

Central Power Research Institute

Mechanical Engineering Division

e-NIT/e-Tender/Agreement

1	Name of the work	Outsourcing for rigging and other works related to tower testing at tower testing station (TTS), MED, CPRI, Bengaluru
2	Estimate cost put to tender	Rs.1,10,00,000/- for two years
3	Period of completion	2 Years
4	Schedule of rates	As per CPRI Scope of Works
5	Specifications	As per CPRI Scope of Works
6	Details of materials to be issued by CPRI	Nil
7	Details of T and P to be hired to the contractor	Nil
8	Earnest Money Deposit	Rs. 2,20,000/-

Certified that the e-NIT/e-Tender/Agreement contains **32** Pages (Pages **Thirty Two** Only) excluding the covering sheets.

Sd/-

Joint Director

Name of work: Outsourcing for rigging and other works related to tower testing at tower testing station (TTS), MED, CPRI, Bengaluru.

Important statement of objects and reasons:

1. Reference to CPWD specifications, CPWD tender/contract forms- 6&8, as well as, those made in this tender document etc., shall be operative only to the extent that they are not inconsistent / inapplicable with any of the terms and conditions contained in this document.
2. The under mentioned changes / substitutions mutatis mutandis shall be applicable to this tender document as well as to the formal agreement that would be concluded in CPWD GCC form-8 of 2023 edition with upto date amendments, wherever references are made as under:

IN THE PLACE OF	SUBSTITUTE
Government / central government:	Central Power Research Institute (CPRI)
Chief Engineer	Director General, CPRI (DG, CPRI)
Superintending Engineer/SE	Chairman, High Power Committee, CPRI, Bangalore (Chairman, HPC)
Division Engineer/Executive Engineer/Engineer-in-Charge	Joint Director/Engineer-in-Charge, Mechanical Engineering Division, CPRI, Bangalore
Subdivision Officer/SDO /Assistant Engineer/Assistant Executive Engineer	Engineering officer, Mechanical Engineering Division, CPRI, Bangalore
Junior Engineer	Engineering Officer/ Engineering Assistant, Mechanical Engineering Division, CPRI, Bangalore
CPWD/Department	Central Power Research Institute (CPRI)

3. Powers / duties vested with certain officers by designation like Chief Engineer, Superintending Engineer, Executive Engineer, Assistant Executive Engineer, Divisional Officer, Sub-divisional Officer, Junior Engineer, Divisional Accountant, etc., contained in this document shall be exercised and discharged by such of the officers of the institute as may be nominated / authorized / substituted by Director General, CPRI for the purpose of operation of the contract from time to time.
4. In case of any discrepancy / discrepancies noticed between Hindi version and English version in this e-NIT and/ or e-Tender and / or Contract, the English version shall prevail or the English version shall hold good.

NOTICE TO BE ISSUED FOR PUBLICITY

NOTICE INVITING E-TENDERS
(Through e-tendering only)
<https://cpri.res.in/>

The Engineer-in-Charge, Mechanical Engineering Division, CPRI, Bangalore invites on behalf of Director General, CPRI, Bangalore online item rate e-tenders for following work:-

e-NIT No. **05/2025-26**

Name of work: Outsourcing for rigging and other works related to tower testing at tower testing station (TTS), MED, CPRI, Bengaluru

1.	Estimated cost:	Rs.1,10,00,000/- for two years
2.	Earnest money:	Rs. 2,20,000/-
3.	E-tender processing fee:	Rs.5,900/- (0.1% of estimated cost put to tender + 18% GST)
4.	Tender fee:	Nil
5.	Time of completion:	2 years

The e-tender forms / documents and other details can be downloaded from the website: www.tenderwizard.com/CPRI. The last date for submission of online e-tenders is upto **07.08.2025**. Interested and eligible bidders must obtain User ID and password by registering in the above mentioned website. For more details contact e-tender help desk: 080-40482000, 9686196764, 9686115318. Email ID of the Engineer-in-Charge: msraj@cpri.in

CENTRAL POWER RESEARCH INSTITUTE
MECHANICAL ENGINEERING DIVISION
Bengaluru

Notice Inviting Tender through e-tendering only

The Engineer-in-Charge, Mechanical Engineering Division, Central Power Research Institute (CPRI), Bangalore on behalf of Director General, CPRI invites online item rate e-tenders from specialized agencies for the following work.

Sl. no.	NIT no.	Name of the work & location	Estimate cost put to tender (in Rs.)	Earnest money (in Rs.)	E-Tender processing fee	Time of completion	Last date & time of submission of online	Last date & time for submission of EMD, e-tender processing fee and other stipulated documents	Date and time of opening of technical	Date & time of opening of online bid
1	2	3	4	5	6	7	8	9	10	11
01	05/2025-26	Out sourcing for rigging and other works related to tower testing at tower testing station (TTS), MED, CPRI, Bengaluru	Rs.1,10,00,000/-	2,20,000/-(2 % of estimated cost put to tender)	Rs.5,900/-(0.1% of estimated cost put to tender + 18% GST)		07.08.2025 upto 3.00 PM	07.08.2025 upto 3.00 PM	07.08.2025 at 4.00 PM	14.08.2025 at 3.30 PM

1. Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.

(a) Should have satisfactorily completed work/ works as mentioned below during the last seven years ending on 31.03.2025.

- i. The Firm / agency shall have experience in all the works listed below with respect to transmission line towers, similar structures, line accessories etc., for projects / towers / monopoles either in tower testing station or at site. The firm shall have experience in stringing of conductors / rigging works at any test station or at site. The proof of similar works carried out shall be produced with satisfactory completion certificate from the agency for whom the works were executed.

(i) Three similar works each of value not less than Rs.44,00,000/- (40 % of estimated cost put to tender) or two similar works, each of value not less than Rs.66,00,000/- (60 % of estimated

cost put to tender) or one similar work of value not less than Rs. 88,00,000/- (80 % of estimated cost put to tender) in the last 7 years ending on 31.03.2025.

Similar work means Rigging and other works related to tower testing at tower testing station". The similar work/s shall be with some Central/ State Government/ Central autonomous / Central Public Sector undertaking / State Public Sector undertaking/ stringing of conductors / rigging works at any tower testing station or at site. The contractor shall submit work completion certificate signed by an officer not less than the rank of Executive Engineer or above for the work carried out with Government Sector Organizations. The value of executed works shall be brought to current costing level by enhancing actual value of work at simple rate of 7% per annum; calculated from the date of completion to the last date of receipt of application for bids. In case the work completed certificate is from those other than Government sector organizations, it shall be supported by relevant IT returns for the said work. In case of agencies who have been earlier awarded works at CPRI & if the works are in progress and not completed, then the work order amount of such work shall be reduced from the work completion certificate, if same certificate had been produced for the earlier awarded work.

