current and PF should be noted in logbook everyday, preferably during peak loading time of the day. [In the case of isolated/unattended buildings where it is not feasible to log daily, the period may be increased to weekly or fortnightly as feasible]
6. Inspection of Electrical Installation is intended primarily from Fire Safety consideration. Following points need to be observed as part of inspection and corrective action as necessary should be taken immediately including co-ordination with the client department & Concerned Engineer-in-charge at site as may be required.
 - a) Check that- there is no sign of heating up, burning smell, discoloration or sparking at any of the boards [SDBs as well as main boards], and rising mains. These may occur due to over loading or loose termination. Highly unbalanced loading may cause heavy neutral floating currents and consequent heating of neutral conductors and terminals.
 - b) No temporary wiring exists anywhere in the bldg.
 - c) There is no joint in cords connecting the WTAC units/ Voltage regulators/office equipments like photocopier, PC, etc
 - d) No bare wiring exists over the flooring without mechanical protection by a metallic conduit/channel.
 - e) The shaft/spaces for electrical services are not misused for storage or dumping rubbish.
 - f) The spaces in the front of DBs and sockets are free [without any storage of files/ papers etc]
 - g) No addition/alterations are done by the user department to the electrical installation by themselves.
7. Record of loading upto DB level [in each phase in case of 3-ph DBs] should be maintained after measurements using a clip on ammeter. Such measurement should be done as far as possible during peak season [summer & winter] when the loads are likely to be the highest.
8. While cleaning fittings and fans, the fixing/suspending arrangements should also be checked and attended to as necessary. Care should be taken that the alignment is not disturbed.
 - a) In the case of ceiling fans remove the blades and wash the same with detergent without causing deformation of blade angle. Check the shackle and replace if damaged. Check that down rod is fully screwed upto the last Thread on both ends and the threads are not loose. If so required replace the down rod of the same size, thickness and length of threading [not less than 20 mm]. Check split pins and replace if any strain deformation or damage is observed. If any other system of suspension had been adopted check the soundness of the same and tighten as necessary. Fix fan blades tightly to the body. Operate the fan at different speeds, the run should be without wobbling/noise.
 - b) As per specification lubrication needs to be done as necessary. In such cases the fan needs to be brought down after removing the blades. The old grease should be replaced with a fresh one after cleaning the bearing. If damaged the bearing should be replaced. When reinstalling the fan the suspension bolts should be well tightened.
9. Insulation tests should be done during monsoon season as per clause 11.2 of CPWD Specifications for Electrical Works Part-I Internal-2005/2013.
10. Earth continuity tests and earth electrode resistant test should be conducted during summer season as per clause 11.4 and 11.5 of the above Specification.
11. It is proposed to provide maintenance services for Electrical & Mechanical Installations at site on Round the clock 7 days a week basis. The contractor shall render the services even on Holidays in case of urgency & requirement, without claiming extra charges/amount for the same.
12. The Details of installation included in the above contract of work.

13. The workers should be provided with adequate tools to enable them to perform their duties efficiently. The sundries materials like cotton waste, grease, distilled water for batteries and fuse wires required for the maintenance and operation shall be provided by the contractor within the amount tendered by him. Other than the material specified above required for maint. & operation shall be regulated through demand cum-consumption register which will have linkage with complaint register.
14. The contractor and or his representative, labour should not remove, disturb, and dislocate the existing equipment and its parts from its position until and unless it is authorized by the Engineer-in-Charge in writing. The entire installation should be intact at any time of inspection. Care shall also be taken not to damage installation by improper handling etc. The contractor shall be responsible for any damage or theft and shall have to make good to its original shape and description as and when damage/theft etc. is noticed or taken place due to wrong operation of the equipment or negligence of the contractor's staff.
15. The contractor will provide Uniform to all staff engaged by him. The suitable identification mark shall be engraved on the pocket of the shirt. The identity card shall be issued by the contractor duly signed by the Engineer-in-Charge.
16. To start with, the contractor shall maintain a complaint register which will monitor the time and receipt/attending the complaint. The contractor shall be responsible for getting signature of the occupant in token of attendance of the complaint in workers diary. The complaint shall be attended to on the same day as early as possible.
17. In case the contractor fails to attend the complaint in reasonable time [within the same day] then deptt. shall be free to get the complaint attended through other agency and shall deduct the amount from the bill of the contractor at double the rate spent on such work. The judgment of the Chief Project Officer will be final in accessing the expenditure involved for attending the fault by the other agency.
18. Proper preventive maintenance of electrical installation particularly for the following items of work shall be carried out as per period stated against them. The contractor should check out the suitable Programme for doing the test result and inform the Engineer-in-charge in advance and same shall be noted in suitable register maintained by the contractor.

