

**OFFICE OF THE EXECUTIVE DIRECTOR (C&LM)  
CHHATTISGARH STATE POWER TRANSMISSION CO. LTD  
DAGANIYA, PO:SUNDER NAGAR RAIPUR, C.G. PIN 492 013  
(A CG GOVT UNDERTAKING)**

TEL. (0771) – 2574221, 2574044, FAX: (0771)- 2574222

**TENDER SPECIFICATION NO: TR- 492**

**River crossing by height raising of existing 33 KV Birkona (Koni) feeder  
to 33/11 KV Circuit house sub-station on labour contract basis**

LAST DATE OF SALE OF TENDER	10.08.2021	17:30 Hrs
LAST DATE OF SUBMISSION OF TENDER	11.08.2021	15:00 Hrs
DATE & TIME OF OPENING OF TENDER (TECHNO-COMMERCIAL)	11.08.2021	15:30 Hrs

**Cost of tender Document:**

- i. Rs 1680/- (Incl. 12% GST) Purchase from O/o ED (C&LM).**
- ii. Rs 1770- (Incl. 18% GST) if downloaded from website.**

**CHHATTISGARH STATE POWER TRANSMISSION CO. LTD**  
**(A CG GOVT UNDERTAKING)**

ISSUED to M/s -----

Cost of Tender documents Rs.....

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

Name of Bank -----

**Signature & Seal of Issuing Authority**

**TENDER FORM**

The undersigned hereby tender and offer (subject to company's conditions of tendering), the CSPTCL 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, 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.
- (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 Company 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 .....20....

Bidder's signature -----

Name & Address -----

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Company Seal -----

**Note – This form must be returned  
in original while tendering**

CIN-U40108CT2003SGC015820

GSTN-22AADCC5773E1ZX

**CHHATTISGARH STATE POWER TRANSMISSION COMPANY LIMITED**

(A Govt. of Chhattisgarh Undertaking)

**OFFICE OF THE EXECUTIVE DIRECTOR (C&LM)**

Block-4, Near CSPHCL Dispensary, Dagania, Raipur (C.G.)

Website: [www.cspc.co.in](http://www.cspc.co.in) E-Mail- [ce.eht@cspc.co.in](mailto:ce.eht@cspc.co.in) Phone no. 0771 – 2574221, 2574224 Fax No. 2574222

ED/C&amp;LM/Works/ TR-476, TR-491 &amp; TR-492/973

Raipur, Date: 29.07.2021

**NOTICE INVITING TENDER**

Sealed tenders are invited for following EHV work on labour contract basis as detailed hereunder:

Sl No	TR No	Name of work	EMD (Rs)	Cost of tender form (Rs) (Incl. GST)		Date of opening
				Printed tender form	Downloaded from website	
1.	TR-476	Construction of 01 No. 40 MVA X-mer bay at 132 KV S/s Mohla	9,000/-	1,120/-	1,180/-	24.08.21
2.	TR-491	Construction of 03 No. 132 KV feeder bay for M/s Shaurya Ispat Udyog Pvt. Ltd. Raipur and 02 No. 132 KV feeder bay for accommodating 132 KV DCDS Kuthrel to Math Kharora line at 220 KV S/s Kuthrel	23,000/-	1,680/-	1,770/-	25.08.21
3	TR-492	River crossing by height raising of existing 33 KV Birkona (Koni) feeder to 33/11 KV Circuit house sub-station	20,300/-	1,680/-	1,770/-	11.08.21

Note: (i) in case any of the above date is declared as holiday then the particular date will automatically get shifted to next working day.

(ii) **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.**

**TERMS AND CONDITIONS:-**

- (i) The tender specification can be purchased from the office of ED (C&LM), CSPTCL, Raipur till one day before the date of opening on any working day on payment of **Rs.1,120.00/Rs.1,680.00 (Including GST) (non refundable)** in the form of DD in favour of Manager, (RAO-HQ), CSPTCL, Raipur (C.G.), payable at Raipur CG accompanied with firms application on its letter head. If tender document is required by post then additional Rs. 200/- is to be paid along with cost of document. CSPTCL shall not be responsible for any postal delay regarding receipt/ non-receipt of tender documents. The tender document can also be down loaded from official website of CSPTCL ([www.cseb.gov.in/csptcl](http://www.cseb.gov.in/csptcl)) and required tender fee **Rs.1,180.00/Rs.1,770.00 (Including GST) (nonrefundable)** in form of DD in favour of Manager (RAO: HQ), CSPTCL, Raipur (C.G.) payable at Raipur (C.G.) in envelope-I containing EMD should also be submitted. The details of DD be mentioned on the outer side of the envelope-I also. **Please note carefully in absence of aforesaid requisite tender fee in envelope-I, further bids shall not be considered for opening. The bidders who download the documents are requested to remain in contact with this office for any development in the tender.**
- (ii) The tenders, duly filled, shall be accepted up to 15:00 Hrs. on the due date. The techno-commercial bids shall be opened at 15:30 Hrs on the due date. CSPTCL reserves the right to accept or reject any or all the offers, in part or full without assigning any reason whatsoever.

