

**CHHATTISGARH STATE POWER
TRANSMISSION CO. LTD.**

**OFFICE OF EXECUTIVE DIRECTOR (STORES & PURCHASE)
C.S.P.TRANS.C.L., DANGANIA, RAIPUR: 492013 (C.G.)**

Phone No. 0771- 2574240 FAX: 0771-2574246

TENDER SPECIFICATION No. TR- 21/S&P/24

**SUPPLY OF
132kV/70KN, 132kV/90KN ,220kV/70KN and
220kV/160KN
LONG ROD POLYMER INSULATOR**

(Through : E-bidding)

RFX No. - 8100023312

LAST DATE & TIME OF SUBMISSION OF TENDER

28/10 /2021 (TIME 15:00 HRS.)

DUE DATE OF OPENING OF TENDER

28/10 /2021 (TIME 15:30 HRS.)

Price

Rs. 1120/- Printed Tender Form

Rs. 1180/- Downloaded E- Tender Form

TENDER NO TR-21/S&P/24**INDEX**

Sr. No.	PARTICULARS	PAGE No.
1.	Tender Form	3
2	E-Procurement Tender Notice	4-7
3	Annexure – I (Special instruction to bidders)	8-13
4	Section - I General Terms & Condition of the tender	15-28
5	Section - II Technical Specification Of Materials	29-40
6	SCHEDULES TO BE FURNISHED WITH TECHNO-COMMERCIAL BID SECTION II (PART I) GTP SCHEDULE I - PRICE & QUANTITY SCHEDULE SCHEDULE II – TECHNICAL INFORMATION SCHEDULE III – TECHNICAL DEVIATION SCHEDULE IV - COMMERCIAL INFORMATION SCHEDULE V - COMMERCIAL DEVIATION SCHEDULE VI- ANNUAL TURN OVER SCHEDULE-VII – BIDDER’S EXPERIENCE SCHEDULE -VIII – MANUFACTURING DETAILS AND DETAILS OF SUPPLY (A,B&C) SCHEDULE-IX- B.G. PROFORMA FOR SECURITY DEPOSITE SCHEDULE -X Integrity Pact Agreement Format SCHEDULE –XI CHECK LIST	41-42 43 44 45 46-48 49 50 51 52 53 54-59 60

TENDER FORM**CHHATTISGARH STATE POWER TRANSMISSION CO. LTD.**

Tender document SL.No.....

ISSUED to M/s

Cost of Tender documents Rs.....

Received vide D.D.No.....Dtd.....

Name of Bank

Signature & Seal of Issuing Authority**CHHATTISGARH STATE POWER TRANSMISSION CO. LTD.****RAIPUR****TENDER FORM**

The undersigned hereby tender and offer (subject to CSPTCL conditions of tendering), the CHHATTISGARH STATE POWER TRANSMISSION CO. LTD. to test and supply, plant, machinery, materials, deliver and execute and do the several works and things which are described or referred to in the enclosures & Annexure to the specification **TR-21/S&P/24**, copies of which are annexed hereto and which under the terms thereof are to be supplied, executed and done by the contractor in a thoroughly good and workman like manner, and to perform and observe the provisions and agreements or the part of the contract contained in or reasonably to be inferred from the said tender documents for the sum and at the rates set out in schedules annexed hereto.

It is confirmed that:

- (I) Questionnaire for Commercial terms and conditions.
- (II) Questionnaire for Technical specifications of the Materials, and
- (III) All other conditions wherever described in the tender documents have been replied in full giving clear details. It has been noted that in case any reply is not given or any reply is incomplete/ambiguous the Board will have right to take the same to be advantageous for the company. Company's decision in this regard will be final. The bidder will have no right to furnish any technical or commercial clarification after opening of the bid, which may in any way alter the offered prices.

Dated, this day of

Bidder's Signature**Bidder's Address.**

C.I.N. : U40108CT2003SGC015820

CHHATTISGARH STATE POWER TRANSMISSION COMPANY LTD. RAIPUR

(A Government of Chhattisgarh Undertaking)

OFFICE : EXECUTIVE DIRECTOR (STORES & PURCHASE) ,**Address : 3rd Floor, LD Building, Dangania-Raipur (CG)-492013**Website: www.cseb.gov.in

Fax:0771-2574246, Tele.0771-2574238/4240

No.02-16 / TR-21/S&P/24/

Raipur, Dtd:

E-PROCUREMENT TENDER NOTICE

Sealed tenders are invited from experienced manufacturers for supply of following equipments/ materials.

Sl. No.	Tender No.	Particulars	Qty in Nos.	Cost of tender document including GST (Rs.)		EMD (Rs.)	Due date
				Printed Tender Form	E-Tender Form Online (downloaded from website)		
1.	TR-21/S&P/24 RFx No-8100023312	Long Rod Polymer Insulators of 70 KN for 132 KV	2805	1120/- (Incl. of 12% GST)	1180/- (Incl. of 18% GST)	1,50,000/-	28.10.2021
2		Long Rod Polymer Insulators of 90 KN for 132 KV	4045				
3		Long Rod Polymer Insulators of 70 KN for 220 KV	385				
4		Long Rod Polymer Insulators of 160 KN for 220 KV	440				

- NOTE:- i) In case any of the above dates is declared as holiday then the particular date will automatically get shifted to next working day.
- ii) The quantities mentioned above are tentative & may vary according to final requirement.
- iii) Any notice for extension of due date of tender opening shall not be published in newspapers. It will be displayed only on official website of the company.
- iv) The tender will be processed through e-bidding module of SAP-SRM. Bidders are advised to visit our website www.cspc.co.in/csptcl for viewing detailed instructions regarding submission of offer through SAP-SRM.
- v) The NIT shall also be published in www.tarang.website

// TERMS AND CONDITIONS //

- (i) The tender documents can be obtained from the office of the ED (S&P), CSPTCL, Raipur in person on payment of cost of tender documents in the form of DD only made out in the name of Manager (RAO: HQ), CSPTCL, Raipur accompanied with firm's application on its letter head. If tender document is required by post, Rs.250/- is to be paid by DD additionally along with the cost of documents. If more than one tender document is required, separate DDs should be furnished for each tender. CSPTCL shall

not be responsible for any postal delay in receipt/ non-receipt of tender documents. No receipt of tender shall be issued in any case.

- (ii) The tender document can also be downloaded from official website of CSPTCL 'www.cspc co.in (go through Chhattisgarh State Power Transmission Co. Ltd.- Tender Notice/ Store & Purchase Offices) and required tender fee in form of DD in favour of Manager (RAO:HQ), CSPTCL, Raipur payable at Raipur should be submitted along with EMD in envelope containing DD of EMD. The envelope containing DDs of cost of tender document and EMD should be suitably super scribed "DDs containing cost of tender document and EMD". The details of DDs be mentioned on the outer side of the envelope also. Please note carefully in absence of aforesaid requisite tender fee, further bids shall not be considered for opening.
- (iii) Tender document and the details specification can be obtained on any working day one day prior to the due date. The tenders duly filled in shall be dropped/ get dropped in the specified tender box up to 15.00 Hrs. respectively on the due date. Any other means of delivery shall not be accepted. No receipt of tender shall be issued in any case. The tender box shall be locked/ sealed at 15.00 Hrs. respectively on the due date and shall be opened at 15.30 Hrs on the same date.
- (iv) After publication of NIT & before the date of opening of TC bid, corrigendum/ other information (if any) shall be displayed on our official web only. The bidders are requested to remain in contact with this office or visit our web-site for any development/ clarification/ amendment issued subsequently.
- (v) CSPTCL reserves the right to accept or reject any or all the offers, in part or full without assigning any reason whatsoever.

Executive Director (S&P)
CSPTCL : Raipur

Special Instructions to bidders for submission of bid through SAP- SRM module (e-bidding)

The tender specification no. **TR-21/S&P/24** is to be processed through e-bidding. The Techno commercial bid is to be submitted online as well as offline (hard copy). Details of NIT & Tender Documents are available on our website – <http://www.cspc.co.in> & <http://ebidding.cspcl.co.in:50700/irj/portal>. The bidder may download the same from the above site. In e-bidding portal, tender documents will be displayed in online tender display at Technical RFx section.

Last date & time of submission of techno commercial bid in hard copy and upload details in softcopy is **28.10.2021 upto 15:00 pm**. Due date & time of opening of part –I and part-II in Hard copy and TC bid soft copy details through SAP SRM (e- bidding Portal) of the tender is **28.10.2021 at 15:30 pm**. Price bid is not required to submit in Hard copy.

Important Instructions :-

1. Please note that this tender shall be processed online as well as offline. The bidder has to submit all the documents in hard copy as per tender specifications in four envelopes. Besides above, scanned copy of following documents are to be uploaded in e-bidding portal:-
 - (a) The scanned copy of DD for tender fee.
 - (b) The scanned copy of DD for EMD/ EMD exemption.
 - (c) Schedule IV & V Commercial information & Commercial information.
 - (d) Schedule II Schedule for Technical Information.
 - (e) Schedule III Schedule for Technical deviation.

It may please be noted that only above mentioned documents are to be uploaded in e-bidding portal and no other document is required to be submitted in e-bidding portal. The bidder shall give reply to following questions regarding above documents in e-bidding portal:-

 - (i) Whether scanned copy of tender fee DD uploaded. Yes/No
 - (ii) Whether scanned copy of DD of EMD /EMD Exemption uploaded. Yes/No
 - (iii) Whether scanned copy of Schedules of Commercial information Yes/No
 - (iv) Whether scanned copy of Schedules of Commercial deviation Yes/No
 - (v) Whether scanned copy of Schedules of Technical deviation Yes/No
2. It is not required to upload /attach scanned copy of price bid in soft copy. **Only the rates are to be filled in the item tab in e-bid in SAP SRM System (online e-tender)**. Rates should be quoted online & in specified fields only. Once the rates are filled, the bidders may change their rates upto the due date and time of submission of tender. After due date and time, no change on any ground whatsoever will be accepted.
3. After scrutiny of techno-commercial bid, the price bid will be opened in e-bidding system only of eligible bidders for which suitable intimation will be given to the bidders offline & through email.
4. Please note that e-mail is always system generated, hence bidders are advised to regularly check their inbox/junk mail box.
5. CSPTCL shall not assume any responsibility for non-supporting of system, internet, line & associated hardware & software for bidding their tender. No extension in time shall be granted on such grounds. The bidder should submit their bid well before submission dead line to avoid any system related problem. It is strongly recommended not to wait for submission of bid in last minutes as internet/technical problem may disrupt their works.

6. Reference time for submission dead line shall be the time displayed in the portal and shall be treated as final.
7. After end of submission dead line, no alteration in the tender will be allowed by the system. However, in case of extension of due date of opening of tender, the bidders will be allowed to submit revised bid in the system.
8. CSPTCL will not accept incomplete bid.
9. The bidder must have a valid Digital Signature & SAP SRM User ID. User ID & Password from CSPTCL and Digital Signing Certificate and Digital Encryption Certificate from any recognized digital signature issuing authority are required for participation in any Tender. The bidder shall intimate in advance regarding details of digital signature issuing authority for ensuring the reliability of the same. For User ID and Password for participating in the tender, the bidder shall register on line through e-bidding portal.
10. The e-bidding vendor user manual displayed on website-<http://ebidding.cspcl.co.in:50700/irj/portal> for the help of the bidders. For any further queries the bidder may contact at **Helpline no. 0771-2576672/73 (EITC, CSPDCL, Raipur)**.
11. The training for bidders will be on every Wednesday from 3.00 pm to 5.00 pm at office premises of Energy Info Tech Center (EITC) at Dangania, Raipur.
12. Tender shall be opened in the scheduled time as notified. If the due date of opening/submission of tender documents is declared a holiday by the Govt. or local administration, it will be automatically shifted to next working day for which no prior intimation shall be given. Tender opening shall be continued on subsequent days, in case the opening of all tenders is not completed on due date because of the technical constraints of system on the day of opening. It may be noted that the due date of opening/time may be altered/ extended if desired by CSPTCL without assigning any reason. However, intimation shall be available on company's tender portal/bidders email (if participation shown). The bidders are requested to keep track of the same.
13. Amendment in tender specification will be published on our website as well as in SRM system and the intimation regarding amendment in date extension will be conveyed through system generated e-mail to registered bidders only.
14. Before participating the bidder shall carefully read all the instructions and processes.
15. Tender duly completed in all respects will be accepted online up to due date & time and will be opened on the due date at specified time in the presence of bidders or their authorized representatives. In case of authorized representative(s) they shall bring the original authorization letter with their signature attested by the bidder.

Executive Director (S&P)
CSPTCL: RAIPUR

Annexure-I
SPECIAL INSTRUCTIONS TO BIDDERS

IMPORTANT: Except as otherwise provided in any subsequent modification/LOI/Order, the provision of this Section shall have effect notwithstanding anything inconsistent therewith contained in any other Schedule/ Annexure/ Clause/ Terms/ Condition of this tender document).

E-Bidding & Due date: Please note that the Tender shall be processed through e-Bidding.

Instruction to Bidders for submission of Bids through SAP-SRM Module (e-bidding) are detailed in **Instructions to bidders for submission of bid through SAP- SRM module (e-bidding)-**

1. The bidders are requested to go through these instructions carefully and submit the tender in e -bidding portal and also in hard copy accordingly.

Date of submission of tender is **28.10.2021 upto 15:00 PM** and tender will be opened on same day at **15:30 PM** in the Office of ED (S&P), CSPTCL, Danganiya, Raipur, through E-bidding as per the guidelines .

The Chhattisgarh State Power Transmission Company Ltd., Raipur (or any authority designated) - hereinafter called 'OWNER' or 'CSPTCL' or 'Company' - will receive bids as per the accompanying specification. All bids shall be prepared and submitted in accordance with instructions, terms and conditions stipulated in the tender.

2. **Tender Fee:** - The tender document can also be downloaded from official website of the CSPTCL (www.cspc.co.in/csptcl). In case bidder chooses to submit his offer on downloaded tender document, they will be required to deposit specified tender fee (cost of tender documents- non refundable) in form of DD in favour of Manager (RAO:HQ), CSPTCL, Raipur payable at Raipur. The bank draft shall be issued from the nationalized/ scheduled bank. **DD should be enclosed with the part I of the tender offer.** In absence of tender fee, offer will not be considered for opening of price bid.