Earth Testing	Once in a Year
Insulation Test	Once in six months.
Cleaning of installation	Once in Three Months
Transformer Testing	Once in a Year

19. The contractor and or his representative, labour should not remove, disturb, and dislocate the existing equipment and its parts from its position until and unless it is authorized by the Engineer-in-Charge in writing. The entire installation should be intact at any time of inspection. Care shall also be taken not to damage installation by improper handling etc.
20. The contractor shall be responsible for any damage or theft and shall have to make good to its original shape and description as and when damage/theft etc. is noticed or taken place due to wrong operation of the equipment or negligence of the contractor's staff.
21. This contract does not include the following:
 - a) Spare parts for repairs.
 - b) Consumable like HRC fuses, fuel oil, lub./engine-oil and transformer oil.
 - c) Overhauling of machineries and equipment.
 - d) Rewinding of Alternator.
 - e) Repairs of LT and HT joints.
 - f) Repairs of Transformer.
 - g) Repair to Incoming OCB's, HT, bus-bar, relays, batteries and battery charger

ADDITIONAL SPECIFICATION, FOR DRINKING WATER SUPPLY PUMP SETS

1. Deputing necessary trained and technically qualified staff to operate the pump installation Round the clock as per the direction of Engineer-in-charge.
2. Maintaining and up keeping of every associated equipment and machinery such as water level indicator, automatic operators, associated electrical panel and accessories in proper functional condition.
3. Recording of all parameters in logbook as prescribed by the department.
4. Bringing to the notice of the department. Any defect mal-functioning of any pump, motor electrical panel, switches, etc. which required immediate attention of the department.
5. Keeping proper watch & ward of the equipment and machinery installations.
6. Servicing and up keeping of the equipment such as motors terminal boxes, pump, incoming cables, cable terminations and associated electrical panel in accordance with the maintenance routine specified.
7. Making good losses or damages to the equipment and machinery or any part there-of if as a result of negligence or default of operating staff. The decision of the Engineer-in-charge in this respect being final.
8. Informing the department well in advance about the requirement of any spares and other items necessary for satisfactory operation of the pump installation.
9. The Contractor would be required to operate the pump in three shift and ensure to depute technically qualified operational staff as below.
The staff employed shall have following qualification and experienced, practical experience of three years in handling E & M plants including normal running, maintenance knowledge of motor pumps including engines. Moreover he should also have: -
 - a) Elementary knowledge of working of pumps and starters (DOL & FASD type)
 - b) Familiar to identify & use of mech. tools e.g. spanner, pliers, screw drivers, etc.
 - c) Able to identify tools and lubricants commonly used.
 - d) Be able to start, stop operate a pump and carry out operation e.g. priming, opening and closing of valves tightening of glands and lubricants application.
Ability to handle simplex mech. tools e.g. spanners, pliers, screw, drivers etc.
 - e) Ability to read to instrument like pressure gauge, ammeter, voltmeter, APFC, Power Factor etc. & to maintain a daily log book of readings & instruments.
11. After the work is awarded the contractor would be required to furnish the name, father name, qualification, local address of staff proposed to be deputed by him for the job. The staff shall be engaged after particulars are scrutinized and approved by Engineer-in-Charge. Similar procedure shall be followed if he proposes to change the staff there after.
12. For undertaking work such as cleaning and conditioning of valves etc. requiring additional man power, the same will have to be arranged by the contractor as and when required for which nothing extra shall be paid.
13. Specialized highly technical man power e.g. checking of MCCB and adjusting of settings, relays, starters, insulation tests and other such works in pumps except major repairs to pumps and motors, rewinding of motor etc. which will be required to keep the pumps in good condition will also be arranged by the contractor without extra cost for the same.
14. The Engineer-in-Charge reserves the rights to ask the contractor to remove any staff without assigning any reason what so ever the decision of Engineer-in-Charge will be final and binding on the contractor.
15. The contractor shall be fully responsible for the conduct of the staff deputed by him.
16. Place of duty shall be fixed by JE-in-charge and operator concerned shall normally be available at duty place. Before leaving place of duty operator shall make entry in the log-book.
17. The operational staff shall always be as per clause 10 above. In case of unforeseen absence from duty of the operational staff, the same will have to be filled in by making suitable arrangement immediately.
18. The contractor shall make his own arrangement for tools for electrical & mechanical work for the use of their staff. No T&P shall be issued by the department. Operating staff shall be equipped with all necessary T&P and testing equipments so as to attend to normal faults and set them right.
19. Water & power will be supplied free of cost for bonafide use at the work only.
20. All spares of all equipment will be supplied by the department free of cost for the bonafide use of works. However in case it is established that any of the spares & materials have been misused or has been wasted by the contractor staff on account of their negligence, inefficiency or any other reason for which department is not responsible.- recovery will be made from the contractor bill towards the cost of such spares/materials. Decision of Engineer-in- Charge will be final and binding on contractor.