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**EXECUTIVE DIRECTOR (C&LM)**  
**CSPTCL–RAIPUR**

## **SECTION – I**

### **INSTRUCTION TO THE BIDDERS**

Sealed tenders are invited from experienced eligible bidders for the work river crossing by height raising of existing 33 KV Birkona (Koni) feeder to 33/11 KV Circuit house sub-station on labour contract basis detailed as below:

<b>Tender specification No.</b>	:	TR-492
<b>Due date of opening of Tender</b>	:	11.08.2021 at 15:30 Hrs
<b>Cost of Tender Documents</b>	:	(i) Rs. 1680/- (Incl. 12% GST) Purchase from O/o ED (C&LM) (ii) Rs. 1770/- (Incl. 18% GST) if downloaded from website
<b>Earnest money</b>	:	Rs. 20,300/- (accepted in the form of DD only, in favour of Manager, (RAO-HQ), CSPTCL, Raipur and the EMD will be returned after the finalization of tender.
<b>Departmental stores &amp; Distribution of materials</b>	:	All line materials i.e. stub, tower part, nut & bolts, hardware, conductor, earth wire etc. will be supplied by the CSPTCL and materials required for foundation work i.e. tor steel, binding wire for reinforcement, cement, metal & sand etc. will be supplied by the Contractor. <b>The contractor shall collect tower parts from Work Shop Dn. Bhilai and all the line materials from area store Bilaspur on his own cost &amp; by deploying own transport including loading &amp; unloading.</b>
<b>Completion Period</b>		<b>2</b> calendar months from the date of issue of transmission line profile or tower schedule.
<b>Cost of material for the Purpose of Insurance</b>	:	Approx. Rs 27 lakh.

**NOTE:**

1. In case due date of tender opening is declared as holiday then the particular date will automatically get shifted to next working day.
2. The tender specification duly signed with seal in each page must be submitted with techno-commercial bid.

## 1. SCOPE OF WORK

The work includes check survey, excavation, stub setting, concreting, erection of tower, welding, painting, stringing, final checking etc. for the work river crossing by height raising of existing 33 KV Birkona (Koni) feeder to 33/11 KV Circuit house sub-station on labour contract basis. All line materials i.e. stub, tower part, nut & bolts, hardware, conductor, earth wire, insulator etc. will be supplied by the CSPTCL and materials required for foundation work i.e. tor steel, binding wire for reinforcement, cement, metal & sand etc. will be supplied by the Contractor. **The contractor shall collect tower parts from Work Shop Dn. Bhilai and all the line materials from area store Bilaspur on his own cost & by deploying own transport including loading & unloading.** The materials required for foundation work such as tor steel, binding wire, cement metal & sand is to be arranged by the contractor at his own cost.

**The contractors are advised to inspect the site before participation in tender to assess the actual quantum of work and avoid any dispute in future.**

## 2. PRE-BID QUALIFICATIONS/ REQUIREMENTS:-

### (i) PROJECT CAPABILITY:

Only sole bidder shall be eligible to participate in tender. No consortium/Joint Venture will be accepted.

The bidder should have executed as the sole bidder / any other partner of Joint Venture at least one work of construction activities of the EHV lines/substations namely :

- a. stub setting / setting of template
- b. tower erection
- c. stringing
- d. bay work of EHV Sub-Stations
- e. erection of equipment/structure in EHV S/S

in any power utility/ transmission licensee/ generating company /central/ state Govt. undertaking in India. The date of order should not be older than 7 years from the date of issue of NIT of the instant tender.

OR

The bidder should have worked as a Sub-contractor of the main contractor of turnkey projects in any power utility/ transmission licensee/ generating company /central/ state Govt. undertaking in India for the above mentioned work. The date of order should not be older than 7 years from the date of issue of NIT of the instant tender.

OR

The bidder should have a retired Electrical Engineer with minimum 5 years of field experience in the capacity not below an Executive Engineer in Transmission Wing of an Electricity Company / Transco / PSU as partner or proprietor.

**The following document must be submitted against PQR 2 (i):**

Particular	Document to be submitted
(i) Only sole bidder shall be eligible to participate in tender. No consortium/Joint Venture will be accepted.	Documentary proof of completing any of the above work by authentic authority regarding work of construction activities

<p>The bidder should have executed as the sole bidder / any other partner of Joint Venture at least one work of construction activities of the EHV lines/substations namely</p> <p>a. stub setting / setting of template</p> <p>b. tower erection</p> <p>c. stringing</p> <p>d. bay work of EHV Sub-Stations</p> <p>e. erection of equipment/structure in EHV S/S</p> <p>in any power utility/ transmission licensee/ generating company /central/ state Govt. undertaking in India. The date of order should not be older than 7 years from the date of issue of NIT of the instant tender.</p>	<p>of the EHV lines / Sub-station in any power utility/ transmission licensee/ generating company /central/ state Govt. undertaking in India.</p>
<p>should have worked as a Sub-contractor of the main contractor of turnkey projects in any power utility/ transmission licensee/ generating company /central/ state Govt. undertaking in India for the above mentioned work. The date of order should not be older than 7 years from the date of issue of NIT of the instant tender.</p>	<p>Documentary proof from the main contractor of turnkey project in any power utility/ transmission licensee/ generating company /central/ state Govt. undertaking in India authorizing the contractor / firm as a sub-contractor and proof of completing the work may be attached.</p>
<p>should have a retired Electrical Engineer with minimum 5 years of field experience in the capacity not below an Executive Engineer in Transmission Wing of an Electricity Company/Transco/PSU as partner or proprietor.</p>	<p>1.Required retirement cum experience certificate from the Electricity Company / Transco / PSU.</p> <p style="text-align: center;">&amp;</p> <p>2. document of partnership or proprietorship with retired person.</p>