- 3.(i) **Earnest Money:**-The Earnest Money in the instant tender is **Rs 1,50,000/-** ,demand draft/Banker's Cheque drawn **in favour of Manager (RAO:HQ), CSPTCL, Raipur, payable at Raipur (Chhattisgarh)**. The other details regarding mode of submission of EMD/ exemption from EMD etc are given in clause No. 5.0 of Section-I "General Terms & Conditions of the Tender".

- (ii) **Goods & Service Tax:**-The bidder should furnish valid GST registration certificate alongwith EMD. In absence of GST registration the offer shall not be accepted.

4. The bidding is open to manufacturers only who can provide satisfactory evidence to substantiate this.

5. Qualifying Requirements:-

The bidder is required to furnish Self attested (i.e copy attested by authorized signatory of the tender) document proof for having acquired following Pre Qualifying Requirement (PQR) :-

SN	Proposed instant tender No. TR-21/S&P/24 for 132kV/70 KN, 132kV/90 KN, 220kV/70 KN, 220kV/160 KN Long Rod Polymer Insulators	
	Particulars	Documents to be submitted in support Self attested copies (i.e copy attested by authorized signatory of the tender).
	<u>Technical Criteria</u>	
01	The Bidder should be manufacturer of tendered items or higher having manufacturing unit in India	Valid NSIC/DIC certificate for tender items duly attested by self. In case firm is not registered with NSIC/DIC, bidder should furnish self attested copy of Factory Registration Certificate issued by Industries Department of State/Central Govt. for tendered items or higher.
2(a)	<p>The bidder should have minimum experience of 3 years for manufacturing & supply of tendered item or higher to following Indian entities as on the date of issue of NIT:-</p> <p>i.) Power utilities owned and controlled by Central or State Govt., Or</p> <p>ii.) PSUs, Or</p> <p>iii.) Govt. Organizations'</p> <p>Further these, insulators should be in successful operation for minimum 01 year from the date of commissioning as on date of issue of NIT in the aforesaid entities.</p>	<p><u>For Regular Suppliers (a) In support of supply-</u> copies of purchase order (in the name of manufacturer) and relevant MRCs (Material Receipt Certificate) issued by the entities mentioned will be submitted. The date of receipt mentioned in MRC will be treated as actual date of supply. The supply experience as on the date of issue of NIT will be counted from the aforesaid actual date of supply. In case of non-availability of MRC, commissioning certificate/Performance certificate may also be treated as proof of actual supply provided it establishes the requirements as per PQR and is issued by an officer not below the rank of Executive Engineer/Manager of the entities mentioned in clause-2 of the PQR</p> <p>If performance certificate indicates both proof of supply experience of 03 years or more and satisfactory performance for 01 years or more, separate MRC will not be required as a proof of supply. However, if only MRC is submitted as proof of supply, performance certificate will have to be submitted separately to establish minimum performance of one year as per PQR. All these documents should be attested by the authorized signatory of the tender.</p> <p><u>Supply through turnkey contracts:-</u></p> <p>i) Copies of order issued by the entities mentioned in para A(2) of PQR to the turnkey contractor (Order should be in the name of the turnkey contractor).</p> <p>ii) Copies of order issued by the turnkey contractor(s) to the manufacturer (bidder).</p> <p>iii) Copies of inspection letter and dispatch clearance issued by the entities mentioned in para A(2) of PQR to the manufacturer (bidder).</p>

(b)	<p><u>For C.G State SSI units: for 132kV/70KN and 132kV/90 KN only</u> Chhattisgarh State based Micro and Small Enterprises (hereinafter referred as CG State SSI Units) should be registered under Micro, Small and Medium Enterprises Development Act, 2006 for manufacturing tendered item or higher.</p>	<p>iv) Copies of invoice issued by the turnkey contractor to the entities mentioned in para A(2) of PQR.</p> <p>v) Copies of performance certificate issued by the entities mentioned in para A(2) of PQR towards proof of execution of order placed by the turnkey contractor to the manufacturer (bidder).</p> <p>b) <i>In support of satisfactory performance</i>, a self attested copy of performance certificate issued by the entities mentioned in clause-2 of the PQR will be submitted.</p> <p>Copy of registration under MSME act 2006, type test and BIS license for tender items, duly self attested.</p>
03	<p>The bidder should have all the type test certificates of tendered item or higher materials as per relevant standards i.e. ISS/IEC issued by Govt. standard test laboratory/ NABL accredited laboratory shall be submitted along with the tender. The type test certificate of tendered materials shall not be more than 10 years old from the date of issue of NIT.</p>	<p>Self attested copy of test certificate.</p>
<u>Commercial and financial criteria</u>		
04 (a)	<p>The bidder should have minimum average annual turn over (MAAT) for best three years out of last five financial years (i.e. 2015-16, 2016-17, 2017-18 , 2018-19& 2019-20) of Rs. 2.25 Cr.</p> <p>In case bidder is a holding company, MAAT shall be that of holding company only (i.e. excluding its subsidiary / group companies). In case bidder is a subsidiary of a holding company, the MAAT shall be of subsidiary company only (excluding its holding company).</p>	<p>Self attested copies of statement of annual turnover (as per annexure of the tender), audited balance sheets and profit & Loss statement should be furnished in support, duly certified by Chartered Accountant. The balance sheets furnished should be for last five financial years (i.e. 2015-16, 2016-17, 2017-18 , 2018-19& 2019-20) . Self attested copies of statement of aggregate turnover audited balance sheets and profit & Loss statement should be furnished in support, duly certified by Chartered Accountant. The balance sheets furnished should be for FY2017-18 , FY2018-19 & FY2019-20.</p>
(b)	<p><u>For C.G State SSI units for 132kV/70KN and 132kV/90KN only</u> CG State SSI units should have the aggregate turnover of minimum Rs. 9.03 lacs during last 3 financial years i.e FY, FY2017-18 & FY2018-19 & FY2019-20.</p>	<p>Self attested copies of statement of aggregate turnover audited balance sheets and profit & Loss statement should be furnished in support, duly certified by Chartered Accountant. The balance sheets furnished should be for FY2017-18 , FY2018-19 & FY2019-20.</p>

05	Net worth of bidder for last 3 financial year i.e. 2017-18 , 2018-19 &2019-20 should be positive .Net worth means the sum of total of the paid up of the capital and free reserves (excluding reserves created out of revaluation) reduced by aggregate value of accumulated losses (including debit balance in profit and loss account for current year) and intangible assets.	Self attested copy of Statement showing ‘ Net Worth ’ indicating assets and liability of firm duly certified by Chartered Accountant for the last three financial years i.e. FY2017-18 , FY2018-19 & FY2019-20
06	The bidder should not be debarred/black listed by Bank/State Govt./Central Govt./State PSU/CPSU/SEB/ Public utility as on the date of issue of NIT. However, the bid may not be considered for further processing in following cases also: i) If bidder is debarred/blacklisted by Bank/state Govt./Central Govt./State PSU/CPSU/SEB/public utility up to date of opening of price bid of the instant tender. ii) If a case comes to notice regarding submission of forged/fake document in any other tender under process in CSPTCL up to date of opening of price bid of the instant tender.	A declaration in this regard shall be furnished by the bidder. <i>(Name of the bidder) M/s.....is not debarred/black listed by Bank/State Govt./CentralGovt./StatePSU /CPSU/SEB/ Public utility as on the date of issue of NIT.</i>
07	Any sum of money due to CSPTCL on the date of opening of tender should have been paid/settled in full prior to the date of opening of tender. Price bids of bidders not complying with this requirement shall not be opened.	A declaration in this regard shall be furnished by the bidder.
08	The bidder shall submit self attested certificates(in original) issued by CA confirming fulfilment of following criteria : (a) Bidder should have discharged all its payment obligations (Principal/ Interest) on outstanding debentures (i.e. debentures which have not yet been redeemed), if any, and no such payment as on 30.06.2021 should be outstanding/overdue. (b)Bidder should not be presently in default in payment of any bank loan or interest thereon for more than three months or any loan account of the bidder should not have been classified as NPA (Non performing Assets) by the creditor/lending bank, as on date of issue of NIT.	The bidder shall furnish self attested certificate issued by CA(in original) <i>(a) All payment obligations (principal / Interest) on outstanding debentures (i.e. debentures which have not yet been redeemed) have been discharged and no such payment as on 30.06.2021 is outstanding / overdue.</i> <i>(b)The bidding company M/s is presently not in default in payment of any bank loan or interest thereon for more than three months or any loan account of the bidder has not been classified as NPA (Non performing assets) by the creditor/ lending bank as on date of issue of NIT.</i>

09	All the documents/ statements/Attachments /information submitted by the bidder in proof of the qualifying requirements must be authentic/genuine/correct and in case, any of the said documents/ statements /attachments/ information is found to be false /fake/misleading the bidder will be disqualified and action will be taken against the bidder as per relevant provision of the tender.	Self attested declaration shall be furnished by the bidder:- <i>All the documents/ statements/ attachments/information submitted by (Name of the bidder) M/s..... in proof of the qualifying requirements are authentic/genuine/correct and in case, any of the said documents/statements/attachments/information is found to be false /fake/misleading the bid will be disqualified and action will be taken as per relevant provisions of the tender.</i>
10	The bidder shall have to submit pre-contract integrity pact in the format enclosed as Schedule X on non-judicial stamp paper worth Rs.250/- duly signed by the bidder along with the Techno-Commercial bid. The validity of this integrity pact shall be from the date of its signing and extended up to 2 years or the complete execution of the order to the satisfaction of both the Buyer and the Bidder/Seller, whichever is later. In case Bidder is unsuccessful, this Integrity Pact shall expire after six months from the date of its signing.	The bidder shall have to submit duly signed pre-contract integrity pact in the format enclosed as Schedule X on non-judicial stamp paper worth Rs.250/-.

6. The prices offered should be in Indian Rupees. The offered rates should be valid for 180 days from due date of tender. In case of extension in due date of opening, the validity shall be counted from the extended due date on which TC bid has been opened. The prices offered should be **FIRM**.
7. PRICE BID has to be submitted in prescribed format only as per **SCHEDULE-I**. Ex-works price including packing & forwarding charges should be quoted. Goods & Service Tax (GST), any other charges & freight charges should be quoted separately The total F.O.R. destination price should be quoted in the relevant column. The freight shall be on FIRM basis. It may please be noted that only statutory variations due to Govt. Regulation in the rate of GST & other taxes/levies shall be permitted by CSPTCL only within contractual delivery schedule
 8. The rates quoted in the price bid shall be taken as final for computing the competitive rates and for all purpose.
 9. The tender document shall be available for sale in the Office of ED (S&P),CSPTCL on payment of the cost of tender document through demand draft / cash payment on all working days up to one day prior to the due date of opening. The tender document shall also be displayed in CSPTCL's website i.e. www.cspc.co.in and bidders may download the tenders from the website directly. In such case, the payment of cost of tender document shall be made through demand draft along with the tender. The details are given in **clause No. 7 of Section-I. In such case, the cost of tender document in the form as detailed above be submitted along with the tender in EMD envelop. In absence of same, the tender shall not be opened.**
 10. The bidder should have adequate plant and machinery necessary for the manufacture of the tendered item.

11. The CSPTCL reserves the right to reject any or all tenders or accept any tender in full or part, considered advantageous to the CSPTCL, whether, it is lowest or not without assigning any reason whatsoever.

12. **Offered quantity:**

It is obligatory on part of bidders to offer at least 60% of the tendered quantity of material for manufacturer other than C.G. state SSI units. Bids with an offer of less than 60% of tendered quantity shall not be considered. **However, CG State SSI Unit shall offer minimum 10 % of quantity allocated for CG State SSI Units, below which the offer will not be considered.**

13. **Criteria for placement of order:** -

For C.G State SSI units:- For C.G State SSI units meeting all technical requirements of tender upto maximum **25% of tendered quantity (i.e. 700 Nos 132kV/70KN and 1010 Nos 132kV/90KN Long Rod Polymer Insulators)** is reserved for CG State SSI/ MSME units for procurement subject to following terms & condition.

- (1) Chhattisgarh State based Micro and Small Enterprises (hereinafter referred as CG State SSI Units) should be registered under Micro, Small and Medium Enterprises Development Act, 2006 for tendered items.
- (2) CG State SSI units should have the requisite valid type test reports of tendered material/equipment and BIS License.
- (3) CG State SSI units - offering against reserved quantity for CG State SSI units, shall not quote price for the tendered item.
- (4) C.G State SSI units has to offer minimum 10% of quantity allocated for C.G State SSI units
- (5) Maximum quantity of tendered item which any CG State SSI unit may offer shall be restricted to 100% of reserved quantity for CG State SSI Units. However it shall be limited as per production/manufacturing capacity of that item (as mentioned in the SSI Certificate) with respect to time frame of supply mentioned in the tender.
- (6) If any CG State SSI unit submits the price bid in open tender, he shall not be considered against quantity reserved for C.G State SSI units
- (7) The rate quoted by the L-1 bidder in the open tender shall be counter offered to all eligible CG State SSI units. On receipt of their acceptance, earmarked quantity for CG units(maximum 25%) shall be equally distributed to all such firms subject to their individual ceiling.
- (8) In case of non/partial acceptance of allotted quantity by any CG State SSI units, the unallocated remaining quantity out of reserved tendered quantity(maximum 25%) shall be equally distributed among other eligible CG State SSI units subject to their consent and individual ceiling.
- (9) In case any quantity or whole quantity remains left from CG State SSI units, the same shall be allocated to regular bidders in same ratio as per tender clause.
- (10) CG State SSI units are also eligible for extension order up to 50% of the original order quantity placed on them.

For Regular Suppliers :- The balance tendered quantity other than reserved for CG State SSI Units for tendered item will be offered to maximum two parties. The quantity shall be distributed in the ratio 60% to L-1 bidder and 40 % to L-2 bidder on counter offer rates, bidder will have to quote for entire quantity.

In case L-2 bidder does not accept the counter offer the quantity shall be allocated to L-1 bidder.