21. In case of any damage to any equipment on account of negligence/ fault of the contractor staff, the same will have to be made good at their risk & cost. Failure of which recovery will be made from contractors bill.
22. During the concurrency of contract the pumps be shall be in physical custody of the contractor and after expiry of contract the plant shall be handed over to department in the similar condition in which it was taken over.
23. All works e.g. overhauling of pumps, rewinding of motors, [damaged on account of no fault of contractor] replacement of valves, etc. works involving welding, repairs, painting and any other works for which machinery has been sent out for repair, testing will be arranged by the department.
24. Pump Operator is supposed to record his arrival in the logbook. At the earliest opportunity he shall also report to the JE-in-charge and get his reporting acknowledged in the log –book of pumps.
25. The department reserves the right to terminate the contract before/after the expiry of contract period without assigning any reason. This will normally be as a result of unsatisfactory performance of contract. Validity of the contract can however be extended in accordance with clause no. 3 & 4 of the form-8.
26. Before the installations are taken over for operation and maintenance, the Contractor shall duly sign the inventory with the state of pumps, motors, etc. recorded if necessary.

SCHEDULE OF PERIODIC MAINTENANCE

A DAILY CHECKS

1. The water intake level in the sump as well as in the level in Over Head tank shall be Checked and also discharge pressure, voltmeter, ammeter readings shall be checked and recorded in the log-book as and when system run.
2. Cleaning of pump house, floor and machinery & Panel.

B WEEKLY CHECKS

1. To check pump gland packing and add more packing if required.
2. Dusting or blowing inside of all electric panel with compressed air or electric blowers.
3. To check lugs/thimbles/terminal blocks of electrical motor's, switches starters, single phase preventer (SPP), indicating lamp for loose connection and to take remedial steps if required.
4. To check coupling of pumps and motor and to check alignment of pump, rectify if necessary

C WORKS TO BE DONE ON MONTHLY BASIS.

1. To check operation of valves against leaks & proper functioning & to rectify if necessary.

D WORKS TO BE DONE AFTER EVERY THREE MONTH.

1. To check and lubricate the bearings of motor and to keep proper records.
2. To check the foundation bolts of pumps, motors & to take necessary action.
3. To check all electrical motors for earthing & insulation & its proper records.
4. Servicing of switches, starters and adjust the relays and keep proper record.

ADDITIONAL SPECIFICATION, TERMS AND CONDITIONS FOR D.G. SETS.

Scope of work:- The scope of work covered by this contract is an integral part of schedule and include the following.