2. The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and if he is in possession of all the documents required.

3. Information and instructions for bidders posted on 'www.tenderwizard.com/CPRI' website shall form as part and parcel of the bid document.

4. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website: www.tenderwizard.com/CPRI free of cost.

5. But the bid can only be submitted after depositing the original EMD and E-Tender processing fee, uploading the mandatory scanned documents such as Banker's cheque/ Online transaction acknowledgement / Demand Draft drawn from any scheduled bank guaranteed by Reserve Bank of India, towards cost of EMD in favour of 'Accounts Officer, CPRI, Bangalore', and e-tendering processing fee in favour of KSEDCL-payable at Bangalore. Earnest Money shall be in the form of Demand Draft / Banker's Cheque / FDR issued by any scheduled bank guaranteed by Reserve Bank of India, drawn in favour of the 'Accounts Officer, CPRI, Bangalore. FDR shall be pledged in favour of the 'Director General, CPRI and Bangalore'. **For consideration of tender, the original earnest money deposit and tender processing fee and attested copies of valid registration certificate as contractor and relevant work experience certificates and registration with GST should be handed over in the office of the undersigned on or before date and time as mentioned in column 9 of the table. In case the bidder fails to deposit the original Earnest Money Deposit and Tender Processing Fee, in case of payment mode other than 'online payment', such bidder shall stand disqualified.**

6. The contractors who are not registered for e-tendering on the website mentioned are required to get prior registration with KEONICS, No.24, 3rd Stage, 4th Block, Basaveshwarnagar, Bangalore –560 079 , after fulfilling due procedural formalities, including making payment of the requisite registration fee of Rs.2360/- in the form of Demand Draft in favour of KSEDCL payable at Bangalore.

If needed, bidders can be imparted training on online bidding process as per details available on the website.

7. One of the pre-requisites for participation in e-tendering is obtaining a valid Class III Digital Signature Certificate from one of the Digital Signature Certifying authorities such as NIC, MTNL, e-Mudhra, TCS, Safescrypt, GNFC etc., preferably through KEONICS.

8. On opening date, the contractors can login and can witness the bids opening process. Sequel to the opening of bids at the appointed date & time, the tenderers would automatically receive competitor- bid- sheets, giving them a clear picture as to where they stand in the competition.

9. Contractors can upload documents in the form of JPG format and/ PDF format.

10. Contractor must ensure to quote rate of each item. The column meant for quoting rate in figures appears in pink colour and the moment rate is entered, it turns sky blue. In addition to this, while selecting any of the cells, a warning appears that if any cell is left blank the same shall be treated as “0”

Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as “0” (ZERO). Further, if a tenderer quotes nil rates against each item in tem rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer. Such tenderer shall be disqualified from bidding for any contract with CPRI for a period of one year from the date of the subject tender notification.

11. The bidder shall furnish an affidavit on non-judicial stamp paper of appropriate value duly attested by a notary as under:

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 from tendering in CPRI 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 Performance Guarantee furnished by me/us.

12. The competent authority reserves the right to accept or reject any or all tenders, without assigning any reason thereof.

II. List of Documents to be scanned and uploaded within the period of bid submission:

1. Demand Draft/Banker’s Cheque/FDR issued by any of scheduled banks guaranteed by Reserve Bank of India, drawn in favour of the ‘Accounts Officer, CPRI, Bangalore’ against EMD or proof of online payment via tender wizard.

2. Demand Draft towards cost of e-tendering processing fee payable in the form of banker’s cheque or DD in favor of ‘**KSEDCL**’ payable at Bangalore or proof of online payment via tender wizard

3. Certificates of Work experience.

4. Certificate of Registration with Goods and Service Tax department for GST tax payment etc.

6. “ **IT returns in case of private firm experience** ”

Sd/-

Joint Director,
Mechanical Engineering Division, CPRI,
Bengaluru

FORM-6

Central Power Research Institute
Bengaluru
(CPWD form-6 for e-Tendering)

Item rate e-tenders are invited on behalf of Director General, Central Power Research Institute from specialized agencies for the work of **Name of work: Out sourcing for rigging and other works related to tower testing at tower testing station (TTS), MED, CPRI, Bengaluru.**

1.1 The work is estimated to cost Rs.1,10,00,00/--This estimate, however, is given merely as a rough guide.

1.2 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 of magnitude specified below:-

1.2.1 Criteria of eligibility for submission of bid documents: Should have satisfactorily completed work/ works as mentioned below during the last seven years ending on 31.03.2025. Three similar works each of value not less than Rs.44,00,000/- (40 % of estimated cost put to tender) or two similar works, each of value not less than Rs.66,00,000/- (60 % of estimated cost put to tender) or one similar work of value not less than Rs.88,00,000/- (80 % of estimated cost put to tender) in the last 7 years ending on 31.03.2025.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to the last date of submission of bid .

1.2.2 To become eligible for issue of bid, the bidder shall have to furnish an affidavit on a non-judicial stamp paper of worth Rs.100/- attested by a notary as under:

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 from tendering in CPRI 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 Performance Guarantee furnished by me/us. I/We also confirm that none of the contracts executed by me/us in the past have been rescinded / terminated by any of client department and I/we have not been black listed by any department.

2. Agreement shall be drawn with the successful bidder on prescribed CPWD GCC form-8 of 2020 incorporating amendments upto Circular bearing No. DG/CON/Maintanance-2023/11 dated 29.10.2024, which is available as a Govt. of India Publication. Bidders shall quote their rates as per various terms and conditions of the said form which will form part of the agreement.

3. The time allowed for carrying out the work will be **2 years** from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.

4. The site for the work is available.

The site for the work is available on acceptance of LOA.

5. The bid document consisting of plans, specifications, the schedule of quantities of the various types of items to be executed and the set of terms and conditions of contract to be complied with and other necessary documents, except standard general conditions of contract form can be seen on website www.tenderwizard.com/CPRI, free of cost. General Conditions of Contract 2024 Maintenance Works is available as a standard document on CPWD website which has free access for everyone. Hence GCC document is not printed along with the e-NIT. However, the applicable GCC (with relevancy of conditions indicated in clear terms) shall form part of the agreement.

6. After submission of bid, the contractor can resubmit revised bid any number of times, but before last time and date of submission of bid as notified.

7. While submitting the revised bid, contractor can revise the rate of one or more items any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.