14. Bidders are requested to go through Technical requirement carefully and it may be noted that furnishing of all information as required in various schedules enclosed is a must. In case any of the schedule, duly filled in, is not found furnished as required in the Schedules / Annexure, the tender will be treated as incomplete, and may be liable for rejection without any correspondence by the CSPTCL.
15. **INTEGRITY PACT:** - The bidder shall have to submit pre-contract integrity pact in the format enclosed as Schedule X on non-judicial stamp paper worth Rs.250/- duly signed by the bidder along with the Techno-Commercial bid. The validity of this integrity pact shall be from the date of its signing and extended up to 2 years or the complete execution of the order to the satisfaction of both the Buyer and the Bidder/Seller, whichever is later. In case Bidder is unsuccessful, this Integrity Pact shall expire after six months from the date of its signing.
16. **‘EXTREMELY IMPORTANT’- (Bidders to note this to avoid rejection of the bid)-**
Attention of bidder is drawn to the fact that all the documents required as per tender are submitted along with bid on or before due date of tender. The bid submission date is cut-off date of submission of all the documents required as per tender and every bidder must adhere to this dead line.
However, if any short coming is observed during scrutiny of TC bid, CSPTCL reserves the right to seek required clarifications/documents from bidder giving them only one chance to submit required documents/ clarification/ confirmations within specified time line.
It may also be noted that if a bidder has quoted ‘NIL’ deviations in Schedule IV (deviation technical specifications / condition and Schedule III (deviation commercial conditions) this will have an overriding effect on any other condition noted as deviations elsewhere in the bid.
17. **CHECK – LIST:-**
 The check list (Schedule-XI) in respect of various schedules etc is required to be submitted by the bidder without which the tender will be considered incomplete and liable for rejection. The bidder should submit all schedule duly filled in along with this offer.

Section-I

GENERAL TERMS & CONDITIONS OF THE TENDER

- 1 **Scope :-** The tender specifications shall cover supply of tendered items as per the technical specifications mentioned in Section-II of the tender document.
- 2 **Acceptance of offers:-**
While the tenderers may make all out efforts to offer for the complete scope of tender, they may please note that the CSPTCL reserves the right to split the tender into different lots towards supply.
Bidders are advised to go through the contents of specific requirement for standard conditions very carefully and in absence of non-compliance/ lapse, responsibility for the same will rest on bidders
- 3 **Offered quantity:**
It is obligatory on part of bidders to offer at least 60% of the tendered quantity of material for manufacturer other than C.G. state SSI units. Bids with an offer of less than 60% of tendered quantity shall not be considered. **However, CG State SSI Unit shall offer minimum 10 % of quantity allocated for CG State SSI Units, below which the offer will not be considered.**
- 4 **Criteria for placement of order: -**
For C.G State SSI units:- For C.G State SSI units meeting all technical requirements of tender upto maximum **25% of tendered quantity (i.e. 700 Nos 132kV/70KN and 1010 Nos 132kV/90KN Long Rod Polymer Insulators)** is reserved for CG State SSI/ MSME units for procurement subject to following terms & condition.
 - 1) Chhattisgarh State based Micro and Small Enterprises (hereinafter referred as CG State SSI Units) should be registered under Micro, Small and Medium Enterprises Development Act, 2006 for tendered items.
 - 2) CG State SSI units should have the requisite valid type test reports of tendered material/equipment and BIS License.
 - 3) CG State SSI units - offering against reserved quantity for CG State SSI units, shall not quote price for the tendered item.
 - 4) C.G State SSI units has to offer minimum 10% of quantity allocated for C.G State SSI units
 - 5) Maximum quantity of tendered item which any CG State SSI unit may offer shall be restricted to 100% of reserved quantity for CG State SSI Units. However it shall be limited as per production/manufacturing capacity of that item (as mentioned in the SSI Certificate) with respect to time frame of supply mentioned in the tender.
 - 6) If any CG State SSI unit submits the price bid in open tender, he shall not be considered against quantity reserved for C.G State SSI units
 - 7) The rate quoted by the L-1 bidder in the open tender shall be counter offered to all eligible CG State SSI units. On receipt of their acceptance, earmarked quantity for CG units(maximum 25%) shall be equally distributed to all such firms subject to their individual ceiling.
 - 8) In case of non/partial acceptance of allotted quantity by any CG State SSI units, the unallocated remaining quantity out of reserved tendered quantity(maximum 25%) shall be equally distributed among other eligible CG State SSI units subject to their consent and individual ceiling.

- 9) In case any quantity or whole quantity remains left from CG State SSI units, the same shall be allocated to regular bidders in same ratio as per tender clause.
- 10) CG State SSI units are also eligible for extension order up to 50% of the original order quantity placed on them.

For Regular Suppliers :- :- The balance tendered quantity other than reserved for CG State SSI Units for tendered item will be offered to maximum two parties. The quantity shall be distributed in the ratio 60% to L-1 bidder and 40 % to L-2 bidder on counter offer rates, bidder will have to quote for entire quantity.

In case L-2 bidder does not accept the counter offer the quantity shall be allocated to L-1 bidder.

5. **Extension Order:** The CSPTCL reserves the right to place extension order for supply of 50% additional quantity of tender items/material with associated accessories within six months from date of order and accordingly offered prices should be taken into account for these requirements.
6. **Price reduction clause:-** In case a fresh tender is issued for the same item before completion of supply against extension order and lower rates are received in the fresh tender .The lower rates received in the fresh tender shall be applicable to the balance order quantity to be supplied including extension order.
7. The bidders are requested to go through our Technical requirement carefully and it may be noted that furnishing of all information as required in various schedules enclosed is a must. In case any of the schedule, duly filled in, is not found furnished as required in the Schedules /Annexure the tender will be treated as incomplete, and will be liable for rejection without any correspondence by the CSPTCL.
- 8 **Offers:-**The offer for material/materials are required to be submitted in Duplicate in separate sealed envelopes for which following details may be noted: -

8.1 **PART-I Earnest money deposit:**

Please note that techno commercial bid of the tender will not be opened at the time of tender opening if earnest money shall be deposited in the form of demand draft as described in **clause 3 of section-I** unless the bidder is exempted from submission of EMD. The exemption from submission of EMD shall be given in the following cases:

- (i) SSI units of Chhattisgarh state permanently registered with DIC. The registration should be permanent & should be specifically for the items quoted in the tender & valid on the date of opening of tender.
- (ii) Small scale units registered with NSIC: - In case of small scale units permanently registered with NSIC, their registration certificates should be valid for the item under tender on due date of opening of Techno-commercial bid.
- (iii) Fully owned State Govt. /Central Govt. units, if 100% shares are held by the state Govt. concerned for which documentary evidence must be furnished with offer.
- (iv) Self attested copy of the NSIC/ SSI registration certificate for the tendered item duly notarized by a notary should be furnished with the offer. In case of un notarized copy, the original certificate should be produced at the time of opening for verification failing which their offer will be liable for rejection.

- v) It has been noticed that some bidders submit photocopy of certificate. This is not acceptable. The photocopy of valid NSIC certificate should be self attested (i.e copies attested by authorized signatory of the tender) failing which tender shall be liable for rejection.
- vi) The Bidders who come under any of above category must produce documentary evidence failing which offer shall be rejected.
- vii) The bidder should furnish valid GST registration number and certificate along with EMD. In absence of GST registration the offer shall not be accepted.

In case the bidder withdraws his offer during the validity period or after placement of order, the Earnest Money shall be forfeited. EMD of unsuccessful bidders shall be returned on placement of order. EMD of bidder on whom order is placed shall be returned on acceptance of security deposit. No interest shall be paid on the EMD amount.

8.2 PART-II Techno commercial Bid:

8.2.1 PART-II (A) - Technical bid:

In this part of bid, bidder will have to furnish confirmation in regard to all our technical requirements. The bid should clearly describe various technical particulars, as per details given in this specification. Also along with above information all details required in various schedules should be furnished so that the purchaser may be able to examine whether the offer submitted is technically acceptable or not. All relevant technical schedules viz. Guaranteed Technical Particulars, technical deviation etc shall be submitted with the bid.

The bidder shall have to submit pre-contract integrity pact in the format enclosed as Schedule-X on non-judicial stamp paper worth Rs. 300/- duly signed by the bidder along with the Techno-Commercial bid.

8.2.2 Completeness of equipment and bought out items: -

The bidder must furnish the following information's along with technical bid.

- i) The responsibility for obtaining timely supplies of bought out items will rest on the bidder and only on this basis, delivery period will be offered in the tender.
- ii) It may be noted in the case of damages / shortages due to improper packing or any other negligence, replacement shall be arranged within one month's time. If this is not done, date of delivery of such accessory will be treated as date of delivery of main equipment and full penalty should be recoverable from the bidder on total cost of the material.
- iii) For bought out items, responsibility for guarantee and obtaining immediate replacement in case any defects are noticed and in case defective supply of any item is reported will rest on the bidder
- iv) In case for attending to defect in any equipment or inspection / replacement of the equipment, which may be bought out item for the bidder; services of engineer of original manufacturer is required, the same will be organized on immediate basis by the bidder at his cost.

8.2.3 It would be obligatory on the part of Bidder to enclose a schedule of Technical deviation in Schedule-III in case there are any deviations from our technical requirement. **Even if no deviations are involved, a separate schedule of deviation for technical particulars should be enclosed wherein a certificate may be recorded that there are no deviations from all our technical requirements.** In the event of non-compliance of this instruction, it may be noted that the CSPTCL reserves the right to reject all such offers without assigning any reason or without making any correspondence for obtaining any clarification.

8.2.4 **PART-II(B)- Commercial Bid:**

This bid should clearly spell confirmation in regard to various commercial terms and conditions for supply. Basis of price, acceptance of various important terms and conditions for supply and questionnaire for commercial terms and conditions for supply duly filled in will form part of commercial bid. The bidder, therefore should furnish all information's clearly. All commercial schedules viz. commercial terms & conditions, commercial deviations, bidders experience, details plan of manufacturing & testing shall be furnished with this bid.

.It may please be noted that it is obligatory on the part of tenderer to comply with all our commercial terms and conditions. In particular, specific confirmation towards acceptance of following commercial terms and conditions should be furnished in the tender.

8.3.1 **Prices and Goods & Service Tax etc:** The prices offered should be in Indian Rupees. The offered rates should be valid for 180 days from due date of opening of tender. In case of extension in due date of opening, the validity shall be counted from the extended due date on which TC bid has been opened. The prices offered should be **FIRM**.

The prices should be quoted in the proforma given in schedule-I indicating unit ex-works price inclusive of packing & forwarding charges. Freight charges & applicable GST charges should be quoted separately in the relevant columns. The freight shall be on FIRM basis. It may please be noted that only statutory variations due to Govt. Regulation in the rate of GST & other taxes/levies shall be permitted by CSPTCL only within contractual delivery schedule. In case supplies against the contract are effected late i.e. beyond contractual delivery period and rate of GST undergoes upward revision the payment will continue to be made only on the basis of rates prevailing during the contractual delivery period. However, in case the rate of statutory levies undergoes downwards revision then the delayed supplies beyond contractual delivery period will attract reduced rate of levies.

8.3.3 **Terms of payment:** 100% payment along with all taxes and duties shall be made on production of necessary documents including submission of bills along with material receipt certificate (MRC) from our consignee normally within 30 days time from the date of receipt of material by consignee.

The supplier should submit original Material Receipt Certificate issued by the Consignee along with copies of bill and other necessary documents to the Manager (Bills) O/o ED (Finance), CSPTCL, Raipur for arranging payment.

8.3.4 **Delivery Period:-** The delivery should commence within 45 days from the date of order with minimum quantity of 25% of ordered item. The supplies of balance quantity on order of each item shall then be completed in 90 days thereafter. The entire quantity shall be supplied within 135 days from date of order. However if required the delivery may be advanced / deferred by CSPTCL.

The time and date of delivery of the stores stipulated in the order shall be deemed to be the essence of the contract. In case of delay in execution of the order, the CSPTCL shall either:-

- (i) Recover from the supplier as agreed Penalty /liquidated damages at the rate mentioned in “Penalty” clause.
- (ii) Purchase from elsewhere on account and at the risk of the supplier, the stores not delivered or other of similar description or;
- (iii) Cancel the contract

8.3.5 . **Security Deposit:-** The supplier has to submit the security deposit in form of Demand Draft / Bank Guarantee for value of order as indicated below to cover performance guarantee period for supply of equipments covered in this specification.

- (i) All the outside state units shall be required to pay security deposit @10% of ordered value.
- (ii) The SSI units of CG having annual business above Rs.50.00 Lacs shall be required to pay Security deposit @7.5% of the value of order subjected to maximum Rs. 10.00 lacs (Rs. Ten lac only)
- (iii) In case of SSI units of CG whose annual business is up to Rs.50.00 Lacs, they will be required to pay Security deposit @ 5% of the value of order subject to maximum of Rs. 20,000/- (Rupee Twenty thousand only).

In support of annual business of SSI units of CG , the certificate of chartered Accountant duly notarized should be furnished. **The bank guarantee shall be submitted within 30 days from the date of order and shall be kept valid for guarantee period exceeding claim period of 6 months.** The bank guarantee shall be submitted on stamp paper worth Rs.250/- or as per the prevailing legal requirements/ any other amount as per the C.G. State Stamp Duty Act and shall be from a Nationalized/ Scheduled Bank in the prescribed form of CSPTCL. No interest shall be paid by CSPTCL on the security deposit. In case of non-fulfillment of contractual obligations by the supplier the security deposit shall be forfeited.

8.3.6 **Transit Insurance risk:**

- a) Responsibility regarding covering of risk, during transit of material shall entirely be on the supplier. The CSPTCL, shall in any case, not bear the transit risk/transit insurance charges.
- b) Transit damages/ shortages/ losses shall be reported by the consignees within 30 days from the receipt of the consignments. Such damages/shortages/losses shall be repaired/replaced by the suppliers, free of cost within one month from the date of intimation by the consignee without awaiting for the settlement from carrier or insurance company etc. If the supplier fails to do so the consignee(s) shall be free to get the repair work done fro other sources and they shall be free to recover the cost of such material/ expenses of repairs either from the supplier/balance bills or from the security deposit as deemed fit.
- c) While the necessary assistance shall be rendered by the consignee in lodging and processing the claims with carriers and the supplier’s insurance underwriters, the responsibility shall rest with the supplier to immediately make good the shortages/ losses/ damages, without extra cost and without waiting for the settlement of the claim.
- d) Replacement of goods lost/broken or damaged including loss to fire:-
Notwithstanding anything herein contained, the supplier shall undertake responsibility for the safe arrival of the material in good condition and without any loss or damage at the final destination and until the same is actually delivered to / received by the CSPTCL at its stores or other places of final destination. For this purpose, material carried by Railway or Road transport or other carriers shall be deemed to be so carried

at the risk of the suppliers. In the case of transport damages/shortages, the payment shall be made only for the quantity received in good and working condition and consignee shall lodge claim with the supplier/carrier with necessary documents of the same with carriers at supplier's end.