- (ii) Net Worth of the bidder for each of the last 3 Financial Years i.e. 2017-18, 2018-19 & 2019-20 out of submitted balance sheets as per clause (iii) below should be positive. The bidder should be in existence for at least 3 financial years. In case of the bidder for whom audit of annual accounts is not required, a self-declaration & CA certificate to that effect and CA certificate for net worth of each year is required. Net worth means the sum total of the paid up 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. Net worth means the sum total of the paid up 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.
- (iii). The Bidder must have Minimum Average Annual Turnover (MAAT) for best 3 years out of last 5 financial years i.e. 2015-16, 2016-17, 2017-18, 2018-19 & 2019-20 of **Rs. 6,09,000.00 (Rupees six lakh nine thousand only)**. For calculation of turnover, other income indicated in balance sheet shall not be taken into account. In case of the bidder for whom audit of annual accounts is not required, a self-declaration & CA certificate to that effect and CA certificate for annual turnover of each year is required.

- (iv). The contractor should have valid A-Class Electrical License issued by competent authority of C.G. Govt. & it should be submitted along with the offer or an undertaking may be furnished to this affect that they will obtain and submit the license within one month from the date of order in respect of the said work, failing which order is liable for rejection without notice and punitive action as per tender clause No. 28 of section –II may be initiated against the contractor.
- (v) Bidder should have EPF Code Number allotted by EPF Commissioner & it should be submitted along with the offer or an undertaking may be furnished to this affect that they will obtain and submit the EPF Code Number within one month from the date of order in respect of the said work; otherwise order is liable for rejection without notice.
- (vi) The contractor should have valid labour License issued by competent authority of C.G Govt. & it should be submitted along with the offer or an undertaking may be furnished to this affect that they will obtain and submit the license within one month from the date of order in respect of said work; otherwise order is liable for rejection without notice.

It will be the sole responsibility of the sole bidder to make sure 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 for 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 by giving them only one chance to submit required documents / clarifications / confirmation within specified time limit.

### **3. EMD**

- (i) The bidder will submit EMD amounting Rs. 20,300.00 (Rs. Twenty thousand three hundred only) in the form of DD in favour of Manager, (RAO-HQ), CSPTCL Raipur.
- (ii) No interest will be paid on EMD amount, which will be returned to bidders after finalization of tender.
- (iii) Tender not accompanied by Earnest Money shall be disqualified.

### **4. SUBMISSION OF TENDER**

Sealed Tenders are invited on three part basis, One envelope containing the E.M.D. clearly super-scribed “**Earnest money**” on Top. In case, the tender has been downloaded from CSPTCL’s official website, the cost of tender document in the form of DD in favour of Manager (RAO:HQ), CSPTCL, Raipur be submitted along with the tender in EMD envelope. In absence of same, the tender shall not be opened. The bidders who download the documents are requested to remain in contact with this office for any development in the tender.

Second envelope clearly super-scribed “**Techno-commercial Bid**” should contain the tender form, Techno-commercial details and other documents along with integrity pact and a copy of un-priced / un-filled price schedule.

Third envelope should contain the price bid clearly super -scribed “**Price Bid**” on Top. All the three envelopes shall be kept in one sealed envelope addressed to the Executive Director (C&LM), CSPTCL, Raipur with the name of work, tender specification number, due date of tender, amount & mode of E.M.D. and name of the bidder super-scribed on the cover. The offer should be dropped in tender box, kept in the office of ED (C&LM) CSPTCL, Dangania, Raipur (CG).

## 5. OPENING OF BID

Tenders will be opened in the office of ED (C&LM), CSPTCL, Dangania, Raipur (CG) 492013, in the presence of participant bidders or their authorized representatives (limited to two persons only with a valid authorization from their employer). The Bidders/ their representative shall sign a register / sheet in evidencing their attendance.

The offer shall be opened in the following manner:-

Part – I	Envelope –I	Earnest money
Part – II	Envelope –II	Qualifying Requirement &Techno Commercial Bid
Part – III	Envelope –III	Price Bid

6. At the time of opening of the Part-I and Part-II i.e. Earnest money & Qualifying Requirement, Techno Commercial Bid of the offer, shall be opened on due date as indicated in tender notice in chronological order. If the earnest money and tender form are found satisfactory, then the qualification requirement and techno-commercial bid shall be opened. All the relevant details will be read out.

Price bid of successful Techno- commercial bidders would be opened at a later date with due information to the qualifying bidders.

## 7. PRICE BID

The bidder must quote their Prices in the Proforma given in the Schedule-III of the tender. Bidders must quote their price in accordance to the specifications and conditions. Any deviation from the above shall be considered as an alternate bid. The bids will be evaluated based on the main offer only.