8. (i)) Earnest money of Rs. 2,20,000/- in the form of fixed deposit receipt of a scheduled bank/demand draft of a scheduled bank issued in favour of 'Accounts Officer, CPRI, Bangalore' shall be scanned and uploaded to the e-tendering website within the period of bid submission and original should be deposited in the office of Engineer-in-Charge, Mechanical Engineering Division.

(ii) Interested contractor who wishes to participate in the bid has to make following payment in the form of Demand Draft or Banker's cheque of any scheduled bank and to be scanned and uploaded to the e-tendering website within the period of bid submission.

E-Tender processing fee: Rs.5,900/- inclusive of GST drawn in favour of 'KSEDCL' payable at Bengaluru.

The payment towards e- tender processing fee can also be made online through tender wizard.

(iii) Demand Draft or Banker's cheque against EMD, cost of bid document and cost of bid processing fee shall be placed in single sealed envelope superscripted as "Earnest Money, cost of bid document and cost of bid processing fee" with name of the work and due date of

opening of the bid also mentioned thereon.

(iv) Certificates of work experience and other documents as specified in the press notice shall be attested, scanned and uploaded to the e-tendering website within the period of bid submission and certified copy of each shall be deposited in a separate envelope as “Other documents”.

(v) Both the envelopes shall be placed in another envelope with due mention of name of work, date and time of opening of bids and to be submitted in the office of Engineer-in-Charge Mechanical Engineering Division after last date and time of submission of bid and up to 3.00 PM

Of **07.08.2025**. The documents submitted shall be opened at 4.00 PM of **07.08.2025**.

(vi) Online bid documents submitted by intending bidders shall be opened only of those bidders, whose EMD and e-Tender Processing Fee and other documents placed in the envelope are found in order. The bid submitted shall be opened at 3.30 PM of **14.08.2025**. e-Tender processing fee paid is non-refundable.

(vii) The bid submitted shall become invalid if:

- a) The bidder is found ineligible.
- b) The bidder does not upload all the documents as stipulated in the bid document.
- c) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically in the office of Engineer-in-Charge, Mechanical Engineering Division.
- d) If the bidder fails to deposit the original Bid Securing Declaration Form, cost of Bid document and Tender Processing Fee in case if payment mode other than ‘online payment’ on the prescribed date, such bidder shall stand disqualified.

9. The contractor, whose bid is accepted, will be required to furnish **performance guarantee of 3% (Three Percent)** of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of Banker’s cheque of any scheduled bank/Demand Draft of any scheduled bank/Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. The Performance Guarantee shall be initially valid upto the stipulated date of completion plus sixty days beyond that. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule ‘F’ including the extended period, if any, the contractor shall be disqualified from bidding for any contract with CPRI for a period of one year from the date of the subject tender notification.

The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW welfare board and programme chart (time and progress with the period specified in schedule F.

10. The description of the work is as follows: Out sourcing for rigging and other works related to tower testing at tower testing station (TTS), MED, CPRI, Bengaluru
Name of work, The details of work to be executed are briefly described in the additional terms, conditions and specifications of the e-NIT.

11. Intending bidders are advised to inspect and examine the site and its surroundings and

satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A Bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by CPRI and local conditions and other factors having a bearing on the execution of the work.

12. The competent authority on behalf of the Director General, Central Power Research Institute, Bengaluru does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received, without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the Bidder shall be summarily rejected.

13. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.

14. The competent authority on behalf of the Director General, Central Power Research Institute, Bangalore reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted. The rates quoted for each item of work under the tender, which is accepted, shall be firm and hold good for the entire period of contract or the extended period, i.e., the accepted rates shall not be liable to be changed under any circumstances.

15. The contractor shall not be permitted to bid for works in CPRI responsible for award and execution of contracts, in which his near relative is posted as an officer in any capacity as Engineering or Scientific Officer at the headquarters or at Units of CPRI which is responsible for award and execution of the contract. 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 Officer in CPRI. Any breach of this condition by the contractor would render him liable to be debarred from tendering in CPRI in future, forever.

16. No officer of the rank of Engineering Officer Gr.1 or above working in any capacity in CPRI shall be allowed to work as a contractor for a period of one year after his retirement from CPRI service, without the previous permission of competent authority in CPRI, in writing. This contract is liable to be cancelled, in case of contravention of this provision either by the contractor, or any of his employees.

17. The bid for the work shall remain open for acceptance for a period of sixty days (60 days)

from the date of opening of technical bids. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the CPRI/ department, then the bidder shall not be allowed to participate in the re-bidding process of the work. Further, bidder shall be disqualified from bidding for any contract with CPRI for a period of one year from the date of the subject tender notification.

18. 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: -

- a) The Notice Inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bids and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
- b) Standard C.P.W.D. GCC Form 8: CPWD GCC form-8 of 2023 incorporating amendments upto Circular bearing No. DG/CON/Maintanance-2023/11 dated 29.10.2024.

CENTRAL POWER RESEARCH INSTITUTE

Item Rate E-Tender & Contract for Works

(A) Name of work: Out sourcing for rigging and other works related to tower testing at tower testing station (TTS), MED, CPRI, Bengaluru

(i) To be submitted online by 3.00 PM of **07.08.2025** to Joint Director, Mechanical Engineering Division, CPRI, Bengaluru.

(ii) To be opened online at 3.30 PM of **14.08.2025**.

E-Tender

I/We have read and examined the notice inviting e-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 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 Director General, CPRI within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing 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 respect of accordance with, such conditions so far as applicable.

I/We agree to keep the e-Tender open for sixty (60) days from the due date of its opening and not to make any modification in its terms and conditions and the said rates.

I/We agree that the rates quoted by us shall be firm and hold good for the entire period of contract or the extended period and we understand that the accepted rates shall not be liable to be changed under any circumstances.

A sum of Rs. 2,20,000/- is hereby forwarded in 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 Director General, CPRI 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 Director General, CPRI or the 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 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 & 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 CPRI 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 Contractor

Witness:

Postal Address

Address:

Occupation:

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for an on behalf of the Director General, CPRI 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 DG,CPRI

Signature.....

Dated:

Designation.....