8.3.7 Integrity Pact: As per the circular N0. 799 dtd. 10.07.2013 issued by Chief Secretary, Govt. of CG; proforma for integrity pact has been incorporated in the tender as a schedule-X and all the bidders have been asked to submit duly filled integrity pact along with the tender.

8.3.8 Guarantee Period:- Material offered covered under the tender shall be guaranteed for performance and quality for a period of 30 months from the date of supply of last lot to Store.

In case any defect in the equipment / material is found within guarantee period, the same will be replaced / repaired by you on free of cost basis. The replacement / repairing will have to be organized by you expeditiously and preferably within one month's time.

If for the purpose of replacement / repairs, the equipment / material is required to be dispatched to your works, all charges towards transportation / insurance / packing / forwarding will have to be paid by you for to and fro dispatches.

In this connection, please note that the following additional conditions will also be applicable in case any damages / defects are noticed in the equipments or its accessories supplied by you.

8.3.9 Deviations:

It would be obligatory on the part of the tenderer to enclose a separate schedule of deviation, if there are any deviations from our commercial terms / conditions. Even if no deviations are involved, a separate schedule of deviation for commercial conditions should be enclosed wherein a certificate may be recorded that there are no deviations from all our commercial conditions. All tenders, wherein these conditions are not complied with, may run the risk of rejection without any correspondence from our side.

8.3.10 Unsatisfactory performance:

The bidder who has supplied material earlier in CSPTCL and which has been found to be defective / not rendering satisfactory service within guarantee period and has not been replaced in the stipulated period shall not be considered for opening of price bid. (The cases reported as on date of NIT shall be considered).

In addition to the above, the bidders who have supplied material to CSPTCL and if any adverse reports regarding higher rate of failure, poor performance of equipment or defective supply reported from field, the price bid of such bidders shall not be considered for opening. (The cases reported as on date of NIT shall be considered).

8.3.11 Part - III Price bid:-

Price bid shall include submission of details of prices as per Schedule-I. **It is not required to upload /attach scanned copy of price in soft /hard copy. Only the rates are to be filled in the item tab in e-bid in SAP SRM System (online e- bidding portal).** The prices should be quoted through SAP SRM system should indicating unit ex-works price inclusive of packing & forwarding charges, GST, freight charges & any other charges should be quoted separately. In case of any discrepancy is found suitable loading on prices will be considered for which responsibility will rest on the Bidder.

9. Submission of offers: The Bidders should submit their bids in three envelopes as under:-

- (i) **Envelope - I :-** (To contain Part-I of the tender document) This envelope should contain a covering letter with earnest money or earnest money exemption certificate as detailed in clause (4.1). The cover of the envelope should be suitably super scribed with the details of earnest money and tender number. The envelope should be sealed properly. **The bidder should furnish valid GST registration number & certificate alongwith EMD. In absence of GST registration the offer shall not be accepted.**

In case the tender document is downloaded from CSPTCL's Website the required cost of tender document in the form of MICR DD drawn in favour of Manager (RAO-HQ), CSPTCL, Raipur should also be kept inside this Envelope.

Please note that the tender shall be liable for rejection if

- i) EMD as per tender specification / proof in support of exemption of EMD as per clause 4.1 is not found inside the envelope. **The GST registration certificate is not furnished**
- ii) In case DD towards tender cost is not found inside this envelope in case tender document is downloaded from website.

- (ii) **Envelope - II** (To contain Part-II of tender document)

This envelope should contain the Technical Bid and Commercial bid complete in all respects, in duplicate & Integrity pact as per proforma in Schedule-X and power of attorney . Tenders being submitted must be signed by a person holding a power of attorney authorizing him to do so. **The self attested copy** of power of attorney should be furnished. Tenders submitted on behalf of company registered under Indian Companies Act shall be signed by persons duly authorized to submit the tender on behalf of the company and shall be accompanied by **self attested copy** of resolution / abstract of Article of Association/ special or general power of attorney.

- (iii) **Envelope - III:-** This large envelope should contain all the above two envelopes. A certificate in the following format should be recorded on main Envelope:

**TENDER SPECIFICATION No. TR-21/S&P/24 DUE FOR OPENING ON
28.10.2021 FOR SUPPLY OF LONG ROD POLYMER INSULATOR**

To,

The Executive Director (Stores & Purchase)
C.S.Power Transmission Co. Ltd.,
Dangania, RAIPUR (C.G.) 492 013

IT IS CERTIFIED THAT WE AGREE TO THE FOLLOWING CLAUSES OF
TENDER SPECIFICATION:-

1	PAYMENT TERMS	AGREED
2	SECURITY DEPOSIT	AGREED
3	PENALTY	AGREED
4	PERFORMANCE GUARANTEE	AGREED
5	TECHNICAL SPECIFICATION	IT IS CERTIFIED THAT THE MATERIAL OFFERED BY US IS STRICTLY AS PER TECHNICAL SPECIFICATION AS STIPULATED IN THIS TENDER AND IN CASE ANY DEVIATION IS OBSERVED LATER ON, WE SHALL BE SOLELY RESPONSIBLE AND THAT OUR TENDER SHALL BE LIABLE FOR REJECTION.

Sign & Seal of tenderer

THIS ENVELOPE (Envelop-III) CONTAINS TWO ENVELOPES FOR:-

1. Envelop-I : Earnest Money Deposit and cost of tender document if tender document is downloaded) **along with GST registration certificate**
2. Envelop-II : Technical bid & Commercial Bid **along with integrity pact, Power of Attorney and a copy of un priced / unfilled price schedule.**
3. Envelop-III : . Envelop-I & Envelop-II.

10. **Opening of tenders:**

Part - I i.e. Earnest Money shall be first opened on the due date & time.

Part-II i.e. “Technical & Commercial Bid” will be opened thereafter on the same day in respect of the bidders whose EMD are found to be as per Tender specification.

These bids will be scrutinized and then we will take decision regarding opening of **Part - III** price bid in respect of successful bidders. For the purpose of opening of price bid, a notice of not less than 7 days shall be given to the bidders so that they may depute their representative for attending price bid opening. It may be mentioned that period of 7 days will be counted from the date of issue of fax intimation by us. Such intimation shall be given within a reasonable period from the date of opening of commercial and technical bids, and after its scrutiny. Only authorized representatives possessing necessary authority letter from the bidders shall be allowed to participate in the tender.

11. **Compliance with other conditions:-** Although all other conditions have clearly been spelt out in the tender document, it is once again brought to the notice of tenderer that they should go through our tender document carefully and comply all other conditions also, like furnishing of list of past supplies, performance certificate, profit and loss account, balance sheet for last three years etc., furnishing of drawing and write up for the manufacturing process. In the nut shell, the offer at the time of submission of Technical and Commercial bid

it should be completed in all respects. It should not be expected that in case of lack of any information, the CSPTCL will make any correspondence with the bidder. The documents and details as called for in the tender must be submitted without making any reference to submission of such certificate against past order, tender or past experience of supplies with the CSPTCL etc. All tenders wherein these conditions are not complied with, may run the risk of rejection without correspondence from our side.

12. **Change of quantity:**

The CSPTCL reserves the right to vary the quantities of any or all the items as specified in the technical specifications /schedules as may be necessary based on requirement. No correspondence shall be entered into regarding quantity variation.

13. **Inspection:**

- a) The CSPTCL shall have access at all times to the works and all other places of manufacture where the equipments are being manufactured and the supplier shall provide all facilities for unrestricted inspection at suppliers works, raw material, manufacture of all the accessories and for conducting necessary tests as detailed herein.
- b) The successful supplier shall keep the purchaser informed in advance of the time of starting and of the progress of manufacture of equipment in various stages so that arrangements could be made for inspection.
- c) No material shall be dispatched from its point of manufacture unless the material has been satisfactorily inspected and tested by the CSPTCL's representative and Delivery Instructions (D.I.) is issued in this regard.
- d) The acceptance of any quantity of material shall in no way relieve the successful supplier of his responsibility for meeting all the requirements of this specification and shall not prevent subsequent rejection if such material are later found to be defective.
- e) On readiness of material intimation for inspection should be submitted to O/o the ED (S&P), CSPTCL at least 15 days in advance so that Inspector can be deputed on scheduled date. In case material is not found ready on the intimated date of readiness, the CSPTCL reserves the right to recover from the supplier the actual expenditure incurred on visit of the officer apart from penalty of Rs. 5000/- per officer whichever is higher.
- f) **Random testing:** Inspection of material before dispatch or waiver of inspection will not relieve the supplier from his responsibility to supply the material strictly in accordance with the specification. If required, the Company shall have option to test the samples selected at random from the supplies affected and subject it to acceptance / type test as per relevant ISS/IEC and Technical specifications at any standard laboratories e.g. CPRI, ERDA etc.

In case, the samples fail to withstand the required tests, the entire lot will be liable for rejection (i.e. unused material so supplied) and the Supplier will have to refund the amount paid including taxes and duties as well as the test charges thereof. Such quantities or rejected materials identified shall be replaced in full by the supplier at his own cost. CSPTCL will not be responsible for payment of taxes on such rejected material.

g) **Stage inspection:-**The CSPTCL reserves the right to carryout stage inspection during manufacture. The inspection will include verification of all raw materials, quality

control process etc. Bidder will have to confirm that they will render all assistance for this purpose.

14. **Fake inspection call:**

In case, the material is not offered for inspection on the date of inspection offered by the firm, due to any reason the firm shall be required to remit a sum of Rs.5,000/- or actual expenditure incurred for the visit of the inspector, whichever is more.

15. **Quality assurance plan:**

The supplier shall furnish following information along with his offer, if so desired by CSPTCL. Information shall be separately given for individual type of equipment offered.

- (a) Statements giving list of important raw materials, name of sub-suppliers for the raw material, list of standards according to which the raw material are tested, list of tests normally carried out on raw material in presence of suppliers representative, copies of test certificates.
- (b) Information and copies of test certificates as in (a) above in respect of bought out items.
- (c) List of manufacturing facilities available.
- (d) Level of automation achieved and list of areas where manual processing exists.
- (e) List of areas in manufacturing process where stage inspections are normally carried out for quality control and details of such tests and inspections.
- (f) Special features provided in the equipment/ material to make it maintenance free.
- (g) List of testing equipment available with the supplier for final testing of equipment specified and test plan limitation, if any, vis-a-vis the type/ special acceptance and routine test specified in the relevant standards. These limitation shall be very clearly brought out in schedule of deviations from specified test requirements.

16. **Test certificate:**

In case CSPTCL requires testing of material at any Govt. Standard Laboratory/ NABL accredited Laboratory, then the supplier shall arrange the same at his own cost as directed by CSPTCL.

17. **Pool rate / Cartel:**

Formation of tenderer's cartel is strictly prohibited. "Cartel" includes an association of sellers, distributors, traders or service providers who by agreement among themselves, limit, control or attempt to control the production, distribution, sale or price of or trade in goods or provision of services, Here, "agreement" includes any arrangement or understanding or action, whether or not is formal or in writing.

Quoting same rates i.e. pool rate is not acceptable. In case the same rate is found to be quoted by more than two bidders, offers of all such bidders may be outrightly rejected. However, if rates of two bidders are found to be same, quantity of orders to be placed on them will be reduced to half of the quantity a bidder is entitled to be allocated by virtue of their common rank. But, in case of multi-item tender, if rates of even two bidders for more than one item are found to be same, it will be considered as deliberate cartel and offers of both the bidders may be dealt with accordingly. Therefore, all the bidders are advised to quote their own individual and most competitive rates.

Rates received in a tender will be minutely scrutinized to find out as to whether some or all bidders have entered in to any such 'agreement'. If CSPTCL is satisfied with the conclusion that some or all the bidders have formed a cartel, offers of all such bidders shall be rejected.

18. **Amendment in specifications:**
The Company may revise or amend the specification prior to the date notified for opening of tender. Such revision/ amendment, if any, will be communicated to all the tenderers as Amendment/ Addendum to the invitation of tender and the same will be displayed in CSPTCL's website also.
19. **Bids through fax:-**
Fax offers will not be considered under any circumstances.
20. **Lump sum based bids:**
In case prices for some items or all items are given as lump sum, instead of unit prices as required in the tender specifications, CSPTCL can summarily reject such incomplete tender.
21. **Penalty:-** The time for and the date of delivery of the material stipulated in the order shall be deemed the essence of the contract. In case of delay in execution or non-execution of the order, the CSPTCL at its option shall recover from the supplier/contractor as agreed towards liquidated damages a sum of ½ % of the total price of any stores not delivered per week or part thereof up to a maximum of 10%. For this purpose date of offer for inspection of material in the O/o Chief Engineer (S&P) shall be considered as the date of delivery subject to condition that offer has been made 15 days in advance of terminal date of scheduled delivery & material is delivered at stores within 21 days of issue of DI. Please note that in case material is not received within 21 days from date of issue of dispatch instructions even though the delivery period exists, penalty shall be imposed on delay of dispatch. The inspection offer, apart from postal/courier service shall be invariably **Faxed/E-mailed** to the CE (S&P) so that ambiguity does not arise for date of offer. In case the inspection offer is not received in the O/o C.E. (S&P) through Fax/E-mail the date of receipt of offer letter shall be taken as date of offer for inspection
22. **Printed terms & conditions in bids:**
Supplier's printed terms and conditions will not be considered as forming part tender under any circumstance whatsoever.
23. **Alterations/ correction in bids:**
No alternations in the tender document will be permitted.
24. **Incomplete bids:**
Tender which is incomplete or obscure is liable for rejection.
25. **Ambiguities in conditions of bids:**
In case of ambiguous or self contradictory terms/ conditions mentioned in the bid, interpretations as may be advantageous to the Company, may be taken without any reference to the tender.
26. **Disqualification of bids:**
A bid which gets opened before the due date as a result of improper or no indication has been given on the cover to indicate that it is a tender, will be disqualified. Tenderers will not be permitted to change the substance of his tender on post interpretation/ improper understanding grounds. This includes post tender price changes/ modifications etc. after opening of price bid. In such events, otherwise, that is, when a bidder does not comply, tender will be rejected.
27. **Language of bids:**
All tenders should be made either in English, or in Hindi only.
28. **Canvassing of bids:**
Tenders shall be deemed to be under consideration, after opening of tender/ bid till placement of order. During this period, the tenderers or their authorized representatives or other interested parties are advised strongly in their own interest, to refrain from contacting by any means any of the CSPTCL personnel or representative, on matters relating to under study.