- (i) Over-writing, erasures and other changes shall bear the dated initial of the person signing the tender.
- (ii) In the event of discrepancy or arithmetical error in the schedule of price, the unit price shall prevail and the total price shall be accordingly corrected by the CSPTCL. The above arithmetical correction shall be accepted but the decision of CSPTCL shall be final and binding on the bidder.
- (iii) For evaluation the price mentioned in words shall be taken if there is any difference in figures and words in the price bid.
- (iv) The quoted price should be kept valid for the contractual period or completion of the line which ever is later. Bidders are requested to **quote FIRM price inclusive of all taxes & duties except GST. While quoting prices bidders should consider benefit of Input Tax Credit (ITC) available under GST Act and passing same to CSPTCL.**
- (v) All columns shall be completely filled up properly and neatly.
- (vi) The tenders should be kept valid for a period of 180 days from the date of opening of the tenders as notified in the tender notice. In case of extension in due date of opening, the validity period shall be counted from extended due date on which TC bid has been opened.



**8. EVALUATION OF BIDS: -**

- (i) The evaluation of bids will be done by comparing the total of prices of all the items, which are needed for construction, and final commissioning of the Lines.
- (ii) The loading of the items for which the prices are not quoted by bidders. In such cases the loading will be done at highest price quoted among the bidders. But the orders will be placed at the lowest price offered among the bidders.
- (iii) The CSPTCL reserves the right to reject the lowest or any other tenders or all tenders without assigning any reason, whatsoever, if it is considered expedient in the overall interest of CSPTCL.  
The CSPTCL's decision in such matter shall be final.

**9. NON RESPONSIVE BID**

CSPTCL reserves the right to reject any bid, which is:

- (a) Not accompanied by the Earnest Money as specified above.
- (b) Not received by the due date and time specified.
- (c) In variance with specified terms and conditions.
- (d) If at any time, it is found that a material misrepresentation of the fact is made or uncovered.
- (e) The bidder does not respond promptly and thoroughly to the request for supplementary information required for the evaluation of his bid.
- (f) If the bidder fails to super scribe on the envelope containing the bid, the details of Earnest Money deposited by him, the company shall not accept any responsibility and the offers received shall be rejected and shall be returned to the bidders.

**10. COMPLETION PERIOD: -**

Time being the essence of contract, the work work river crossing by height raising of existing 33 KV Birkona (Koni) feeder to 33/11 KV Circuit house sub-station on labour contract basis should be completed within 2 (two) calendar months from the date of issue of transmission line profile or tower schedule. The contractor shall ensure to complete the work within aforesaid stipulated period.

**11. INTEGRITY PACT: -**

The bidder shall have to submit pre-contract integrity pact in the format enclosed as Schedule IV 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.

**12. QUANTUM OF WORK:**

The quantities indicated in price schedules are based on preliminary assessment hence provisional and may vary. The work is to be completed as per actual site conditions (as confirmed by the O.I.C of the work) and on same price as offered and on similar terms and conditions.

- 13. The power of attorney in respect of the person signing the tender on behalf of bidder shall be submitted along with techno – commercial bid.

14. If the firm is partnership firm, the names of the firms, its complete address and designation of all the partners may be furnished.
15. **GST No. :**  
The bidder shall have GST (Goods & Service tax) registration Number and the documentary proof of the same shall be submitted along with the techno-commercial bid. **The letter head of the firm should invariably consisting the GST No. at the top of it.**
16. As per CG Govt.'s orders No. F 7-17/2020/1-6 dtd. 02.12.2020, the contractor shall appoint Diploma Engineer for a contract which value is more than Rs. 20.00 lakh and Graduate Engineer for a contract which value is more than Rs. 1.00 Cr.. The appointed Diploma Engineer should have a minimum wage of Rs. 15,000.00 per month and Graduate Engineer should have a minimum wage of Rs. 25,000.00 per month.

## **SECTION – II**

### **GENERAL CONDITIONS OF CONTRACT**

#### **1. CONTRACTOR**

The contractor shall be deemed to have carefully examined the general conditions of specification, schedules and drawings. If he shall have any doubt as to the meaning of any portion of these general conditions or of the specification, he shall before signing the contract set forth the particulars thereof, and submit them to the Engineer in writing, so that doubt may be removed.

#### **2. CONTRACT AGREEMENT AND SECURITY DEPOSIT**

2.01 The successful contractor shall have to enter into an agreement with the CSPTCL in the approved contract agreement form on a non-judicial stamp worth Rs. 300/- + revenue stamp of 1/-Rupees within 15 days of the receipt of the work orders for due performance and observance of terms and condition of contract , failing which the contract may be cancelled.

2.02 The successful bidder will be required to deposit 10% amount of the contract price as security deposit. An amount equal to that of 10% of the total value of the order initially placed, in the form of FDR/TDR/Deposit receipt pledged in favour of Manager RAO-HQ, CSPTCL, Raipur payable at Raipur valid up to scheduled completion date plus eight months.

#### **OR**

The contractor shall furnish a bank guarantee from a nationalized / scheduled bank for an amount of 10% (ten percent) of the value of the order as a contract security. This bank guarantee shall be submitted within 15 days of receipt of work order and shall be kept valid for a period exceeding the scheduled completion date by two months with claim period of further six months. In the event of extension of completion date, the validity of the bank guarantee shall be suitably extended 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 in the prescribed form of CSPTCL.