PROFORMA OF SCHEDULE

PROFORMA OF SCHEDULES

(Separate Performa for Mechanical, Elect. & Hort. Works in case of Composite Tenders)
(Operative Schedules to be supplied separately to each intending tenderer)

Schedule 'A' :	Schedule of quantities (as per CPWD-3) on Pages 31 to 32
Schedule 'B':	No material will be issued to the contractor. The existing facilities of the major equipment's like Tower Crane, rigging winches, cutting/drilling/welding/gas cutting machines/Chain hoist etc., shall be made available to the agency free of cost.
Schedule 'C':	All the tools and plants shall be provided by CPRI except for personal protection equipment's required for the deployed manpower of the agency.
Schedule 'D': Extra schedule for specific requirements/document for the work, if any.	Please refer pages 20 & 30 of this document.
Schedule 'E': Reference to General Conditions of contract:	CPWD GCC form-8 of 2023. incorporating amendments upto Circular bearing No. DG/CON/maintenance-2023/11 dated 29.10.2024.
Name of work:	Out sourcing for rigging and other works related to tower testing at tower testing station (TTS), MED, CPRI, Bengaluru.
Estimate cost of work:	Rs.1,10,00,000/- for two years
(i) Earnest Money	Rs. 2,20,000/-
(ii) Performance Guarantee :	3% of tendered value
(iii) Security Deposit:	2.5% of tendered value
Schedule 'F':	
GENERAL RULES & DIRECTIONS :	
(i) Officer inviting tender :	Engineer-in-Charge, Mechanical Engineering Division , CPRI, Bangalore
(ii) 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:	See below
Definitions:	
2(v) Engineer-in-Charge:	Joint Director, Mechanical Engineering Division, CPRI, Bangalore
2(viii) Accepting Authority	Director General, Central Power Research Institute, Bangalore

2(x) Percentage on cost of materials and labour to cover all overheads and profits:		15%	
2(xi) Standard Schedule of Rates:			
2(xii) Department:		Central Power Research Institute	
9(ii) Standard CPWD Contract Form GCC 2020, CPWD Form 7/8 as modified & corrected upto		CPWD GCC form-8 of 2024 incorporating amendments upto Circular bearing No. a) DG/CON/Maintanance-2023/F1 dated 29.10.2024.	
Clause 1:			
(i) Time allowed for submission of Performance Guarantee, programme chart (time and progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW welfare board or proof of applying thereof from the date of issue of letter of acceptance:		Four days	
(ii) Maximum allowable extension with late fee @0.1% per day of performance guarantee amount beyond the period : provided in (i) above		Two days	
Clause 2A: Compensation for delay			
Whether Clause 2 / 2A shall be applicable		2A applicable	
Authority for fixing compensation under clause 2A:		Chairman, High Power Committee (HPC), CPRI, Bangalore	
Clause 5:			
Number of days from the date of issue of letter of acceptance for reckoning date of start Milestone (s)as per table given below:			
Sl. No	Description of Milestone(Physical)	Time allowed in days (from date of start)	Amount to be with-held in case of non-achievement of milestone
1	NO milestones stipulated		
Authority to decide:			
(i) Extension of time :		Joint Director	
(ii)Rescheduling of milestones:		NA	
(iii)Shifting of date of start in case of delay in handing over of site		Chairman, High Power Committee (HPC)	
PROFORMA OF SCHEDULES Clause 5 Schedule of handing over of site			
Part	Portion of site	Description	Time period for handing over reckoned from date of issue of letter of Intent

Part A	Portion without any hindrance	Full site	Along with LOA
Part B	Portions with encumbrances		
Part C	Portions dependent on work of other agencies		
Clause 5 Applicable clause 5 / Clause 5A		Clause 5 applicable	
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		Monthly bills or after completion of two test towers, whichever is later or as directed by Joint Director (MED).	
Clause 7 A Whether Clause 7 A shall be applicable		Yes	
Clause 10A: List of testing equipment to be provided by the contractor at Site Lab.		As required for the work -NA-	
Clause 10B(ii): Whether clause 10B(ii) shall be applicable:		No. No mobilization advance against the work shall be given	
Clause 10C: Component of labour expressed as percentage of value of work:		100%	
Clause 10CC:		Not applicable	
Clause 10 D : Dismantled Material Govt. Property		NA	
Clause 11: Specifications to be followed for execution of work:		As per CPRI Scope of Works	
Clause 12 Authority to decide deviation upto 1.5 times of tendered amount		Director General, CPRI	
Clause 12.2. & 12.3. Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for building work		50% of respective items (The deviation stipulated is applicable for individual items)	
12.5: (i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (Except items mentioned in earth work sub head in DSR and related items) (ii) Deviation limit for items mentioned in earth work sub head of DSR and related items		Not Applicable	
Point no.13 of General Rules and directions of GCC 2020 Maintenance Works		The rate quoted by the agency / firm shall be exclusive of GST and the same shall be processed as per applicable rules.	
CLAUSE 16: Competent Authority for deciding reduced rates.		Chairman, High Power Committee, CPRI, Bangalore	

Clause 18: List of mandatory machinery, tools, and plants to be deployed by the contractor at Site.	NA
Clause 19C : Authority to recover costs from the contractor for defaulting in providing safety provisions as per CPWD Safety Code	Joint Director, MED
Clause 19D : Authority for effecting deductions from the bills if the contractor does not furnish a true statement (fortnightly report) indicating the number of labourers, their working hours, wages paid to them, accidents that occurred during that period, the number of female workers who have been allowed maternity leave and the amount paid to them	Joint Director, MED
Clause 19G : Authority for effecting deductions from the bills if the contractor commits a default of provisions of the CPWD, Contractor's Labour Regulations and Model Rules	Joint Director, MED
Clause 19K : Authority to recover costs from the contractor for non-deployment of qualified tradesman	Joint Director, MED
Clause 19 H	CPRI shall not make availability of any site to the contractor for erection of hutments for his labour in CPRI campus.
Clause 25 Constitution of Dispute Redressal Committee (DRC)	No dispute redressal committee shall be constituted. All other provisions of the clause are as follows. Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions here –in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as

	<p>mentioned herein after.</p> <p>(i) If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Joint Director on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Chairman HPC in writing for written instruction or decision. Thereupon, the Chairman HPC shall give his written instructions or decision within a period of one month from the receipt of the contractor's letter. If the Chairman HPC fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decisions of the Chairman HPC, the contractor may, within 15 days of the receipt of Chairman HPC's decision, appeal to the Director General who shall afford an opportunity to the contractor to be heard, if the latter so desires, and to offer evidence in support of his appeal. The Director General shall give his decision within 30 days of receipt of contractor's appeal. If the contractor is dissatisfied with the decision of the Director General, the contractor may within 30 days from the receipt of the Director General's decision, give notice to the Director General for appointment of Arbitrator on prescribed proforma as per Appendix XV, failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.</p> <p>It is a term of contract that each party invoking arbitration must exhaust the aforesaid mechanism of settlement of claims/ disputes prior to invoking arbitration.</p> <p>(ii) Except where the decision has become final, binding and conclusive in terms of sub- para (i) above, disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by the Director General CPRI, in charge of the work. If the arbitrator so appointed is unable or</p>
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	<p>unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.</p> <p>It is a term of this contract that the party invoking arbitration shall give his list of disputes with amounts, claim in respect of each such disputes along with the notice for appointment of arbitrator and giving reference to the rejection by the Director General of the appeal.</p> <p>It is also a term of this contract that no person, other than a person appointed by such Director General CPRI, as aforesaid, should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.</p>
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CLAUSE 32