29. All schedules are to be submitted by the bidder along with the tender document duly filed in and signed..
- 30. TRANSPORTATION:** The bidders are required to quote transportation charges in respect of Polymer insulators. Further transshipment of materials dispatched will not be allowed.
- 31 Cancellation of order:**
- 31.1 The company may upon written notice of default, terminate contract in the circumstances detailed here under:
- (a) If in the opinion of the Company, the supplier fails to deliver the material within the time specified or during the period for which extension, has been granted by the Company.
- (b) If in the opinion of the Company, the supplier fails to comply with any of the other provisions of this contract or material is found not in accordance with prescribed specifications and or the approved samples.
- (c) If as a result of stage inspection, it is revealed that material and / or workmanship is substandard, which is likely to affect the performance of the finished product, a notice would be served by the Company to the supplier to suspend further activities and to take urgent steps towards corrective measures, failing which the entire order would be cancelled.
- 31.2 In the event of such termination, the CSPTCL shall exercise its discretionary power as:
- (a) To recover from the supplier the agreed liquidated damages as given in the clause No. 6.2.4 above.
- or
- (b) To purchase form elsewhere after giving due notice to the supplier on account and at the risk of the supplier such stores/ material not so delivered or others of similar description in respect of consignment not yet delivered.
- or
- (c) To cancel the contract reserving Company's right to recover damages.
- 31.3 Notwithstanding that the power under clause (36.2 a, b & c) referred to above, are in addition to the rights and remedy available to the Company under the general law of India relating to contract.
- 31.4 In the event of risk purchase of stores of similar description, the opinion of the Company shall be final. In the event of action taken under clause 36.2 (a) or (b) above, the supplier shall be liable to pay for any loss, which the Company may sustain on that account but the supplier shall not be entitled to any saving on such purchases made against the default.
- 31.5 The decision of the Company shall be final regarding the acceptability of the stores supplied by the supplier and the Company shall not be required to give any reasons in writing or otherwise at any time for the rejection of the stores/ material.
- 31.6 In the event Company does not terminate the order as provided in clause 36.1 & 36.2 above, the supplier shall continue execution of this order, in which case he shall be

- liable to the CSPTCL for liquidated damages for the delay as per clause 6.2.4 until supplies are accepted.
32. **Arbitration:**
 If at any time, any question, dispute or difference, whatsoever shall arise between the Purchase and the supplier, upon or in relation to or in connection with the Contract, either party may forth with give to the other, notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of two arbitrators, one to be nominated by the Purchase and the other to be nominated by the supplier or in the case of said arbitrators not agreeing, then to the adjudication of the Umpire to be appointed by the arbitrators, whose decision shall be final and binding on the parties and the provisions of the Indian Arbitration Reconciliation Act 1996, and of the rules there under and any statutory modification thereof shall be deemed to apply. The arbitrators or the Umpire, as the case may be, are bound to give a detailed speaking award assigning reasons for the findings.
 Supplies under the contract, shall be continued by the Contractor during the arbitration proceedings, unless otherwise, directed in writing by the Purchase or unless the matter is such that the work cannot possibly be continued until the decision of the arbitrators or of the Umpire, as the case may be is issued.
33. **Jurisdiction:** Any dispute or difference, arising under, out of or about this tender/ contract order shall be subject to exclusive jurisdiction of competent court at Raipur only from where the order has been placed and not in any other court or tribunal.
34. **Variation in quantity:**
 A tolerance in the ordered quantity will be allowed to the extend of +/- 2% (plus minus 2%). This tolerance will be allowed on total ordered quantity. The MRCs shall be issued on actual receipt of quantity only.
 This clause will be applicable to items which are ordered in terms of weight or length i.e. cable, conductor, transformer oil etc.
35. **Force Majeure :-**The supplier shall not be liable for any liquidated damages for delay in performing in the contract for reasons of force majeure conditions such as acts of God, acts of public enmity, act of Govt. fires, floods, epidemics, quarantine restriction, strikes, freight embargo and provided that the supplier shall within ten(10) days from the beginning of such delay notifying the Company in writing the cause of delay. Power cut and non-availability of raw materials will not be considered as force majeure reason. The extension of delivery may be granted on due justification of the facts.
36. **Limitation of Liability :-** Except in cases of gross negligence or wilful misconduct,
 a) The bidder and CSPTCL shall not be liable to the other party for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the contractor to pay liquidated damages to the CSPTCL

A N D

The aggregate liability of the contractor to CSPTCL, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipments, or to any obligation of the contractor to indemnify CSPTCL with respect to patent infringement.

37. **CHECK – LIST:-**

The check list (Schedule-XI) in respect of various schedules etc is required to be submitted by the bidder without which the tender will be considered incomplete and liable for rejection. The bidder should submit all schedule duly filled in along with this offer.

Executive Director (S&P)
CSPTCL : Raipur

SECTION – II
70 KN, 90KN & 160 KN Long Rod Polymer Insulator

SCOPE:-

This specification of tender covers scope of design, manufacture, testing at manufacturer's works, before dispatch and supply of Silicon Rubber Composite Insulators.

The materials covered hereunder this specification shall be supplied complete in all respects, including all components which are necessary or are usual for their efficient performance and satisfactory maintenance under the various operating and atmospheric conditions.

TECHNICAL SPECIFICATION FOR POLYMER INSULATORS

1. STANDARDS

1.1 Unless otherwise specified elsewhere in this specification, the rating as well as performance & testing of the Polymer Insulators shall conform but not limited to the latest revision & amendments available at the time of placement of order of all the relevant standards as listed hereunder, except as modified in this document.

S. No.	Indian Standard	Title	International Standard
1	IS:731	Porcelain insulators for overhead power lines with a nominal voltage greater than 1000V	IEC:61109-1992
2		Verification of Dimensions of Polymer Insulators	IEC:61109
3	IS:13134	Guide for the selection of insulators in respect of polluted conditions	IEC : 60815
4	IS:2071 Part(I), II, III	Method of High Voltage Testing	IEC:60060-1
5		Characteristics of string insulator units of the long rod type	IEC : 60433
6	IS:2486	Specification for insulator fittings for overhead power lines with a nominal voltage greater than 1000V-General Requirements , Tests, Dimensional Requirements, Locking Devices	IEC-60575 IEC-60120 IEC:60372
7		Hydrophobicity classification guide	STRI guide 1.92/1
8		Standard for insulators– Composite-Distribution Deadend type	ANSI C29 13-2000
9	IS : 8263	Methods of RIV Test of HV Insulators	IEC:60487
10		Standard specification for glass fiber strands	ASTMD 578-05
11		Standard test method for compositional analysis by Thermo gravimetry	ASTME 1131-03
12	IS:8269	Methods for Switching impulse test on HV insulators	IEC:60506
13	IS:2629	Recommended practice for Hot Dip Galvanisation for iron & steel	ISO:1461(E)
14	IS:2633	Testing for Uniformity of Coating of Zinc coated articles	
15	IS:6745	Determination of Weight of Zinc coating on Zinc coated iron	BS:443-1969

		and steel articles	ISO 1460-1973
16	IS : 4759	Hot dip zinc coatings on structural steel & other allied products	ISO :1459, ISO :1461
17	IS : 4699	Specification for refined secondary zinc	
18	IS : 3203	Methods of testing of local thickness of electroplated coatings	ISO : 2178
19	IS:209	Specification for Zinc	BS:3436
20	IS:206	Method for Chemical Analysis of Slab Zinc	BS:3436

The standards mentioned above are available from:

Reference Abbreviation	Name and Address
BS	British Standards, British Standards Institution 101, Pentonville Road, N - 19-ND, UK
IEC	International Electro technical Commission, Bureau Central de la Commission, electro Technique international, 1 Rue de verembe, Geneva, SWITZERLAND
BIS/IS	Beureau Of Indian Standards. ManakBhavan, 9, Bahadur Shah ZafarMarg, New Delhi -
ISO	International Organization for Standardization. Danish Board of Standardization Danish Standardizing Sraat, Aurehoegvej-12
STRI guide 1.92/1	STRI, Sweden, Website : www.stri.se
NEMA/ANSI C29 13-2000	National Electric Manufacture Association, 155, East 44th Street, New York, NY: 10017 U.S.A
ASTM	American Society for Testing and Materials, 1916 Race St. Phelledelphia, PA19103 U.S.A.

1.2 Material meeting with the requirements of other authoritative standards, which ensure equal or better performance than the standards mentioned above, shall also be considered. When the material offered by the bidder conforms to other standards, salient points of difference between standards adopted & the standards specified in this specification shall be clearly brought out in the relevant schedules. Three copies of such standards with authentic translation in English shall be furnished along with the bid.

2. CLIMATIC CONDITIONS

The insulators shall be suitable for being installed directly in air with Power ACSR conductors of Double Circuit Double Strung transmission lines. The materials offered shall be suitable for operation in tropical climate & shall be subject to the sun & inclement weather and shall be able to withstand wide range of temperature variations. The topography & climatic conditions in general are as under:-

1	Location in the state	Chhattisgarh
2	2 Maximum ambient air temperature (oC) 50	50
3	Minimum temperature in shade (oC)	1
4	Maximum relative humidity (%)	95 (sometimes approaches saturation)
5	Average daily ambient air temperature (oC)	32° Centigrade
6	ISOCERANIC Level (days/year) (Average number of thunder storm days)	50
7	Average rainfall(mm)	1250mm

8	Wind Zone as per IS 802(Part-I)-1995	2
9	Max. Altitudes above mean sea level (meters)	1000M
10	Seismic level (Horizontal acceleration)(g)	0.3

NOTE:- Moderately hot and humid tropical climate conducive to rust and fungus growth. The climatic conditions are also prone to wide variations in ambient conditions. Stroke is also present in the atmosphere. Heavy lightening also occurs during June to October.

3. PRINCIPAL PARAMETERS

3. 1 DETAILS OF POLYMER INSULATORS

A. The Polymer insulator shall be suitable for a three phase 50 Hz, effectively earthed 400 KV, 220 KV and 132 KV transmission system in a moderately polluted atmosphere. They shall be ball and socket type.

B. The specified values and dimensions, impulse and power frequency voltages, electromechanical strength [EMS] of Polymer insulators are as under.

S. No	Particulars Value	132KV POLYMER INSULATORS		220 KV POLYMER INSULATORS	
		70 KN Suspension	90 KN Tension	70 KN Suspension	160KN Tension
		Single/ double Suspension string	Single/ Double Tension string	Single/ double Suspension string	Single/ Double Tension string
		1 x 9/ 2x9	1x10/ 2x10	1x13/ 2x13	1 x 14/ 2 x 14
1	Nominal System Voltage level (KV)	132 KV		220 KV	
2	Highest System Voltage Level	145 KV		245 KV	
3	Type	B&S		B&S	
	MATERIAL				
	a) FRP Rod	ACR Boron Free			
	b) Housing	Silicone Rubber			
	c) End fitting	Casting/Forged Steel HDG			
4	Colour/Surface	Grey/ Smooth			
5	Type of Locking Device & its material	R-clip of SS			
6	Ball & Socket dia meter	16 mm	16 mm	16 mm	20 mm
7	Size & designation of Boll & Socket	16 mm	16 mm	16 mm	20 mm
8	Creep-age distance (mm) (minimum)	4495		7595	
9	Power frequency one minute dry withstand voltage kV (rms)	325	325	460	460
10	Power frequency one Minute wet withstand voltage kV(rms)	275	275	460	460
11	Lightning Impulse withstand voltage dry & wet	650	650	1050	1050

	KVP)				
12	Sectional length / Length of Insulator strings (mm)	1305	1450	2030	2175
13	Gauranteed material failing load	70 KN	90 KN	70 KN	160KN

C. Polymer Insulators shall have sheds with good self-cleaning properties. Insulator shed profile, spacing, projection etc., and selection in respect of polluted conditions shall be generally in accordance with the recommendation of IEC-60815/IS : 13134

D. Dimensional Tolerance of Composite Insulators

The tolerances on all dimensions e.g. diameter, length and creepage distance shall be allowed as follows in line with-IEC 61109 :

$\pm (0.04d + 1.5)$ mm 300mm \square when d

$\pm (0.025d+6)$ mm when d>300mm

Where, d being the dimensions in millimeters for diameter, length or creepage distance as the case may be.

However, no negative tolerance shall be applicable to creepage distance

4. GENERAL TECHNICAL REQUIREMENTS

4.01 Core:

The core shall be glass-fiber reinforced epoxy resin rod (FRP) of high strength. Both, glass fiber and resin shall be optimized in the FRP rod. Glass fibers with low content in alkalis shall be boron free E glass or Boron free electrically corrosion resistance (ECR) glass. Use of resin with hydrolysis trend due to water penetration should be prevented i. e. matrix of the FRP rod shall be Hydrolysis resistant. Suitability of Epoxy matrix as well as interface between matrix and fibers is to be considered as design parameter to prevent brittle fracture. The FRP rod should be void free and shall be manufactured through Pultrusion process.

4.02 Housing (Sheath):

The core of the Polymer insulator shall be completely covered by a continuous housing consisting of a sheath-weathershed. For moulding of entire weathershed structure on to the rod in a one shot moulding process to be employed to avoid multiple interfaces. Hardware i. e. metal fittings may be installed on the rod prior to moulding of the shed controlling molding lines. The base polymer shall be 100% Silicon Rubber prior to the addition of reinforcing fillers. The thickness of compounding material on core should be minimum 3 mm. Manufacturer should furnish a description of its Quality Assurance Programme including fabrication, testing and inspection for any material (i.e. rubber), components(i.e. rod) or hardware (i.e. end fittings). The manufacturer has had fabricated by others should also be included. Manufacturing methods and material composition documentation will be a part of Technical Bid to be submitted along with offer. Insulator should have hermetically sealed structure in which the housing material is moulded to cover the interface between the end fittings and the FRP rod. This seal should never be broken during testing or otherwise.