- 1) The Contractor would be required to operate the D G set on Mains Failures as and when required and ensure to depute technically qualified operational staff.
- 2) Fuel and lube oil required shall be supplied by department at FREE OF COST.
- 3) Any type of major repairs shall be done by the department.
- 4) The operator provided should be well conversant with the system installed and should be knowledgeable to rectify the minor defects.
- 5) The contractor shall maintain a LOG-BOOK for operation and test run of D G Set in a prescribed proforma.
- 6) Any type of major faults/breakdown/PF malfunctioning of the system shall be brought to the notice of J E (E) and the Engineer-in-charge immediately.
- 7) Every day test run for 5 minutes shall be conducted for ensuring proper and smooth function of the system.
- 8) The department reserves the right to terminate the contract before/after the expiry of contract period without assigning any reason. This will normally be as a result of unsatisfactory performance of contract. Validity of the contract can however be extended in accordance with clause no. 3 & 4 of the form-8.
- 9) D.G. Operator is supposed to record his arrival in the logbook. At the earliest opportunity he shall also report to the JE-in-charge and get his reporting acknowledged in the log – book of D.G. Sets.

MAINTENANCE ROUTINE

A DAILY CHECKS

- 1 Keep the D.G. Sets room clean. Wipe out dirt from external surface of engine, generator & control panels.
- 2 Check the levels of diesel in daily service tank, lubricant oil in engine, crank case and (in case of water cooled engines) water in radiator. Fill/top up as necessary.
NOTE: i) Oil Level should not be above the High Level Mark and Below Low Level Mark on the dipstick, the check being done before start of the engine or after about 20 minutes after stopping of running engine.
ii) Radiator cap must be properly put in position, else there can be aeration i.e. mixing of air with coolant, resulting in over-heating of the engine.
- 3 Inspect the engine for any leakage of diesel oil, engine oil and coolant in the respective system.
- 4 Check that the selector in control panel is in AUTO mode in the case of AMF sets.
- 5 Record the readings of voltage of supply and engine battery voltage.

B WEEKLY CHECKS

- a) Check the automatic starting of engine by switching off the Main Supply to AMF panel (For AMF sets only). Non-AMF sets may be started Manually and loaded. Run the set on load for 15 minutes. Observe for any abnormality of noise, vibration, bearing surface heating (whether warm), engine pick up, voltage level and frequency.
- b) Check the level of electrolyte in the battery of the engine. Top up with distilled water as necessary, if the battery needs charging (as can be judged by cell voltage), arranged for its charging early and also examine whether trickle charger (if provided) is defective. Dusting or blowing inside of all electric panel with compressed air or electric blowers.
- c) Check whether all panel lamps, fuses and instruments are healthy in the control panel.

C MONTHLY CHECKS

- a) Check engine radiator for air restriction if any. Clean up. Check the condition of drive belts, hose and radiator cap. Where heat rejection is through cooling tower, check that there is no blockade in spray nozzles and the CT basin is clean. Clean the strainer in water circuit.
- b) Clean the battery terminals and apply grease to prevent corrosion. Check specific gravity of the electrolyte.

- c) Check the exhaust system for leakage, corrosion and vibration. See whether the exhaust smoke is not very dark.
- d) Check that there are no restrictions to air flow in air cleaner.
- e) Check that the oil heater is functional.
- f) Check coupling with alternator for any sign of fatigue.

D SIX MONTHLY CHECKS.

- a) Inspect the electrical control panel and starters to see that all power/control contracts are clean, all terminals are sound and all fuses are intact. Blow out dirt from machine windings at panels by a blower, check brushes [where provided] of alternators.
- b) Inspect all cable end terminations i/c control cables. Tighten as required.
- c) Check all safety controls and alarms in the set supply system.
- d) Check and change filters of diesel oil, coolant and air cleaner element of the engine after checking total hours of operation and manufacturers recommendations. Drain and change the cooling water [in water cooled sets].
- e) Check the belt tension. Tighten if required.
NOTE: New belts will stretch within one hour of operation, these are to be readjusted.
- f) Change the crank case breather element for naturally aspirated engines. Clean the screen. Turbo charged engine.