2.03 **No interest shall be paid by CSPTCL on the security deposit.**

In case of non-fulfilment of contractual obligations by the contractor the earnest money / security deposit shall be forfeited.

2.04 The security deposit shall be released only on successful completion of work and after issue of No dues certificate by OIC of the awarded work.

#### **3. MANNER OF EXECUTION**

Erection of the line shall be carried out in an approved manner as detailed / outlined in the technical specification or in accordance with latest relevant Indian Standard Specification, to the reasonable satisfaction of the Engineer. All works shall be executed in accordance with CBIP manual and the Indian Electricity Rules-1956, and any statutory modifications thereof, wherever they are applicable, unless otherwise agreed to in writing by the Engineer.

(a) The contractor shall within 15 days after the date of issue of order submit a detail programme for the execution of work for his consent to the Engineer. The contractor shall, whenever required by the Engineer, also provide in writing for his information if general description of the arrangements and methods which the contractor proposes to adopt for the execution of the work.

- (b) If at any time, it appears to the Engineer that the actual progress of works does not conform to the programme to which consent has been given, the contractor shall produce at the request of the Engineer, a revised program showing the modifications to such program necessary to ensure completion of the works within the time of completion.

**4. ENGINEER'S SUPERVISION**

All the works shall be carried out under the direction and to the reasonable satisfaction of the Engineer-in-charge. If supervision of erection or complete erection be included, the contractor shall be responsible for the correctness of the position, levels, and dimensions of the works according to the drawings, notwithstanding that he may have been assisted by the Engineer in setting out the same.

**5. ENGINEER'S DECISIONS**

In respect of all matters which are left to the decision of the Engineer, including the granting of or withholding of certificates, the Engineer shall, if required so to do by the contractor, give in writing a decision thereon, and his reasons for such decision.

**6. PROGRAMME CHART AND PROGRESS REPORT**

The time and date of completion of the work as stipulated in the relevant clause shall be deemed to be essence of the contract. The contractor shall organize his resources and perform his work so as to complete it not later than the date agreed to. The time for completion of the works contracted for shall be reckoned from the date of handing over of site.

Besides above, a periodical review meeting between contractor and CSPTCL shall be held monthly to analyze the scheduled and actual progress, targets for the next period and to sort out bottlenecks, if any. The contractor will attend the above meetings along with necessary information in respect of supply and erection activities.

**7. REGULATION OF LOCAL AUTHORITIES**

The CSPTCL shall, through out the continuance of the contract and in respect of all matters arising in the performance thereof, serve all notices and obtain consents, way leaves, approvals and permission required in connection with the regulations and bye-laws of the local or other authority which shall be applicable to the works, However, the contractor shall obtain all the necessary licenses as per central/state/local statutory bodies at his cost.

All works shall be executed in accordance with CBIP manual and the Indian Electricity Rules-1956, and any statutory modifications thereof, wherever they are applicable, unless otherwise agreed to in writing by the Engineer.

**8. ELECTRICAL INSPECTOR FEE**

All Pre-Commissioning test on the lines shall be carried out by the contractor after receipt of clearance from the site engineer for which all the testing instruments required shall be arranged by the contractor at his own cost. Payment of statutory Electrical Inspector fee shall be borne & made by CSPTCL and filing of paper of such inspection shall be done by CSPTCL. Necessary permission

from Chief Electrical Inspector shall be arranged by the CSPTCL before charging/taken over of the lines.

**9. CONTRACT DRAWINGS**

The contractor is required to construct the transmission lines as per drawings supplied by CSPTCL to the successful contractor in confirmatory to relevant IE Rules.

**10. SAFETY PRECAUTIONS**

The contractor shall strictly follow, at all stages of erection of steel structures, the stipulations contained in the latest editions of IS-7205 “Indian Standard Safety code for erection of structural steel work”.

**11. CONTRACTOR’S REPRESENTATIVE AND WORKMEN**

The contractor shall employ at least one competent representative, whose name or names shall have previously been communicated in writing to the Engineer by the contractor, to supervise, the erection of the lines and the carrying out of the work. The said representative, of if more than one shall be employed, then one of such representatives, shall be present on the site during working hours, and any written orders or instructions which the Engineer or his duly authorized representative whose name shall have been communicated in writing to the contractor shall be deemed to have been given to the contractor.

The Engineer shall be at liberty to object to any representative or person employed by the contractor in the execution of or otherwise about the works who shall misconduct himself or be incompetent or negligent, and the contractor shall remove the person so objected to upon the receipt from the Engineer of notice in writing requiring him so to do and shall provide in his place a competent representative at the contractor’s expense.

**12. INSPECTION DURING CONSTRUCTION**

The Engineer-in-Charge or his authorized representative(s) shall be entitled at all reasonable times, access to the contractor’s premises, to inspect and supervise and test during construction work thereof for which all the reasonable necessary assistance shall be rendered by the contractor without any extra commitment. Such inspection will not relieve the contractor from their obligations under this contract.