Requirement of Technical Representative(s) and recovery Rate

Sl. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/ Technical Representative)	Minimum Experience	Number	Rate at which recovery shall be made from the Contractor in the Event of not fulfilling provision of clause 36(i)	
						Figures	Words
1.	Diploma Engineer	Mechanical	Technical representative	One Year	One	Rs.10,000/- Per month	Rupees Ten Thousand Only per month
2	ITI	Welding	Welder	One Year	One	Rs.10,000/- Per month	Rupees Ten Thousand Only per month
3	ITI	Electrical/ Mechanical/ Electronics	Tower Crane Operator	One Year	One	Rs.10,000/- Per month	Rupees Ten Thousand Only per month

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

ADDITIONAL TERMS, CONDITIONS AND SPECIFICATIONS

Name of Work: Out sourcing for rigging and other works related to tower testing at tower testing station (TTS), MED, CPRI, Bengaluru.

1. These Additional Terms, Conditions and specifications shall be read in conjunction with CPWD GCC form-8 of 2023 edition with upto date amendments.
 - i. The Contractor shall comply with all the provisions of labour laws applicable to India from time to time including the minimum wages Act 1948 (latest version), Contract labour (regulation and abolition) Act, 1970 (latest version) and rules framed there under and also other labour laws affecting Contractor labour that may be brought into force. With reference to above, the contractor shall furnish the details of supporting documents mandatorily once in three months to CPRI.
 - ii. The details like name of the worker(s), parents name, permanent / present address etc., of laborers deployed for work by contractor with photograph (latest) for issue of Identity Card, shall be furnished to the Security Officer of CPRI under the intimation to the division.
 - iii. The contractor shall appoint one supervisor who is conversant with structural drawings to check the ground assembly of test tower, fabrication of tower parts in case of tower failures / modifications and to supervise the workers at the test bed by monitoring all the safety requirements during working hours.
 - iv. The contractor shall carry out the work by deploying experienced manpower for a span of two years from the date of placing order. CPRI may extend the contract by another year based on mutual consent on same rates, terms and conditions.
 - v. The normal working hour of CPRI is 9.00 a.m to 5.30 p.m (6 days a week). The assigned works are time bound activities and the test schedules are fixed. Hence completion of subject scope of work within the stipulated period is the responsibility of the contractor. The contractor shall ensure the sufficient workmen at available at site during normal working hours. In exigency situations, the contractor may be required to deploy additional manpower to complete the time bound activity. It is the responsibility of the contractor to ensure 8 working hours only for any labour during a day. Extra working shall be made good by additional manpower deployment which may be beyond normal working hours mentioned above.

- vi. Experienced fitters, qualified welders shall be posted to meet the requirement of scope of work for stub setting & monopole test bench fixing work of test tower/monopoles.

- vii. The scope of work consists of

RIGGING AND OTHER WORKS RELATED TO TOWER TESTING AT TTS AND FOR TESTING ACTIVITIES AT VIBRATION LABORATORY of MED as detailed in scope of work for which the contractor has to offer his rates item wise as detailed in 'Schedule A'. It is also to inform that; all the items may not be operated at a time for a given tower/tests. The contractor has to consider this requirement and quote accordingly.

- viii. The contract personnel will be engaged normally only as and when the necessity arises, i.e., continuous testing work is not assured (However, past two years there is no break in the work and the same is expected to continue).

- ix. The contractor shall supply and provide appropriate personnel protective equipment's (PPE). The PPE's shall be of ISI mark. The personnel protective equipment's (PPE) such as safety helmets, Safety belts (full body harness), safety shoes etc. & also ensure the workers to wear them during the work & even when they are at test bed. However, no workers will be allowed to work without adequate PPE. An amount of Rs.5,000/- shall be deducted from the running bills of the contractor in case of noncompliance to providing safety equipment to manpower at site and this amount is nonrefundable.

- x. **Safety & Insurance:** The contractor shall at all times indemnify CPRI any claim which may be made under the Workmen's Compensation Act, as applicable and or against any claim which might be made under any other act / law in force from time to time.

Insurance/ ESI to workers: The contractor shall ensure that all the workmen deployed by him at all times shall be insured OR availed ESI, if eligible as per the Act and indemnifying CPRI any claim which may be under the Workmen's Compensation Act in force or against a claim which might be made under any other act/law in force from time to time.

- xi. The contractor is solely responsible for any accidents / injuries to their personnel during handling of tower parts / materials / test equipment's / arrangements during the process of execution of work/testing work. The necessary Insurance mentioning the scope and name of the work place (CPRI) needs to be taken covering the personnel deployed by the contractor. The Contractor shall provide CPRI, the copies of the insurance policies or certificates of insurance / ESI

certificates within 7 days from the commencement of this Contract and upon renewal of any insurance policies.

The contractor shall at all times abide by the provisions of Indian Labor Law as amended from time to time and shall keep CPRI posted with such information as may be required in this regard to enable CPRI comply with any statutory requirement under the said act.

xii. **Income Tax/ GST :**

Income tax at source will be recovered as per relevant rules and necessary certificate will be given by Accounts Division of CPRI. The offer should carry contractor's PAN No. and GST Registration Number. GST shall be paid as applicable from time to time.

xiii. The contractor is held responsible for any theft / pilferage of CPRI material / equipment's by the personnel of contractor directly / indirectly. The commensurate amount as decided by CPRI in case of any such events / incidents will be recovered from the contractors' bill(s).

xiv. **TERMS OF PAYMENT:** Monthly bills or after completion of two test towers, whichever is later or as directed by Joint Director (MED).

xv. The attendance register for the workmen shall be maintained by the contractor. These registers shall be produced for inspection of Joint Director (MED) as and when required.

xvi. **General Instructions:**

- a. The deployed personal shall enter place of their work with proper identity/ uniform with PPE's like helmets, belts (full body harness), shoes, badges issued by the contractor and movement of the personal employed by the contractor shall be restricted to the place of their work only.
- b. The contractor shall submit the name and address of the deployed personnel with two copies of passport size photographs for verification by security.
- c. The details like name of the worker(s), parents name, permanent / present address etc., of laborers deployed for work by contractor with photograph (latest) for issue of Identity Card, shall be furnished to the security officer of CPRI under the intimation to the division. The workers sent by contractors must undergo police verification. Verification must be ensured before workers are allowed access to the premises, to ensure safety and compliance with regulations. And, even if workers change also, they should still undergo verification. It is the contractor's responsibility before allowing them into the CPRI premises.