4.03 End fittings:

The Polymer insulators shall be socket and ball type with the necessary coupling arrangement such that pin shall move freely in the socket but do not get disengaged while in service under various operating and atmospheric conditions.

The socket & ball type metal end fittings shall be designed to transmit the mechanical load to the core & the end fittings shall maintain uniform and consistent mechanical strength Material

and methods used in the fabrication of metal parts shall be selected to provide good toughness and ductility. Metal end fittings shall be made from a quality malleable cast iron or forged steel or Spheroidal Graphite Iron(SGI) and shall be hot dipped galvanized in accordance with IS 2629. Metal end fittings shall be uniform and without sharp edges or corners and shall be free of cracks, flakes, slivers, slag, blow-holes shrinkage defects and localized porosity. The attachment to the FRP rod shall be performed with a symmetrically controlled crimping method control by acoustic method that compresses the metal radially onto the rod without damage to the rod fibers or resin matrix while providing a strength equal to or greater than the defined and specified ultimate strength to the insulator. The material used in fittings shall be corrosion resistant. Nominal dimensions of the pin, ball and socket interior shall be in accordance with the standard. No joints in ball & socket or pin will be allowed. Outer portion of ball or socket should be Zinc sleeved with minimum 99.95% purity of electrolytic high grade Zinc. The finished surface shall be smooth and shall have a good performance. The surface shall not crack or get chipped due to ageing effect under normal and abnormal service conditions or while handling during transit or erection. The design of the fittings and the insulators shall be such that there is no local corona formation or discharges likely to cause the interference to either sound or vision transmission.

4.04 GRADING RINGS

Grading rings shall be provided when system voltages are equal to or greater than 220 KV. For 220 KV transmission, grading ring is to be provided at the energized end only. For 400 KV transmission, grading ring is to be provided at both ends of the insulators. All grading rings and brackets shall be designed as an integral part of the insulator assembly with a positive mounting system that allows mounting in one position. The design of the grading ring shall be such that ring can only be mounted with its orientation towards the weather sheds for maximum RIV and Corona control. Grading rings shall be designed in such a manner that the rings can be readily installed and removed with hot line tools without disassembling any other part of the insulator assembly.

Grading ring height (is the distance from the end of the end fitting to the top of corona ring) should be so selected that maximum field minimizes and uniformly distributed along the insulator. Manufacturer should provide reports of successful electric field modeling testing for the specific insulator design. The EFM should be three dimensional with result containing drawing depicting the electric field in various colours, each of a different voltage level. The result of this study should show that the voltage field surrounding the polymer insulators is optimum along the entire length of the insulator, with the effected hot end of the insulator being a critical location. The threshold at which corona may or may not be present should be defined as a figure in KV/mm for the designed insulator.

4.05 VERIFICATION OF HOUSING MATERIAL

The manufacturer should provide written verification about housing material, for which base polymer shall be 100% Silicon Rubber prior to the addition of reinforcing fillers considered will provide satisfactory performance in the particular environment. It shall meet following requirements: Be homogenous, impermeable, with no fissures, bubbles and strange materials inclusions. Be designed in order to avoid formation of localized discharges and to prevent interfaces humid penetration. Be resistant to corona, UV radiation, ozone, atmospheric contamination, water penetration and power arcs.

4.06 BALL AND SOCKET DESIGNATION

The dimensions of the Ball and Socket shall be 16mm designation for 70KN and 90KN Polymer insulators and 20 mm designation for 120 KN and 160 KN Polymer insulators in accordance with the standard dimensions stated in IEC:60120/IS:2486(Part-II)

4.07 MARKINGS:

Each insulator shall be legibly and indelibly marked with the following details as per IEC – 61109.

- a. Name or trademark of the manufacturer.
- b. Voltage and Type.
- c. Month and year of manufacturing.
- d. Minimum failing load / guaranteed mechanical strength in kilo Newton followed by the word 'KN' to facilitate easy identification.
- e. Country of manufacture

One 10 mm thick ring of suitable quality of paint shall be marked on the end fitting of particular strength for easy identification of Polymer insulators. The paint shall not have any deteriorating effect on the insulator performance. Following codes shall be used as identification mark :

- For 70KN Polymer insulator : Green
- For 90KN Polymer insulator : Blue
- For 120KN Polymer insulator : Yellow
- For 160KN Polymer insulator : Red.

5. MATERIAL DESIGN AND WORKMANSHIP

5.01 GENERAL

(i) All raw materials to be used in the manufacture of these insulators shall be subject to strict raw material quality control and to stage testing/quality control during manufacturing stage to ensure the quality of the final end product. Manufacturing shall conform to the best engineering practices adopted in the field of high voltage transmission. Bidders shall therefore offer insulators as are guaranteed by them for satisfactory performance on 400KV/220 KV and 132kV Transmission lines.

(ii) The design, manufacturing, process and material control at various stages be such as to give maximum working load, highest mobility, best resistance to corrosion, good finish, elimination of sharp edges and corners to limit corona and radio interference voltages.

(iii) The design of the insulators shall be such that stresses due to expansion and contraction in any part of the insulator shall not lead to deterioration.

5.02 GALVANISING

All ferrous parts shall be hot dip galvanized in accordance with the latest edition of IS:2629. The zinc to be used for galvanizing shall conform to grade Zn 99.5 as per IS:209. The Zinc coating shall be uniform, smoothly adherent, reasonably bright, continuous and free from impurities such as flux, ash, rust stains, bulky white deposits and blisters. Before ball fittings are galvanized, all die flashing on the shank and on the bearing surface of the ball shall be carefully removed without reducing the designed dimensional requirements.

5.03 INTERCHANGEABILITY

The Polymer insulators inclusive of the ball and socket fittings shall be of standard design suitable for use with hardware fittings of any make conforming to relevant Indian Standards.

5.04 CORONA AND RADIO INTERFERENCE VOLTAGE (RIV) PERFORMANCE

All surfaces shall be even, smooth, without cuts, abrasions or projections. No part shall be subjected to excessive localized pressure. The metal parts shall not produce any noise generating corona under all operating conditions.

5.05 SUITABILITY FOR LIVE LINE MAINTENANCE

(a) The Polymer insulators shall be compatible for use with hot line or live line maintenance techniques so that usual hot line operations can be carried out with ease, speed and safety.

(b) Suppliers shall indicate the methods generally adopted in routine hot and cold line maintenance of EHV lines for similar Polymer insulators supplied by them. Suppliers shall also indicate the recommended periodicity of such maintenance.

4. **TESTS-** The following tests shall be carried out on the Polymer insulator:

6.01 TYPE TESTS

The type test are intended to verify the main characteristics of a composite insulator, which depend mainly on its shape and size. They also confirm the mechanical characteristics of the assembled core (see Clause A.4) . They are made on insulators whose class has satisfied the design test.

An insulator type is **Electrically** defined by the arcing distance, creep age distance, shed inclination, shed diameter and shed spacing.

An insulator type is **Mechanically** defined principally by a maximum SML for the given core diameter, method of attachment and coupling design.

(A) **The following type tests shall be conducted on all types of the Polymer insulator with hardware fittings :**

- a) Power frequency voltage withstand test with corona control rings and arcing horn under (dry/wet) conditions
- b) Power frequency voltage flash over test with corona control rings and arcing horn under (dry/wet) conditions
- c) Power frequency voltage flash over test without corona control rings and arcing horn under (dry/wet) conditions
- d) Switching surge voltage withstand test under wet condition.
- e) Impulse voltage withstand test under dry condition.
- f) Voltage Distribution test
- g) Impulse voltage flash over test under dry condition
- h) Corona and RIV Test under dry condition.
- i) Mechanical strength test
- j) Vibration test.
- k) Power Arc Test
- l) Salt fog pollution withstand Test

(B) **On composite Insulator Unit:-**

1. Tests on interface and connection of metal fittings

- (a) Dry Power frequency Voltage Test
- (b) Sudden Load Release Test
- (c) Thermal Mechanical Test
- (d) Steep Front Impulse Voltage Test
- (e) Dry Power frequency Voltage Test

2. Assembled Core Load Time Test-

IEC:61109

- (a) Determination of the Average failing load of the core of the assembled unit
- (b) Control of slope of the strength time curve of the insulator

3. Damaged limit proof test and tightness of interface between and fittings and insulator housing

IEC:61109

4. Flammability Test

IEC:61109

5. Recovery of Hydrophobic Test

Annexure A

6. Mechanical Load- Time Test

7. Brittle Fracture resistance test	Annexure A
8. Test of Housing, Tracking and Erosion Test	IEC:61109
9. Test for the Core Material	IEC:61109
- <i>Dye Penetration Test</i>	
- <i>Water diffusion Test</i>	

6.02 ACCEPTANCE TESTS

This shall mean those tests which are to be carried out on samples taken from each lot offered for pre-despatch inspection for the purpose of acceptance of the lot.

- | | |
|--|---------------------|
| a) Verification of dimensions | IEC:61109 |
| b) Verification of Locking System | IEC : 60383 |
| c) Galvanising test IS-731 | IEC : 60383 |
| d) Verification of specified Mechanical Load - | IEC:575 |
| e) Recovery of Hydrophobicity | As per annex-A |
| f) Silicon Content test | As per Annexure - A |

6.03 ROUTINE TESTS

This shall mean those tests, which are to be carried out on each Polymer insulator to check the requirements, which are likely to vary during production.

- a) **Visual Inspection** – Each insulator shall be examined. The mounting of the end fittings on the insulating parts shall be in accordance with the drawings. **As per IEC : 61109**
- b) **Mechanical routine test** – **As per IEC : 61109**

For any change in the design/type ,already type tested and the design/type offered against this bid, the CSPTCL reserves the right to demand repetition of some or all type tests without any extra cost.

All Acceptance and Routine tests as stipulated herein shall be carried out by the Supplier in the presence of CSPTCL's representative.

Immediately after finalization of the programme of acceptance/routine testing, the Supplier shall give sufficient advance intimation to the CSPTCL, to enable him to depute his representative for witnessing the test.

6.04 STAGE TESTS DURING MANUFACTURE

Stage tests during manufacture shall mean those tests, which are to be carried out during the process of manufacture to ensure quality control such that the end product is of the designed quality conforming to the intent of this specification.

On all components as applicable

- Chemical analysis of Zinc used for galvanizing
- Chemical analysis, mechanical and metallographic test and magnetic particle inspection for malleable castings
- Chemical analysis, hardness test and magnetic particle inspection for forgings
- Crack detection test for metal parts

7. TEST VALUES

For all type and acceptance tests, the acceptance values shall be the value guaranteed by the Supplier in the guaranteed technical particulars or the acceptance value specified in this specification or the relevant standard whichever is more stringent for that particular test.

8. TEST PROCEDURES AND SAMPLING NORMS

The norms and procedure of sampling for the above tests shall be as per the relevant Indian Standard or other Internationally accepted standards. This will be discussed and mutually agreed to between the successful Supplier and CSPTCL before placement of order. The standards and norms according to which these tests are to be carried out are listed against each test. Where a particular test is a specific requirement of this specification the norms and procedure for the same shall be as mutually agreed to between the successful supplier and CSPTCL in the quality assurance programme. The supplier shall offer at least three times the quantity of material required for conducting all the type tests for sample selection. Before sample selection, the supplier shall be required to conduct all the acceptance test successfully in presence of CSPTCL's representative.

9. ADDITIONAL TESTS

The CSPTCL reserves the right for carrying out any other tests of a reasonable nature at the works of the Supplier/laboratory or at any other recognized laboratory /research institute in addition to the above mentioned type, acceptance and routine tests at the cost of the CSPTCL to satisfy that the material complies with the intent of this specification.

10. COORDINATION FOR TESTING:

For polymer insulator strings, the Supplier is required to produce type test reports to the satisfaction of the CSPTCL. However, in case the CSPTCL desires, the Supplier shall conduct all the type tests on the complete string with relevant hardware fittings. Responsibility of arranging required hardwares for the purpose of type testing will remain with the insulator Supplier.

11. INSPECTION

- i) CSPTCL and its representatives shall at all times be entitled to have access to the works and to all places of manufactures where insulators are manufactured and the successful Supplier shall afford all facilities to them for unrestricted inspection of the works, inspection of material, inspection of manufacturing process of insulators and for conducting necessary tests as specified herein.
- ii) The successful Supplier shall keep the CSPTCL informed in advance of the time of starting and progress of manufacture of insulators in its various stages so that arrangements could be made for inspection.
- iii) No material shall be despatched from its point of manufacture unless the material has been satisfactorily inspected and tested.
- iv) The acceptance of any quantity of insulators shall in no way relieve the successful Supplier of his responsibility for meeting all the requirement of this specification and shall not prevent subsequent rejection, if such insulators are later found to be defective.

12 QUALITY ASSURANCE PLAN

12.01 The Supplier hereunder shall invariably furnish following information alongwith his offer, failing which the offer shall be liable for rejection. Information shall be separately given for individual type of material offered.

- i) Statement giving list of important raw materials, names of sub-suppliers for the raw material, list of standards according to which the raw material are tested, list of tests, normally carried out on raw material in presence of Supplier's representative, copies of test certificates.
- ii) Information and copies of test certificates as in (i) above in respect of bought out items.
- iii) List of manufacturing facilities available.
- iv) Level of automation achieved and list of areas where manual processing exists.
- v) List of areas in manufacturing process, where stage inspections are normally carried out in quality control and details of such test and inspections.
- vi) Special features provided in Polymer insulators to make it maintenance free.

vii) List of testing equipment available with the Supplier for final testing of Polymer insulators specified and test plant limitation, if any, vis-a-vis the type, special, acceptance and routine tests specified in the relevant standards.