The Engineer shall on giving seven day’s notice in writing to the contractor setting out any grounds of objection which he may have in respect of the work, be at liberty to reject all or any materials, plants or workmanship the subject of any of the said grounds of objection, which in his opinion are not in accordance with the contractor or are in his opinion defective for any reason whatsoever. Such notice shall be sent to the contractor within reasonable time after the ground upon which such notice is based have come to the knowledge of the Engineer. Unless specifically provided otherwise, all tests as per relevant ISS shall be made at the contractor’s works.

The contractor shall give the Engineer 7 (Seven) days clear notice of any work/material being ready for inspection/testing and the Engineer or his said representative shall, attend at the contractor’s premises or works within a reasonable time.

### **13. ENGAGEMENT OF WORKERS BY CONTRACTOR**

- (a). The contractor shall at his own expense provide or arrange for the provision of footwear for labour doing cement mixing work which the contractor has undertaken to execute under this contract to the satisfaction of Engineer-in-charge.
- (b). When ever demanded by the Engineer-in-charge the contractor shall submit a true statement showing: -
  - 1. Number of Labour employed by him on the work
  - 2. Their working hours
  - 3. The wages paid to them, and
  - 4. The accidents that occurred during the working period of which information required stating the circumstances under which they occurred and the extent of damage and injury caused to them. The contractor should intimate all concerned about any accident & take immediate actions as governed by Rules.Failure to supply such information or supplying materially incorrect statements may amount to breach of contract. The decision of the Engineer-in-charge shall be determining whether a breach has taken place.  
In respect of all labourers directly employed in the works of the performance of the contractors part of this agreement the contractor shall comply with or cause to be complied with all the rules framed by the Government from time to time for the protection of Health and Sanitary arrangement of the workers employed by the contractors.

### **14. POWER TO VARY OR OMIT WORKS**

The CSPTCL shall have the right to alter, amend, omit, or otherwise vary the quantum of work, by notice in writing to the contractor. The contractor shall carry out such variation in accordance with the rates specified in the contract so far as they may apply and where such rates are not available; those will be mutually agreed between the CSPTCL and the contractor.

### **15. EXTENSION ORDER**

Extension order maximum to 50 % of the total quantity within 6 month from the date of order may be placed on same rates, terms & conditions of the original order.

### **16. NEGLIGENCE**

If the contractor shall neglect to execute the work due to negligence and expedition, or shall refuse or neglect to comply with any reasonable orders given to him in writing by the Engineer in connection with the work, or shall contravene the provisions of the contract, the purchaser may give seven days notice, in writing, to the contractor, to make good the failure, neglect, or contravention complained of, should the contractor fail to comply with the notice within a reasonable time from the date of service thereof in the case of a failure, neglect, or contravention capable of being made good within that time, or otherwise within such time as may be reasonably necessary for making it good, then and in such case the purchaser shall be at liberty to employ other workmen, and forthwith perform such work as the contractor may have neglected to, or if the purchaser shall think fit, it shall be lawful for him to take the work wholly, or in part, out of contractor's hands and re-contract at a reasonable price with any other persons, or provide any other material, tools, tackles or labour for the purpose of

completing the work or any part thereof. In that event, the purchaser shall without being responsible to the contractor for fair wear and tear of the same, have the free use of all the materials, tools, tackles, construction plant or other things which may be on the site, for use at any time in connection with the work, to the exclusion of any right of the contractor over the same, and the purchaser shall be entitled to retain and apply and balance which may be otherwise due to the contract by him to the contractor or such part thereof as may be necessary to the payment of the cost of executing such work as aforesaid.

If the cost of executing the work as aforesaid shall exceed the balance due to the contractor, and the contractor fails to make good the deficit, the said materials, tools, tackle, construction plant or other things, the property of the contractor may be sold by the purchaser, and the proceeds applied towards the payment such difference and cost of and incidental to such sale. Any outstanding balance existing after crediting the proceeds of such sale shall be paid by the contractor on the certificate of the Engineer, but when all expenses, costs and charges incurred in the completion of the work are paid by the contractor all such material tools, construction plant or other things remaining unsold shall be removed by the contractor.

**17. DEATH BANKRUPTCY ETC.**

If the contractor shall die or commit any act of bankruptcy, or being corporation, commence to be wound up except for re-construction purposes or carry out its business under receiver, the executors, successors, or other representative in law of the estate of the contractor or any such receiver, liquidator or any person in whom the contractor may become vested, shall forthwith give notice thereof in writing to the purchaser for one month, during which he shall take all reasonable steps to prevent a stoppage of works and shall have the option of carrying out the contract subject to his or their providing such guarantee as may be required by the purchaser but not exceeding the value of the work for time being remaining-unexecuted. In the event of stoppage of the works, the period of option under this clause shall be fourteen days only. Provided that, should the above option not be exercised, the contract may be terminated by the purchaser by notice in writing to the contractor, and the same power and provisions reserved to the purchaser in the last proceeding clause on taking of the work out of the contractor's hands shall immediately become operative.

**18. LIABILITY FOR ACCIDENTS AND DAMAGES**

The contractor shall be entirely responsible for all loss, damage or depreciation of the line is 'taken over' in accordance with the relevant clause of the specification.