- d. The Contractor shall employ only such personnel who are skilled and experienced in the trade and the Institute shall be at liberty to object to or require the Contractor to remove from the works and person employed by the Contractor from the execution of works, who, in the opinion of the Institute, misconducts himself or is incompetent or negligent in the proper performance of his duties and all such persons, shall not again be employed upon the works without the permission of CPRI. The personnel of the contractor who are assigned specific jobs will not be permitted to leave before completion of such jobs.
- e. The contractor shall carry out the work by deploying experienced manpower for a span of two years from the date of placing order. CPRI may extend the contract by another year based on mutual consent on same rates, terms and conditions.
- f. The Contractor shall comply with all the provisions of the minimum wages Act 1948 (latest version), Contract labour (regulation and abolition) Act, 1970 (latest version) and rules framed there under and also other labour laws affecting Contractor labour that may be brought into force from time to time. With reference to above, the contractor shall furnish the details of supporting documents mandatorily once in three months to CPRI.
- g. The Contractor shall not assign or sublet the work without the written approval of the Institute.
- h. If the Contractor or his working personnel or servants shall break, deface, injure or destroy any part of Facility/Equipment/Instrument Including building in which they may be working or any buildings, cables and electric wires, contiguous to the premises on which the work or any part of it, is being executed if and or if any damage shall happened to the work while in progress from any cause what-so-ever or if any defects or other faults appear in the work executed within the Contract period, after a certificate final or otherwise of its completion shall have been given by the concerned Divisional Head as aforesaid arising out of defective or improper workmanship, the Contractor shall after receipt of notice in writing in that behalf make the same good at his own expense, or in default the Institute may cause the same to be made good by any other agency and deduct the expense (or which the certificate of the Divisional Head concerned shall be final) from any sums that may then or at any time thereafter become due to the Contractor from his security deposit of the proceeds of sale thereof a sufficient portion thereof.
- i. The prospective bidders shall visit the work place (before offering the rates) during office hours to have the 1st hand information about the nature and magnitude of work and for better understanding of the scope of work in detail and Tender schedules.
- j. CPRI will not provide any shelter/ accommodation/ food etc. for the workmen. The contractor has to make his own arrangement.

- k. General maintenance and up keeping of all the equipment / instruments / tools/ machine used in testing/ calibration work including test rig/bay are to be kept clean & tidy at all times.
- l. Due to urgency/emergency, if any test required to be taken up on priority, required laborers (additional) shall be provided with in a short notice of intimation of time to the contractor.
- m. In the exigencies of any miscellaneous work like small fabrication/welding during testing work without any extra cost shall also be accommodated.
- n. **If there is any delay in completion of assigned work, a penalty of 10% from the corresponding tower bill will be deducted.**
- o. The Vendor/ Contractor/ Supplier are requested to obtain a clear-cut understanding of the nature and type of the works mentioned above. They shall be required to make a visit well in advance to the laboratories in Mechanical Engineering Division, CPRI, Bengaluru before submitting the quotation.
- p. For all intents and purposes, the contractor shall be the “Employer” within the meaning of various Labour Legislation's, for the manpower so deployed at CPRI. The Agency shall alone be responsible for the redressal of grievances/ resolving of disputes relating to personnel deployed. CPRI, shall in no way, be responsible for any damages, losses, FINANCIAL or other injury claims to any personnel deployed by the agency in the course of their performing the functions/duties, or for payment towards any compensation.
- q. The manpower deployed by the selected contractor shall not have any claims of Master and Servant relationship vis-à-vis CPRI nor have any principal and agent relationship with or against the CPRI. Deployed manpower shall not be treated or considered as employees of the Institute under any circumstances.
- r. Supplementary agreement to be made in case the agency executing the erection and dismantling works abandons the contract. the agency awarded the present contract should execute the pending works. the rates at which the work shall be executed shall be mutually agreed by both the parties.

2. The scope of the work consists of

A. Brief description of Works:

The transmission towers/ monopoles are tested for their mechanical strength. The tower parts / monopole sections as received are assembled and erected/mounted on movable footings on the test bed. The appropriate loading arrangements are made & attached to the test tower. These attachments are pre-

tensioned / rigged to the load application winches in all the three directions i.e., vertical, transverse and longitudinal.

The following activities are to be carried out as test arrangements:

1. Movable footing movement, tightening & loosening of bolts for each test tower.
2. Preparation of stubs, stub setting/welding and stub cutting, grinding after test.
3. Pulley mounting on anchor structures (Transverse & Longitudinal).
4. Wire rope Sorting / laying / changing on Anchor structures (Transverse & Longitudinal).
5. Vertical loading (wire rope) arrangements.
6. Calibration of load cells.
7. Pre tensioning / Rigging of wire ropes at transverse and longitudinal directions with load cells and with other load multiplication arrangements if any. Switch gear initializing / monitoring of electrical winches during testing and de-rigging / rigging if any as per the test requirement. After completion of test, de-rigging / detachment of wire ropes from winches, removal of loadcells / cables / removal of Bull dog grips / placing of shackles / hardwares / pulleys to their stock yard / respective places.
8. Testing of hardware / insulator (in door) on Universal Testing Machine (UTM).
9. Testing of hardware / insulators (outdoor) at Test rig / Hydraulic ram.
10. As part of scope of work (Sl. No. II B 13) wherever applicable general up keep maintenance of Lab / assisting maintenance of load cells, instrument cables, electrical winches, UTM, diesel generator set, drilling/grinding machines, hydraulic ram/control, hand tools/machines etc., are to be carried out as part of day to day routines.

B. Scope of Work (Under Subject Tender):

To provide technical service at Mechanical Engineering Division on a day to day basis for carrying out the work as specified below.

1. Movable footing foundation bolts nuts loosening and tightening using heavy duty spanner (for the four footings) after shifting the footings to the required distance based on Base width of test tower.
 - a. 48 - (12x4) Bolt connection
 - b. 24 - (6x4) Bolt connection
 - c. 16 - (4x4) Bolt connection
 - d. Transition/ Base Plate arrangement for Monopoles

Arrangement for shear arresting mechanism for the four footings and other related additional works if any for shear/up lift arrestor. Requisite tools will be provided by CPRI.

Quantity: Average 60 towers per year.