E ANNUAL CHECK

- a) Inspect the fuel tank for any sedimentation and Clean up if required.
- b) Replace the engine oil as per hours of operation and recommendation of the manufacturer.
- c) Check shaft alignment and condition of anti-vibration mountings, in case any abnormal noise or vibration is observed.
- d) Blow through radiator core in a direction opposite to the normal flow of air (reverse flushing).
- e) Conduct megger test on all cabling, mains and control wiring motors and earth test. (Earth test is to be done in summer and megger test during monsoon).

ADDITIONAL SPECIFICATION, FOR ELECTRIC SUB-STATION

1. Deputing necessary trained staff to ensure healthiness and safe installation of Sub-station once every month.
2. Maintaining & up-keeping of every associated equipment & hardware proper functional.
3. Recording all necessary parameters temperature of transformers, etc. in records/ log books as prescribed by the department.
4. Bringing to the notice of the department any defect, malfunctioning of any associated equipment or switchgear which require immediate attention of the department in due time.
5. Keeping proper watch and ward of equipment & machinery installed in sub-station premises.
6. Servicing and up keeping of switchgears, transformer and associated equipments.
7. Making good all the losses/damages to the equipment or systems if as a result of negligence or default of operating staff.
8. Informing the department well in advance about the requirement of any spares, consumable items necessary for satisfactory operation of the sub-station.
9. Replacement of the fuses, spares or switchgears, etc. as supplied by the department.
10. Recording of the maintenance activities in a prescribed manner.

Note: Technical particulars of all the sub-station equipment and installations that are covered by the scope of this schedule Maintenance Routine

(Electrical Sub-station including APFC, H.T & LT panels and associated switchgears, etc.)

MONTHLY: -

- 1) Check transformer oil level & examine transformer for leaks.
- 2) Remove all loose external dirt with clean and dry cloth of the circuit breaker.
- 3) Oil of circuit breaker:
 - a) Check the oil level of the circuit breaker.
 - b) Check also if the oil has become thick or carbonized.
- 4) Contacts of circuit breaker.
 - a) Check for correct alignment of contacts and proper contact pressure.
 - b) Also check if three contacts close simultaneously.
 - c) Examine for burning and pitting of contacts & its reconditioning.
 - d) Smoothen & lubricate the contacts with petroleum jelly.
- 5) Auxiliary contacts of circuit breaker.

- a) Inspect for any deterioration.
- b) Check for proper contacts and apply a thin film of Vaseline.
- 6) Insulation of circuit breaker
 - a) Clean and examine for signs of damage.
 - b) Check insulation resistance.
- 7) Checking earth resistance & earth connections at joint in substation.
- 8) Conducting meagre tests for transformers, CT's, PT's
- 9) Check for proper supporting and level of the transformer.
- 10) Tightening the loose connection after disconnecting the transformers.
- 11) Check for continuity and tightness; correct rating of fuses of main switch in substation.
- 12) Check for the transformer load condition against rated capacity, Over loading of transformer if any shall be reported to the competent authority for taking suitable action.
- 13) Examine transformer bushings for cracks and dirt deposits.
- 14) Check transformer air passage are clear. Check colour of Silica gel, Recondition of Silica gel.

QUARTERLY:-

- 1) Mechanism of circuits breaker.
 - a) Check for tightness for all bolts, nuts and screws.
 - b) Check trip plunger and reset correctly.
 - c) Check and lubricate racking mechanism, truck wheels, racking inter lock and all other moving parts.
 - d) Check operation of tank lowering device and lubricate as necessary.
- 2) Small wiring and other connection of circuit breaker.
 - a) Examine auxiliary wiring and other connections for being intact.
 - b) Meagre test for the control wiring, closing and tripping coils etc.
- 3) Indicators and measuring instruments of circuit breaker.
 - a) Check for satisfactory operation, adjust where necessary.
- 4) CT's and PT's of circuit breaker.
 - a) Examine & clean the bushings.
- 5) Check for proper oil level of the circuit breaker. Top up if necessary & stop any leaks.
- 6) Transformer connection
 - i) Tighten connections, replace worn out thimbles / lugs etc.
 - ii) Examine insulating beans on conductors and replace where necessary.
- 7) Transformer oil level
 - i) Check for proper oil level through gauge glass. Top up if necessary.
 - ii) Stop any leakages.
- 8) Bushings and arcing horns of transformer.
 - i) Examine and replace the damaged gaskets.
 - ii) Adjust the arcing horns for alignment and proper gaps between rods.
- 9) Measure voltage during maximum load period with a 0-500 voltmeter and adjust the taps, If required, to ensure proper voltage to the consumer.
- 10) Check the condition of the danger plate and replace if required.