The contractor shall during the progress of the work, properly cover up and protect the lines from injury which also include theft and by exposure to the weather, and shall take every reasonable, proper, timely and useful precaution against accident or injury to the same from any cause and shall remain answerable and liable for all accidents or injuries thereto which until the same be, or be deemed to be, taken over as per relevant clause of this specification, may arise or be occasioned by the acts or omissions of the contractor or his workman or sub-contractor and all losses and damages to the line arising from such accidents and injuries as aforesaid shall be made good in the most complete and substantial manner by and at the sole cost of the contractor and to the reasonable satisfaction of the Engineer. Until the lines shall be or be deemed to be taken over as

aforesaid, the contractor shall also be liable to indemnify the company in respect of all damage or injury to defective design, work, or material, but not otherwise.

In the case of loss or damage to any portion of the lines arising from or occasioned by other causes, the same shall, if required by the CSPTCL be made good by the contractor in like manner by at the cost of the CSPTCL at a price to be agreed between the contractor and the CSPTCL or in default of agreement, settled by arbitration as per relevant clause of this specification, thereof and the CSPTCL shall pay to the contractor the contract value of the portion of the work so lost or damaged or any balance of such contract value remaining unpaid as the case may be until the work shall be or be deemed to be taken over as aforesaid, the contractor shall also be liable to indemnify the CSPTCL in respect of all damage or injury to any person or to any property of the CSPTCL or of others occasioned by the negligence of the contractor or workmen or sub-contractors or by defective work but not otherwise.

Provided that the contractor shall not be liable under the contract for any loss or profit or loss of contract or any claims made against the CSPTCL not already provided for in the contract, nor for any damage or injury caused by or arising from the acts of the CSPTCL or due to circumstances over which the contractor has no control, nor shall his total liability for loss, damage or injury exceed the total value of the contract.

The contractor shall be deemed to have indemnified and saved harmless the CSPTC against all actions, suits, claims, demands, cost or expenses arising in connection with injuries suffered prior to the date when the line shall have been taken over as per relevant clause of this specification herein by persons employed by the contractor or his sub-contractor on the works whether under the General Law or under the Workmen's Compensation Act-1923 or any other statute enforced on the date of contract dealing with the question of the liability of employers for injuries suffered by employees and to have taken steps properly to insure against any claim there under.

On the occurrence of an accident which results in the death of any of the workmen employed by the contractor or which is so serious as to be likely to result in the death of any such workmen, the contractor shall within 24 hours of the happening of such accident intimate in writing to the concerned legal competent authorities as per rules & act enforce under intimation to Engineer-in-charge the fact or such accident. The contractor shall indemnify the CSPTCL against all loss or damage sustained by the CSPTCL resulting against all loss or damage sustain by the CSPTCL directly or indirectly including the penalties or fines if any payable by the CSPTCL as a consequence of CSPTCL's failure to give notice to the provision of the said Act in regard to such accident.

In the event of any claim being made or action brought against the CSPTCL involving the contractor and arising out of the matters referred to and in respect of which the contractor is liable, under this clause, the contractor shall be immediately notified thereof and he shall, with the assistance if he so requires of the CSPTCL, but at the sole expense of the contractor, conduct all negotiations for the settlement of the same or of any litigation that may arise there from. In such case the CSPTCL shall, at the expense of the contractor, afford all available assistance for any such purpose.



## **19. INSURANCE**

- (a) The materials for the construction of lines will be issued to the contractor only after insurance of the said materials and submission of insurance certificate to the CSPTCL for carrying out the execution of the line works.
- (b) The responsibility for the safety and security of the line materials rest on the contractor, thus the contractor is to ensure it as they are custodian of all the materials issued to them for the execution of the work
- (c) In case of theft/damage of the CSPTCL materials from contractors site store/during transportation of materials/ line, it is sole responsibility of the contractor to lodge FIR in concerned police station immediately and intimate it to the Engineer-in-charge/OIC of the work within 24 hours and ensure to lodge claim before concerned Insurance Company where the materials were already insured for all such purpose under intimation to CSPTCL. The entire cost of materials lost due to theft or damage will be recovered from the contractor.
- (d) The contractor shall arrange insurance coverage for the men and materials at his custody and Line under execution and shall keep it insured against loss by theft, destruction or damage by fire, flood, undue exposure to the weather or through riot, civil commotion, war or rebellion, for the full value of the line till the time of delivery until the line is taken over as per relevant clause of this specification. This insurance shall also cover loss by theft at site/line
- (e) The bidder shall ensure following insurances also: -
  - (i) Workmen Compensation Insurance: - This shall protect against claims applicable against workmen's Compensation Act 1948 (Govt. of India). This liability shall not be less than
    - Workmen's Compensation - As per Statutory Provisions
    - Employees Liability - As per Statutory Provisions
  - (ii) Comprehensive Automobile Insurance :- This insurance shall be in such a form to protect the contractor against all claims for injuries, disability, disease and death of members of public including purchasers men and damage to property of others arising from use of motor vehicle during on or off the site operation irrespective of ownership of such vehicles.
  - (iii) Comprehensive General Liability insurance: It shall protect contractor against all claims arising from injury disability, disease or death of public or damage to property due to act of contractor or his representative.