2. Stub setting involving works like grinding of footing. Marking of diagonals & base width, centering, plumb location on diagonals on footings. As per the stub

setting details provided by the test engineer, stubs to be marked for the slope cutting and rib height and reference for measurement. Cutting of stubs correct to the slope. Cutting of ribs correct to the size based on stub size. Mounting of stubs on base width markings and setting of stubs correct to slope and square. Checking the leveling of stubs and correcting the length of stub if required. Welding of stubs and ribs as per the welding thickness required as directed by Test Engineer based on the stub size. Cutting of stubs and ribs after dismantling of test tower.

Cleaning of welding machines, crimping of welding cables if required, replacement of cutting set hoses, nozzles, regulator etc., whenever necessary. Cleaning of grinding machines & minor electrical works etc.,

Quantity:

- a) Stub angles upto L130x130x12mm.
- b) Stub angles above L130x130x12mm & upto L200x200x20mm.
- c) Stub angles above L200x200x20mm or Star Leg combinations (of any size).

Quantity: Average 60 towers per year.

- 3. Fabrication of tower parts for the test tower in case of need arises during erection of test tower and premature failure of test tower requiring modification / re fabrication of tower parts involves removal of raw material, marking, punching, drilling, cutting, grinding, bending etc., (all the scarp material shall be sent to scrap yard or the designated place after work) as per the drawing supplied/directed by test engineer. (All the required machines and consumables will be provided by CPRI).

All the tools & equipment used for the above work shall be cleaned and returned back to stores.

The quantity / weight has to be clearly entered and endorsed by test engineer. The payment will be only labour charges.

Quantity: Average 5 MT per year.

- 4. Arranging the pulley mounting assembly of weight approx 150kg to 175kg each on the two anchor structures according to the heights (1m to 45m) of the pull of points (POP) of test tower under the supervision of CPRI staff. The pulley mounting assembly consists of side plates, shaft and pulley (single / double).

Quantity of pulley mountings: from 5 to 10 per tower.

- 5. Arranging the required fibre core wire ropes of size ranging upto 25mm dia. over the pulley mounting on anchor towers (at height 1m to 45m).

Quantity of fibre core wire ropes: from 5 to 20 per tower.

- 6. Arranging the required fibre core wire ropes of size ranging above 30mm over the pulley mounting on anchor towers (at height 1m to 45m).

Quantity of fibre core wire ropes: from 5 to 15 per tower.

7. Preparation / Sorting / arranging / making end connections / slings of different lengths of wire ropes of size 16mm to 32mm diameter & accessories like spacers, shifting of load cells & cables from control room to test bed, Load beam arrangements (if any), connecting the load cells, "Tare / Zero" balancing and connecting / Rigging Vertical Winches.

Quantity:

- a) S/C tower/monopoles, 8 to 10 nos. per tower.
- b) D/C tower/monopoles, 10 to 20 nos. per tower.
- c) M/C tower/monopoles, 20 to 30 nos. per tower.

8. Pre / Post test verification of load cells required for test tower, involving works like arranging / sorting of load cells, mounting of load cells on UTM, channel changing, balancing of load cell and corresponding load indicator with appropriate instrument cable, dismantling them, labeling them & stacking at appropriate place. Cleaning of UTM / Fixtures / Control Panel / upkeep of UTM room etc., immediately after work.

Quantity:

- a) S/C tower/monopoles, 8 to 15 nos. of load cells & cables per tower.
- b) D/C tower/monopoles, 15 to 25 nos. of load cells & cables per tower.
- c) M/C tower/monopoles, 25 to 45 nos. of load cells & cables per tower.

9. Rigging / pre-tensioning works of fibre core wire ropes above 25 mm to 40 mm diameter:

Shifting of load cells and cables from control room, "Zero/Tare" balancing and attaching them on to the respective pull of points at sheave pulley end along with arrangements for mechanical advantages and accessories like pulleys/shackles if any.

Rigging / pre-tensioning the same to the respective electrical winches with mechanical advantage if any (at transverse and longitudinal winch house) including making end connections (of bull dog grips if required - as majority of ropes are loading eye ferruled), monitoring of winches during testing, unwinding the winches to initial position and de-rigging/detaching fibre core wire ropes/arrangements of mechanical advantages (if any) and accessories like pulleys/shackles if any from the winches (after testing) and removing the end connections and stacking the hardware's/accessories at respective places after test.

Cleaning of all the winches / greasing & gear oil top up if required, control panel etc., immediately after every tower testing.

In case of power failure changing over to diesel generator & vice versa. Top up of distilled water, diesel (supplied by CPRI) etc., before every tower testing pre / dry run of D.G.set and dusting, cleaning etc.,

In the course of testing if it becomes necessary, rigging / de-rigging, changing of load cells and cables, trip set adjustment in panel / starters and to attend any minor electrical, brake adjustment, assisting of changing of brake coil of winches (if required) etc., has to be carried out. Removing the load cells and cables after the test and shifting them back to the control room.

Quantity:

wire ropes upto 25 mm diameter varies from 5 to 30 nos. per tower.

wire ropes from 25 mm to 40 mm diameter varies from 5 to 15 nos. per tower.

10. During premature failure of tower necessitating de-rigging of all the ropes & rigging back after modification / re-erection of tower with associated works.

Quantity:

wire ropes upto 25 mm diameter varies from 5 to 30 nos. per tower.

wire ropes from 25 to 40 mm diameter varies from 5 to 15 nos. per tower.

11. Testing of insulators/hardware or other mechanical tests using Universal Testing Machine (UTM) including works like unloading of samples, placing at test site, mounting of test samples & fixtures if any/load cells on UTM, dismantling of test samples & fixtures if any /load cells after test and stacking at stock yard/disposing to scrap yard accordingly.

Quantity: Duration 4 hours per test, 100 tests per Year.

12. Support for Testing/Field works comprising pre/post test arrangements like movement of footing (if required) & tightening them, arranging steel wire ropes/slings, mounting of samples / assembly of samples, loading arrangements, welding & cutting for anchorage, fabrication of fixtures, assisting calibration of load cell(s), shifting of load cells and cables, "Zero/Tare" balancing, etc., assisting during testing, dismantling of test arrangements after testing & shifting them back to stock yard / stores / control room, dismantling of test samples & stacking/disposing of tested samples for tests carried out on insulators, insulator strings, hard wares & accessories using Hydraulic ram/Test-rig. Cleaning of Hydraulic power pack, hydraulic ram, minor electrical (related works), control panel, hoses, ram etc., shall be done before and after completion work at Tower Testing Station.
Rigging of conductors with insulators at Vibration laboratory / wake Simulation Laboratory.

Quantity: Duration 4 to 8 hours per test, Average 10 tests per Year

13. Maintenance works like periodical, preventive maintenance / general up keep of maintenance of lab. Machines & Equipments, Instruments like loadcells / load indicators, instrument cables, electrical winches, UTM, diesel generator set, drilling/grinding machines, hydraulic ram/control, welding machines, hand tools etc. (All the required machines and consumables will be provided by CPRI).