YEARLY :-

- 1) Load balancing on phases.
 - i) Check load on three phase with the help of clip on ammeter under maximum load condition and secure between the three phases balanced loading.
- 2) Earth testing
 - i) Tighten the earth connection.
 - ii) Examine and replace broken earth leads conductor with proper size.
 - iii) Measure the earth resistance during the driest season of the year of
 - (A) Neutral of transformer
 - (B) Transformer body and other metal parts.

Schedule of Work

Name of Work: Providing of manpower for day to day maintenance /operation in Delhi Technological University, Bawana Road, Delhi [Electrical and Mechanical services (Internal and External)]

S.No	Description of Work / Item	QTY	Units	Rate RS.	Amount Rs.
1	Running maintenance operation and upkeeping of day to day all the internal and external electrical installations including compound, street and High Mast lighting, recording and monitoring of the complaints at site of work complete as per terms and conditions, details of staff and inventory attached. Operation & maintenance of followings:- a) Round the clock operation of 7 nos. 250/320/500 KVA, water cooled DG set of Greaves/Cummins Make installed at various locations/ Electrical Sub Station, round the clock on all days of the week including, b) Round the clock operation and maintenance of 6 nos. 11 KV /415 V sub stations at site of work, round the clock on all days of the week including Sundays and Holidays. The jobs includes recording of all parameters like HT & LT voltages, current, power factor etc. and routine periodical checking and testing complete Fire Fighting System ,Wet Riser , Sprinkler and Down Comer System) c) Operation and routine maintenance of Wet riser, sprinkler and down comer system installed at site of work complete as per terms and conditions, as per terms and conditions NIT				
a	Wiremen 27 Nos	1	Year	10276054.42	10276054
b	Khallsi 15 Nos	1	Year	4707764.523	4707765
c	Supervisor 01 No	1	Year	413838.1889	413838
				Total	15397657

The rates quoted shall be inclusive of wages of Electrician/ E&M Operator /Wireman/Khallasi etc i/c relievers, cleaning material, uniform and all taxes and duties etc. as applicable. However service tax, ESI/EPF will be reimbursed to the contractor, on production of proof of deposit of the same with respected govt. department

Form of Performance Security (Guarantee)

Bank Guarantee Bond

1. In consideration of the Delhi Technological University (hereinafter called 'The Government) having offered to accept the terms and conditions of the proposed agreement between _____ and (hereinafter called 'the said contractor(s) for the work "as per NIT" (hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs.....(Rupees _____ only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

We, _____ (hereinafter referred to as "the Bank") hereby undertake (indicate the name of the Bank) to pay to the Government an amount not exceeding Rs. _____ (Rupees _____ only) on demand by the Government.

2. We, _____ do hereby undertake to pay the amounts due and payable

Under this guarantee without any demure, merely on a demand from the Government stating that the amount claimed as required to meet the recoveries due or likely to be from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs _____ (Rupees _____ only)

3. We, the said bank further undertake to pay 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 Tribunal 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 thereunder and the contractor(s) shall have no claim against us for making such payment.

4. We, _____ further agree that the guarantee herein contained shall (indicate the name of the Bank)

remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the Government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5. We, _____ further agree with the Government that the Government (indicate the name of the Bank) shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms & conditions of the said agreement or to extend time of performance by the said Contractor (s) from time or the postpone for any time or from time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms & conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. We _____ lastly undertake not to revoke this guarantee except (indicate the name of the Bank) with the previous consent of the Government in writing.

8. This guarantee shall be valid upto _____ unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs _____ (Rs _____ only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the _____ day of _____ for _____ (indicate the name of the Bank)