12.02 The successful Supplier shall submit the routine test certificates of bought out items and raw material at the time of routine testing of the insulator.\

13. DOCUMENTATION

13.01 The Supplier shall furnish full description and illustrated catalogues of insulators offered, alongwith the bid. The supplier shall also furnish alongwith the bid the outline drawing of Polymer insulator unit including cross-sectional view. The drawing shall include the following information:

- i) Shed diameter and unit spacing with manufacturing tolerance.
- ii) Creepage distance.
- iii) Unit mechanical and electrical characteristics for the complete string suspension and tension. unit
- iv) Size and weight of ball and socket part.
- v) Weight of Polymer unit.
- vi) Materials for the cap and pin.
- vii) Identification mark.
- viii) Manufacturer's catalogue number.
- ix) Brief installation instructions.
- x) Relevant technical details of significance.

5.17 PACKING & FORWARDING

i) All Polymer insulators shall be packed in suitable PVC/Plastic tubes/any other suitable packing. The packing shall provide protection against rodent. The supplier shall furnish detailed design of the packing. For marine transportation crates shall be palletted.

ii) The packing shall be of sufficient strength to withstand rough handling during transit, storage at site and subsequent handling in the field.

iii) Suitable cushioning, protective padding, or dunnage or spacers shall be provided to prevent damage or deformation during transit and handling.

iv) All packing cases shall be marked legibly and correctly so as to ensure safe arrival at their destination and avoid the possibility of goods being lost or wrongly dispatched on account of faulty packing and faulty or illegible markings. Each case/crate shall have all the markings stenciled on it in indelible ink.

v) The supplier shall guarantee the adequacy of the packing and shall be responsible for any loss or damage during transportation handling, storage and installation due to improper packing indelible ink.

ANNEXURE-A

1.0 Tests on Complete composite Insulator with Hardware Fittings.

1.1 Salt - fog pollution withstand test

This test shall be carried out in accordance with IEC-60507. The salinity level for composite long rod insulators shall be 80 Kg / m³ NaCl.

2.0 Composite Long rod Insulator Units

2.1 Brittle Fracture Resistance Test.

Assembled core load time test with container that contains in-HNO₃ concentric acid this is applied at the naked rod. The rod should be held at 80% of SML for the duration of the test. The rod should not fail within the 96 hour test duration.

2.2 Recovery of Hydrophobicity Test

(1) The surface of selected samples shall be cleaned with isopropyl alcohol. Allow the surface to dry and spray with water. Record the HC classification. Dry the sample surface

(2) Treat the surface with corona discharges to destroy the hydrophobicity. This can be done utilizing a high frequency corona tester. Holding the electrode approximately 3 mm from the sample surface slowly move the electrode over an area approximately 1'' x 1''. Continue treating this area for 2-3 minutes, operating the tester at maximum output.

(3) Immediately after the corona treatment, spray the surface with water and record the HC classification. The surface should be hydrophilic with an HC value of 6 to 7. If not, dry the surface and repeat the corona treatment for a longer time until an HC of 6 or 7 is obtained. Dry the sample surface.

(4) Allow the sample to recover and repeat the hydrophobicity measurement at several time intervals. Silicone rubber should recover to HC 1 – HC 2 within 24 to 48 hours, depending on the material and the intensity of the corona treatment.

3.0 Test on All components (As applicable).

3.1 Chemical Analysis of Zinc used for Galvanizing.

Samples taken from the zinc ingot shall be chemically analysed as per IS 209-1979. The purity of zinc shall not be less than 99.95%.

3.2 Tests for Forgings.

The chemical analysis hardness tests and magnetic particle inspection for forgings will be as per the internationally recognized procedures for these tests. The sampling will be based on heat number and heat treatment batch. The details regarding test will be as discussed and mutually agreed to by the Supplier and Owner in Quality Assurance Programme.

3.3 Tests on Castings.

The chemical analysis, mechanical and metallographic tests and magnetic, particle inspection for castings will be as per the internationally recognized Procedures for these tests. The samplings will be based on heat number and heat treatment batch.

The details regarding test will be as discussed and mutually agreed to by the Supplier and Owner in Quality Assurance Programme.

4.0 Grading device test :

4.1 In addition to the electrical design tests, for 220 kV and above class insulator design with applicable grading device test, similar to the following described test ;

Grading devices shall be tested using a mechanical shaker with at least a one inch stroke at the grading device and a frequency of no less than three cycles per second for a duration of 2,000,000 cycles. Movement shall be along the long axis of the insulator. The grading device shall be attached to the shaker in a vertical position. The test shall be considered successful if no movement is detected in the ring with respect to the insulator and there is no physical damage to the grading device and the attachment assembly.

The manufacturer should provide with documentation that the insulator design with applicable grading devices will minimize or eliminate corona discharge activity under wet and dry condition.

5.0 Power Arc Test:

Three insulators having any one design of end fittings shall be tested for power arc endurance while tensioned horizontally at 3000lb. An arc shall be initiated across the insulator by means of a Copper shorting fuse wire. The arc shall burn 15 to 30 cycles and its current magnitude is determined by ampere- time product(IxT) equal to a minimum of 150kA cycles. Each insulator is only acceptable if there is no exposure of the core, no mechanical separation of the insulator, and no cracks in the housing.

SECTION-II (Part-I)**GUARANTEED TECHNICAL PARTICULARS 70KN, 90KN, 120 KN & 160 KN
LONG ROD POLYMER INSULATORS**

S. No	Particulars Value	Standard Technical Particular value				As offered by the bidder			
		132KV POLYMER INSULATORS		220 KV POLYMER INSULATORS		132KV POLYMER INSULATORS		220 KV POLYMER INSULATORS	
		Suspension	Tension	Suspension	Tension	Suspension	Tension	Suspension	Tension
		70 KN	90 KN	70 KN	160 KN	70 KN	90 KN	70 KN	160
		Single/double Suspension string	Single/ Double Tension string	Single/double Suspension string	Single/ Double Tension string	Single/double Suspension string	Single/ Double Tension string	Single/double Suspension string	Single/ Double Tension string
		1 x 9/ 2x9	1x10/ 2x10	1x13/ 2x13	1 x 14/ 2x14	1 x 9/ 2x9	1x10/ 2x10	1x13/ 2x13	1 x 14/
1	Nominal System Voltage level	132 KV		220 KV					
2	Highest System Voltage Level	145 KV		245 KV					
3	Type	B&S		B&S					
	MATERIAL								
	a) FRP Rod	ACR Boron Free							
	b) Housing	Silicone Rubber							
	c) End fitting	Casting/Forged Steel HDG							
4	Colour/Surface	Grey/ Smooth							
5	Type of Locking Device & its material	R-clip of SS							
6	Ball & Socket diameter	16 mm	16 mm	16 mm	20 mm				
7	Size & designation of Boll & Socket	16 mm	16 mm	16 mm	20 mm				
8	Creep-age distance (mm) (minimum)	4495		7595					
9	Power frequency one minute dry withstand voltage kV (rms)	325	325	460	460				

10	Power frequency one Minute wet withstand voltage kV(rms)	275	275	460	460				
1 1	Lightning Impulse withstand voltage dry & wet KVP)	650	650	1050	1050				
1 2	Sectional length / Length of Insulator strings (mm)	1305	1450	2030	2175				
13	Guaranteed material failing load	70 KN	90 KN	70 KN	160KN				

SCHEDULE-I**PRICE AND QUANTITY**

S. No	Particular	Unit	Qty. reqd.	Qty. offered	Unit FOR Ex-works price inclusive of packing charges (Rs./unit)	GST	Forwarding & Freight Charges (Rs./unit)	GST	Total FOR price	Total amount
1	2	3	4	5	6	7	8	9	10 (6+7+8+9)	11 (10x5)
1	Long Rod Polymer Insulators of 70 KN for 132 KV	Nos	2805							
2	Long Rod Polymer Insulators of 90 KN for 132 KV	Nos	4045							
3	Long Rod Polymer Insulators of 70 KN for 220 KV	Nos	385							
4	Long Rod Polymer Insulators of 160 KN for 220 KV	Nos	440							

- 1) The price quoted in column 6 shall be FIRM price only.
- 2) The offer with the rates given in any form/ proforma, other than that mentioned above shall be summarily rejected.
- 3) In case any of the material import is involved, no import assistance shall be provided by CSPTCL.
- 4) Rate in various tapering step shall not be considered & hence rate shall be indicated by singular figure only.
- 5) Any variation on taxes/statutory payment on account of change in policy of Govt. either upward or downward within contractual delivery schedule will be on CSPTCL account. However, any upward change on account of increase in turnover shall be on Bidder's account.
- 6) Only statutory variation due to Govt regulations in GST during Contractual delivery period shall be paid by CSPTCL
- 7) The rates will be quoted through online e bidding portal (SAP SRM system) only. Price schedule duly filled in hard copy is not required

Signature & Seal of Bidder

SCHEDULE-II
TECHNICAL INFORMATION

- (i) Strike-off, whichever is not applicable
(ii) Separate sheet should be used, wherever necessary.

1	Whether Polymer insulator offered are exactly as per the technical specification	Yes/No
2	Whether Polymer insulator quoted for lines	Yes/No, give details
3	Whether the copies of orders received for minimum 3 years experience in supply along with relevant MRC as mentioned in PQR-3.	Yes/No, give details
4	Whether performance certificate from such organization regarding supplies enclosed	Yes/No, give details
5	Whether pamphlets/technical details literatures along with drawing etc. furnished with the offer	Yes/no, give details
6	Whether the Bidder agrees to furnish materials test certificates in respect of chemical composition and physical properties from Govt./Govt. Approved Lab. With each batch of supplies	Yes/No
	Whether the Bidder has furnished details of manufacturing materials and short history of plant	Yes/No, give details
8	Whether details of manufacturing process furnished with offer	Yes/No, give details
9	Whether all testing facilities are available, if so, give details and in case of non-availability of facilities indicate approved lab. available in surrounding areas where tests are proposed to be conducted	Yes/No, give details
10	Whether you agree for inspection by Company's representative prior to dispatch and bear the testing charges for all tests as per relevant standards	Yes/no
11	Whether Polymer insulator quoted are as per IS Specification relevant to each items	Yes/No, give details

Place: -
Date: -

Signature & Seal of the Bidder

SCHEDULE-III**SCHEDULE OF TECHNICAL DEVIATIONS.**

We/I have carefully gone through the Technical specification and the General condition of contract and we/I have satisfied ourselves/myself and hereby conform to the requirement of technical specification and General Conditions of contract except for the deviations, which are given below:-

S.No.	Descriptions & Clause No. of The specification & page no.	Stipulation in specification	Deviation offered	Remarks regarding justification Of the deviation.
-------	--	---------------------------------	----------------------	--

Dated

Name and seal of the tendering
Company.

SCHEDULE-IV**COMMERCIAL INFORMATION**

(i) Strike-off, whichever is not applicable

(ii) Separate sheet should be used, wherever necessary.

1	Name of Manufacturer	
2	Address of Manufacturer	a)Office : b) Works:
3	Telephone Nos./ FAX No.	Office : Works: O/R
4	Date of starting manufacturing of Polymer Insulator	
5	Date of Type test of tendered products whether documents attached.	
6	Whether Polymer Insulator confirm latest IS specification.	
7. i)	Earnest Money details	Bank draft/Banker's cheque/ Cash with Manager (RAO:HQ), CSPTCL, Raipur No.
ii)	Amount of EMD and full details	Rs.
iii)	If exempted, state whether bidder is	SSI Unit of CG/Small scale unit registered with NSIC/Fully owned State Central Govt. Unit.
iv)	Reference of documentary evidence regarding exemption enclosed	Yes/No
8.	Whether the offer is valid for 180 days from the date of opening of commercial/technical bid	Yes/No (If no, state validity period)
9	Rate of GST	
10.	MODE OF DESPATCH Note:- Despatch by Road is acceptable:- i) only when the Bidder agrees to supply the material on door delivery bases and through bank approved road transporters and ii) Agrees for payment after receipt of material in good condition	By Rail/By Road
11	FREIGHT CHARGES	Inclusive @

		Exclusive @
12.	Discount :- a) Whether any rebate/discount is offered b) If yes, whether the rebate is unconditional/conditional c) If conditional state condition	Yes/No
13.	PAYMENT TERMS:- Whether Companies terms of payment is acceptable to the Bidder (if no state conditions)	Yes/No
14.	DELIVERY PERIOD:- a) Commencement of supplies from date of order b) Completion & supply rate from the date of Order.	
15.	PENALTY CLAUSE Whether agreeable to Company Penalty clause	Yes/No
16.	GUARANTEE PERIOD: - Intimate guarantee period of material offered by you	Yes/No
17.	SECURITY DEPOSIT :- Whether agreeable to CSPTCL's Security Deposit clause (As per integrity pact validity up to 5 years)	Yes/No
18	EXTENSION ORDER:- Whether you are agreeable to accept extension order on the same rates, terms & condition if any extension order is placed within 6 months from the date of placement of detailed order.	Yes/No
19	Please mention whether rates offered are applicable for part quantities.	Yes/No
20.	Whether all testing charges included in quoted rates	YES / NO
21.	Whether Packing condition is as per our specification.	YES / NO
22.	Whether you are State/Central Govt. undertaking	YES / NO
23.	Have you furnished documentary evidence in respect of qualifying requirement.	YES / NO
24.	Whether manufacturer is ready for Stage test during manufacturing of hardware's.	YES / NO
25	Mention turn over of the firm for best three financial years out of last 05 financial years (Enclose balance sheets in support)	
	2015-16	
	2016-17	
	2017-18	
	2018-19	
	2019-20	

26	C.A. audited notarized copy of net worth for the last three financial years submitted	YES / NO
27.	Whether dimensional sketch indicating approximate. Weight of each Polymer Insulator enclosed.	YES / NO
28.	Whether integrity pact in the prescribed format executed in non judicial stamp paper worth Rs.300/- has been enclosed	Yes/No
29	Whether the testing facility for acceptance test is available at the bidder's factory premises	YES / NO
30	whether you agree to arrange acceptance test at your works	
31	<u>Indicate quantity quoted in Price schedule</u>	In nos.