Periodicity: As and when required.

- a) UTM & accessories: Periodical maintenance of UTM and its accessories/fixtures and Cleaning, Greasing/de-greasing of screw shafts, Check oil level and fill up to the mark in oil tank. General housekeeping etc., minor repair works such as replacement of power connectors/ contactors etc.

Quantity: 1 Machine with accessories.

- b) Hydraulic ram/control: Periodical maintenance of ram and piston check and Cleaning, Greasing/de-greasing, check oil level and fill up to the mark in oil tank. Assisting minor repair works such as replacement of power connectors/ contactors etc.

Quantity: 1 Machine each with accessories

3. The contractor shall scrupulously follow all the security regulations of CPRI that would be in force from time to time, during the period of execution of the work. He shall obtain necessary entry gate passes for bringing in materials and work force inside CPRI office campus needed for execution of work and he shall furnish full details of materials collected at site of work and labor deployed thereon with supporting documentary evidence. He shall be permitted to take out his surplus materials, tools etc., from the site of work, from the CPRI office campus, after obtaining necessary authorized gate pass, from the Engineer-in-Charge or his authorized representative. The entry of materials shall be through gate no 5 of CPRI only.
4. Single phase / three phase electricity required for the work, if available will be supplied to the contractor free of charge at one point, only at the work site subjected to following conditions. Contractor shall make his own arrangement for laying distribution lines, cables, safety devices like fuses, ELCB, MCB, Control panels etc., at his own cost. As directed by Engineer-in-Charge. No compensation shall be paid to the contractor, in case of non-supply of power to the contractor.
5. Income tax at the prescribed rate shall be deducted from the contractor, at source, from the bills payable to him.
6. The Contractor must strictly follow the provisions of contract labour (Regulation & Abolition) Act, 1970 of Government of India and The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.
7. The contractor shall follow the provision of CPWD safety code contained in CPWD GCC for Maintenance Works-2023.
8. The rate quoted for the item of work shall be inclusive of all taxes and levies, **but excluding GST and cess**, payable under respective statute. However, if any further tax or levy or cess is imposed by statute, after the last stipulated date for receipt of quotations, including extensions, if any, and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the additional tax amount so paid, provided such payments, if any, is not, in the opinion

of The Chairman, High Power Committee (HPC) (whose decision shall be final and binding on the contractor) attributable to delay in execution of work, within the control of the contractor. The onus of complying with the statutory obligations of making payment of GST to the GST Department lies with the contractor. The contractor shall make a mention of his GST no and CPRI's GST no in the invoice to be raised after completion of work.

SCHEDULE-A					
Name of Work: Out sourcing for rigging and other works related to tower testing at tower testing station (TTS), MED, CPRI, Bengaluru					
Sl. No.	Particulars of work	Quantity	Unit	Unit Rate (Rs.)	Amount (Rs.)
1	Footing Movement as per Sl.no. B (1) of scope of work. (Average 60 towers/monopoles per year)				
	a. 48 - (12x4) Bolt connection	20 towers	Per tower		
	b. 24 - (6x4) Bolt connection	10 towers	Per tower		
	c. 16 - (4x4) Bolt connection	10 towers	Per tower		
	d. Transition/ Base Plate arrangement for Monopoles	20 poles	Per pole		
2	Preparation for stub & setting as per Sl.no. B (2) of scope of work. (Average 60 towers per year)				
	a) Stub angles upto L130x130x12mm.	40 towers	Per tower		
	b) Stub angles above L130x130x12mm & upto L200x200x20mm.	10 towers	Per tower		
	c) Stub angles above L200x200x20mm or Star Leg combinations (of any size).	10 towers	Per tower		
3	Fabrication / Re-fabrication of tower parts during erection, failures, modifications etc., as per sl. no. B (3) of scope of work.	10 MT	Per MT		
4	Pulley mounting as per Sl.no. B (4) of scope of work. (5 to 10 per tower)	600 nos	Per pulley mounting		
5	Wire rope Changing of size ranging from 12mm to 25mm dia. as per Sl.no. B (5) of scope of work. (5 to 20 fibre core wire ropes per tower)	700 nos	Per rope		
6	Wire rope Changing of size ranging from 30mm to 40mm dia. as per Sl.no. B (6) of scope of work. (5 to 15 fibre core wire ropes per tower)	150 nos	Per rope		
7	Preparation / Sorting / arranging wire ropes / slings & accessories like spacers for Vertical, Transverse and Longitudinal loadings & wind loadings as per Sl.no. B (7) of scope of work.				
	a) S/C tower/monopoles	20 towers	Per tower		
	b) D/C tower/monopoles	30 towers	Per tower		
	c) M/C tower/monopoles	10 towers	Per tower		
8	Assisting in Pre / Post Verification of load cells as per Sl.no. B (8) of scope of work.				
	a) S/C tower/monopoles	20 towers	Per tower		
	b) D/C tower/monopoles	30 towers	Per tower		
	c) M/C tower/monopoles	10 towers	Per tower		

Sl. No.	Particulars of work	Quantity	Unit	Unit Rate (Rs.)	Amount (Rs.)
9	Rigging / pre-tensioning of fibre core wire ropes upto 25mm dia. as per Sl.no. B (9) of scope of work. (5 to 30 wire ropes per tower/monopoles)	1260 nos	Per rope		
10	Rigging / pre-tensioning of fibre core wire ropes from 25mm to 40 mm dia. as per Sl.no. B (9) of scope of work. (5 to 15 wire ropes per tower/monopoles)	450 nos	Per rope		
11	De- Rigging / pre-tensioning of fibre core wire ropes ranging upto 25mm dia as per Sl.no. B (10) of scope of work. (for re-test towers) (5 to 30 fibre core wire ropes per tower/monopoles)	225 nos	Per rope		
12	De- Rigging / pre-tensioning of fibre core wire ropes ranging from 25 mm to 40 mm dia as per Sl.no. B (10) of scope of work. (for re-test towers) (5 to 15 fibre core wire ropes per tower/monopoles)	200 nos	Per rope		
13	Testing of insulators/hardwares or other mechanical tests using Universal Testing Machine (UTM) as per Sl.no. B (11) of scope of work	100 tests	Per test		
14	Support for Testing/Field testing works on insulators, hard wares & accessories for tests on Hydraulic ram/ Test-rig as per Sl.no. B (12) of scope of work	20 tests	Per test		
15	Maintenance Works as per Sl. no. B (13) of scope of work:		L S per time		
a)	Labour Charges	20 day	Per Day		
	TOTAL				