Place: -

Date: -

SIGNATURE OF BIDDER**NAME IN FULL****DESIGNATION/STATUS IN THE VARIABLE****COMPANY SEAL**

SCHEDULE – V**SCHEDULE OF COMMERCIAL DEVIATIONS.**

We/I have carefully gone through the Commercial requirement of the specification and the General condition of contract and we/I have satisfied ourselves/myself and hereby conforms to the requirement of technical specification and General Conditions of contract except for the deviations, which are given below:-

S.No.	Descriptions & Clause No. of The specification Page No.	Stipulation in specification	Deviation offered	Remarks regarding justification of the deviation.
-------	--	---------------------------------	----------------------	--

Dated

Name and seal of the tendering
Company.

Place

SCHEDULE-VI
ANNUAL TURNOVER

Annual Turnover Data for the Last 5 Years	
Year	Amount in Rs.
2015-2016	
2016-2017	
2017-2018	
2018-2019	
2019-2020	
Total Turnover	

The information supplied should be the Annual Turnover of the Bidder for each year for contracts in progress or completed.

Date:

Signature :

Name :

Status :

Seal of the Tendering Co.:

SCHEDULE : VII

SCHEDULE OF BIDDER'S EXPERIENCE

Bidder shall furnish here a list of similar jobs executed by him. A reference may be made by the purchase to them in order be considers such a reference necessary.

S.No.	Name & Description of work. (adequate details to be given certifying the work done)	Order No. & date	Period & date of supply	Client or order placing authority	Person to whom reference to be made

Signature of Bidder

Name :

Company :

SCHEDULE– VIII(A) **Name of the manufacturer, place of manufacturing, testing and inspection.**

S.No.	Description	Manufacturer	Place of manufacturing	Date of testing and inspection

(B) Details of Polymer insulator supplied for minimum experience of 3 years as per PQR-3

Description	Qty.	Year				

(C) Detail of type test carried out

SI No.	Name of Items	Name of test Lab	Date of testing	Reference of relevant ISS

The bidder should submit the detailed order copy and execution certificate for supply of Polymer Insulators from Govt. utilities like SEB, PGCIL, NTPC, State Transco., and Railway etc.

Dated

Name and seal of the tendering
Company.

Place

SCHEDULE-IX

PROFORMA FOR BANK GUARANTEE TOWARDS SECURITY DEPOSIT
(To be executed on non-judicial stamp paper of Rs. 250/- and Revenue stamp may be affixed on Bank Guarantee)

Bank Guarantee No..... Dtd.....

In consideration of the Chhattisgarh State Power Transmission Company Limited, Raipur (A successor company of Chhattisgarh State Electricity Board, Raipur hereinafter referred to as 'CSPTCL') having agreed to accept this Bank Guarantee in lieu of cash deposit by way of Security for due and faithful performance required from M/s. _____ (herein after referred to as "Contractors", the Bank of _____ hereby agrees unequivocally and unconditionally to pay within 48 hours on demand in writing from the Chhattisgarh State Power Transmission Company Limited or any officer authorized by it in this behalf of any amount upto and not exceeding Rs.....(in words) only to the said Chhattisgarh State Power Transmission Company Limited on behalf of the aforesaid M/s who have tendered and contracted for the supply of materials, equipments or services to the said the Chhattisgarh State Power Transmission Company Ltd, against order No..... dtd..... for the order value of Rs.....

The beneficiary of this Bank Guarantee shall be Chhattisgarh State Power Transmission Company Limited, Raipur (A Successor company of CSEB Raipur). The proceeds / encashment of this Bank Guarantee would go in the name of Chhattisgarh State Power Transmission Company Limited, Raipur (A Successor company of CSEB Raipur).

This agreement should be valid and binding on this bank upto and including _____ of for such further period as may hereunder be mutually fixed from time to time in writing by the Chhattisgarh State Power Transmission Company Ltd. and the contractor and shall not be terminable by notice or any change in the constitution of the aforesaid bank or the firm of Contractors or by any others reasons whatsoever and the Banker's liability hereunder shall not be impaired or discharged by any extension of time or variations or alteration made, given conceded or agreed to with or without the Bank knowledge or consent by or between the Chhattisgarh State Power Transmission Company Ltd. and contractor in the existing and / or further tenders and / or contracts.

It is agreed by the Bank with the CSPTCL that if for any reason a dispute arises concerning the Bank's liability to pay the requisite amount to the CSPTCL under the terms of this guarantee the competent court at Raipur alone shall have the jurisdiction to determine the said dispute and that this shall be without prejudice to the liability of the Bank under the terms of this guarantee being unequivocal and unconditional as mentioned above.

The liability under this guarantee is restricted to Rs..... (In words) only. This guarantee shall remain in force until Unless a demand to enforce a claim under the guarantee is made under this Bank Guarantee by the CSPTCL to the Bank within six months from that date the rights of the Chhattisgarh State Power Transmission Company Ltd under this guarantee shall be forfeited and Bank shall be relieved and discharged from all liabilities there under.

WITNESSES: -

SIGNATURES

Authorized Signatories of Bank

1. Signed. _____

2. for _____ Bank

SCHEDULE-X

PRE-CONTRACT INTEGRITY PACT

1. GENERAL

- 1.1 This pre-bid contract Agreement (herein called the Integrity Pact) is made on.....day of the month20..., between the CSPTCL acting through Shri.....CE(S&P.), CSPTCL (hereinafter called the “BUYER”, which expression shall mean and include, unless the context otherwise requires, his successors in the office and assigns) and the First Party, proposes to procure (name of the Stores/Equipment/Work/Service) and M/s.....represented by Shri..... Chief Executive Officer (hereinafter called the “BIDDER/Seller”, which expression shall mean and include, unless the context otherwise requires, his successors an permitted assigns) and the Second Party, is willing to offer/has offered.
- 1.2 WHEREAS the BIDDER is a Private Company/Public Company/ Government undertaking/Partnership/Registered Export Agency, constituted in accordance with the relevant law in the matter and the BUYER is a Ministry/Department of the Government, performing its function on behalf of the CSPTCL.

2. OBJECTIVES

NOW, THEREFORE, the BUYER and the BIDDER agree to enter into this pre-contract agreement, hereinafter referred to as Integrity Pact, to avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the Contract to be entered into with a view to:-

2.1. Enabling the BUYER to obtain the desired Stores/Equipment/Work/Service at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and 2.2. Enabling BIDDERS to abstain from bribing or indulging in any corrupt practices in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing any corrupt practices and the BUYER will commit to prevent corruption, in any form, by its official by following transparent procedures.

3. COMMITMENTS OF THE BUYER

The BUYER commits itself to the following:-

- 3.1 The BUYER undertakes that no official of the BUYER, connected directly or indirectly with the contract, will demand, take promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting of implementation process related to contract.
- 3.2 The BUYER will, during the pre-contract stage, treat BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to the other BIDDERS.

- 3.3 All the officials of the BUYER will report the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the BUYER with the full and verifiable facts and the same prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

4. COMMITMENTS OF BIDDERS

The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-

- 4.1. The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
- 4.2. The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage, or inducement to any official of the BUYER or otherwise in procuring the Contract of forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the CSPTCL for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the CSPTCL.
- 4.3. The BIDDER further confirms and declares to the BUYER that the BIDDER in the original Manufacture/Integrator/Authorized government sponsored export entity of the stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the BUYER or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 4.4. The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payment he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 4.5. The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 4.6. The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 4.7. The BIDDER shall not use improperly, for purpose of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposal and business details, including

- information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 4.8. The BIDDER commits to refrain from giving any compliant directly or through any other manner without supporting it with full and verifiable facts.
 - 4.9. The BIDDER shall not instigate or cause to instigate any third person to commit any of the acts mentioned above.

5. PREVIOUS TRANSGRESSION

- 5.1. The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process.
- 5.2. If the BIDDER makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

6. EARNEST MONEY (SECURITY DEPOSIT)

- 6.1. Every BIDDER while submitting commercial bid, shall deposit an amount as specified in RFP as Earnest Money/Security Deposit, with the BUYER through any of the following instruments:
 - (i) Bank Draft or a Pay Order in favour of.....
 - (ii) A confirmed guarantee by an Indian Nationalized Bank, promising payment of the guarantee sum to the..... (BUYER).....on demand within three working days without any demur whatsoever and without seeking any reasons whatsoever. The demand for payment by the BUYER shall be treated as conclusive proof of payment.
 - (iii) Any other mode or through any other instrument (to be specified in the RFP).
- 6.2. The Earnest Money/Security Deposit shall be valid upto a period of five years or the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and BUYER, including warranty period, whichever is later.
- 6.3. In the case of successful BIDDER a clause would also be incorporated in the Article pertaining to Performance Bond in the Purchase Contract that the provisions of Sanctions for violation shall be applicable for forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 6.4. No interest shall be payable by the BUYER to the BIDDER on Earnest Money/Security Deposit for the period of its currency.

7. SANCTIONS FOR VIOLATIONS

- 7.1. Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the BUYER to take all or any one of the following actions, wherever required:-
 - (i) To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.

- (ii) To forfeit fully or partially the Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bond (after the contract is signed), as decided by the BUYER and the BUYER shall not be required to assign any reason therefore.
- (iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
- (iv) To recover all sums already paid by the BUYER, and in case of the Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate while in case of a BIDDER from a country other than India with Interest thereon 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the BUYER in connection with any other contract such outstanding payment could also be utilized to recover the aforesaid sum and interest.
- (v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest.
- (vi) To cancel all or any other contracts with the BIDDER and the BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation/rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
- (vii) To debar the BIDDER from participating in future bidding processes of the CSPTCL for a minimum period of five years, which may be further extended at the discretion of the BUYER.
- (viii) To recover all sums paid in violation of this Pact by BIDDER(s) to any middlemen or agent or broken with a view to securing the contract.
- (ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.
- (x) If the BIDDER or any employee of the BIDDER or any person action on behalf of the BIDDER, either directly or indirectly, is closely related to any of the officers of the BUYER, or alternatively, if any close relative of an officer of the BUYER has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filling of tender. Any failure to disclose the interest involved shall entitle the BUYER to rescind the contract without payment of any compensation to the BIDDER.

The term "close relative" for this purpose would mean spouse whether residing with the Government servant or not, but not include a spouse separated from the Government servant by a decree or order of a competent court; son or daughter or step son or step daughter and wholly dependent upon Government servant, but does not include a child or step child who is no longer in any way dependent upon the Government servant or of whose custody the Government servant has been deprived of by or under any law; any other person related, whether by blood or marriage, to the Government servant or to the Government servant's wife or husband and wholly dependent upon Government servant.
- (xi) The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the BUYER, and

if he does so, the BUYER shall be entitled forthwith to rescind the contract and all other contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.

- 7.2. The decision of the BUYER to the effect that a breach of the provisions of this pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Monitor(s) appointed for the purpose of this Pact.

8. FALL CLAUSE

- 8.1. The BIDDER undertakes that if has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Department of the Government of Chhattisgarh or PSU and if it is found at any stage that similar product/systems or sub systems was supplied by the BIDDER to any other Department of the Chhattisgarh or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the BUYER, if the contract has already been concluded.

9. INDEPENDENT MONITORS

- 9.1. The BUYER will appoint Independent Monitors (hereinafter referred to as Monitors) for this Pact.
- 9.2. The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 9.3. The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 9.4. Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of meetings. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.
- 9.5. As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER.
- 9.6. The Monitor will be submit a written report to the designated authority of BUYER/Secretary in the department/within 8 to 10 weeks from the date of reference or intimation to him by the BUYER /BIDDER and, should the occasion arise, submit proposal for correcting problematic situation.

10. FACILITATION OF INVESTIGATION

In case of any allegation of violation of any provision of this fact or payment of commission, the BUYER or its agency shall be entitled to examine all the documents including the books of Account of the BIDDER and the BIDDER shall provide necessary information of the relevant documents and shall extend all possible help for the purpose of such examination.

11. LAW AND PLACE OF JURISDICTION

This pact is subject to Indian Law, the place of performance and jurisdiction shall be the seat of the BUYER.

12. OTHER LEGAL ACTIONS

The actions stipulated in this integrity Pact are without prejudice to any other legal action that may following in accordance with the provisions of the any other law in force relating to any civil are criminal proceeding.

13. VALIDITY

- 13.1 The validity of this integrity Pact shall be from the date of its signing and extend up to 5 years or the complete execution of the contract to the satisfaction of both the BUYER and the BIDDER/Seller whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.
- 13.2. If one or several provision of this pact turn out to be invalid; the remainder of this pact shall remain valid. In such case, the parties will strive to come to an agreement to their original intention.
- 14. The parties hereby sign this integrity Pact aton.....

BUYER
Chief Engineer (S&P)
CSPTCL, Raipur

BIDDER
CHIEF EXECUTIVE OFFICER
Department/PSU

Witness

- (i).....
.....
- (ii).....
.....

Witness

- (i).....
.....
- (ii).....
.....

SCHEDULE-XI
CHECK LIST

S.No	ITEMS	REFERENCE	Whether submitted / not submitted
1	Earnest money enclosed	Covering letter (As per clause 8.1 Section-I)	Yes/No
2	Technical Information	Schedule-II	Yes/No
3	Technical Deviation	Schedule-III	Yes/No
4	Commercial Information	Schedule-IV	Yes/No
5	Commercial Deviation	Schedule-V	Yes/No
6	CA certified Annual turnover	Schedule-VI	Yes/No
7	Bidders experience	Schedule-VII	Yes/No
8	Manufacturing details	Schedule-VIII	Yes/No
9	Bank guarantee Performa for Security Deposit	Schedule-IX	Yes/No
10	Pre-contract integrity pact	Schedule-X	Yes/No
11	NSIC/DIC/ Factory registration certificate	As per PQR 1	Yes/No
12	For 5 years experience in supply –Copy of purchase order along with relevant MRC/Performance and 3 year satisfactory performance	As per PQR 2(a)	Yes/No
13	For CG state SSI Units submit MSME registration and type test	As per PQR 2(b)	Yes/No
14	Type test certificate not older than 10 years	As per PQR 3	Yes/No
15	Financial data for previous 5 years	As per PQR 4	Yes/No
16	CA certified Net worth certificate	As per PQR 5	Yes/No
17	Declarations	As per PQR 6 and 7	Yes/No
18	CA certificate	As per PQR 8	Yes/No
19	Self attested declaration	As per PQR 9	
20	Integrity Pact	As per PQR 10 SCHEDULE-X	Yes/No

Signature & Seal of the Bidder