## **20. REPLACEMENT OF DEFECTIVE WORK OR MATERIAL**

If during the progress of the work the Engineer shall decide and notify in writing to the contractor that the contractor has executed any unsound or imperfect work, or has supplied any plant or materials inferior in quality or quantity to those specified, the contractor on receiving details of such defects or deficiency shall at his own expenses, within seven days of his receiving the notice, or otherwise within such time as may be reasonably necessary for making it good, proceed to alter, reconstruct, or remove such work or supply fresh materials up to the standard of the specification, and in case the contractor shall fail to do so, the purchaser may, on giving the contractor, seven days notice in writing of his intension to do so, proceed to remove the work or materials complained of, and at the cost of the contractor, perform all such work or supply all such materials provided that nothing in this clause shall be deemed to deprive the purchaser or affect any rights under the contract which he may otherwise have in respect of such defects or deficiencies.

**21. RESPONSIBILITY TO RECTIFY THE LOSS AND DAMAGE**

If any loss or damage happens to the work or any part thereof or materials/plant/equipments for incorporation therein during the period for which the contractor is responsible for the case thereof or from any cause for whatsoever, the contractor shall at his own cost rectify/replace such loss or damage, so that the permanent work conforms in every respect with the provision of the contract to the work/equipment occasioned by him in course of any operation carried out by him during performing the contract otherwise cost of the material including other charges as per standing practice of the CSPTCL shall be recovered/deducted from the contractor RA Bills/Security deposit/Bank Guarantee/Retention money etc.

**22. DEDUCTIONS FROM CONTRACT PRICE**

- (i) All costs, damages or expenses which the CSPTCL have paid, for which the contractor is liable under the contract, may be deducted by the CSPTCL from any money due / to become due by him to the contractor under the contract or may be recovered by suit or otherwise from the contractor as an arrears of land revenue.
- (ii) **Recoveries For Liabilities Against Other Contract / Order**  
Any amount recoverable, from the successful bidder against earlier contracts / orders placed by the CSPTCL on the bidders shall be adjusted from payment(s) due against this contract that may be awarded against this specification.

**23. CERTIFICATE OF ENGINEER**

Every application to the Engineer for a certificate must be accompanied by a detailed invoice (in duplicate), setting forth in the order of the schedule of prices, particulars of the work executed and/or plant ready for dispatch on the date of claim, and the certificate that such plant and work is in accordance with the contract, shall be issued by the Engineer within a reasonable time.

The Engineer may, by any certificate make any correction or modification in any previous certificate, which shall have been issued, by him and payments shall be regulated and adjusted accordingly.

**24. CERTIFICATE NOT TO AFFECT THE RIGHTS OF THE PURCHASER OR CONTRACTOR**

No certificate of the Engineer on account nor any sum paid on account by the CSPTCL, nor any extension of time for the execution of the works by the contractor under the powers granted shall affect or prejudice the rights of CSPTCL against the contractor, or relieve the contractor of his obligations for the due performance of contract, or be interpreted as approval of the work done or of the materials supplied and no certificate shall create liability in to the CSPTCL to pay for alterations, amendments, variations or additional work not ordered in writing by the Engineer, or discharge the liability of the contractor for the payment of damages whether due, ascertained, or certified or not or of any sum against the payment of which he is bound to indemnify the CSPTCL, not shall any such certificate nor the acceptance by him of any sum paid on account or otherwise affect or prejudice the rights of the contractor against the CSPTCL.

**25. SUSPENSION OF WORKS**

The CSPTCL shall not pay any expenses, to the contractor arising from suspension of the work / works for any reason whatsoever.

**26. RESPONSIBILITY OF CONTRACTOR**

The contractor shall be responsible for carrying out the works covered under the scope of the contract according to the specification, Order, approved Drawing. For example, the towers should be erected according to the position indicated in the approved profiles and the selection of foundation in various types of soils should be done based on the soils actually encountered in the foundation pit. Deviations, if any, from the approved/specified conditions shall be brought to the notice of ED (C&LM) CSPTCL, Dangania, Raipur (CG) 492013 through the site Engineer, before taking up the work and his decision shall be final and communicated through site Engineer. If at a later date, it is found that the contractor has carried out some work, not according to the specifications, and without taking specific approval, then in that case, all the payments made to the contractor for carrying out such works shall be recovered and the contractor will have to rectify the same at the rate indicated in the order for carrying out such works without extension of time.

Anything mentioned in the specification or subsequent approval or acceptance of the Line by CSPTCL the ultimate responsibility for satisfactory performance of the Line shall rest with the contractor.

**27. COMPLETION OF WORK & TAKING OVER**

- a) Time being the essence of contract the work shall be completed within the period specified in the work order.
- b) TAKING OVER: - Upon receipt of intimation about completion of work and after inspection, CSPTCL Engineer-in-charge shall issue a taking over certificate in which he shall certify the date on which the Line has been so taken over. This certificate shall be issued within 30 days of the intimation from the contractor.
- c) The issuance of taking over certificate shall in no way relieve the contractor of his responsibility for the satisfactory operation of the Line in terms of the specifications.

**28. CONTRACTORS DEFAULT LIABILITY**

The CSPTCL may upon written notice of default to the contractor terminate the contract in circumstances detailed here under:-

(I) If, in the judgement of CSPTCL, the contractor fails to

(i) complete the contractual formalities within the time specified in the contract agreement or within the period for which extension has been granted by CSPTCL to the contractor.

And/or

(ii) comply with any of the provisions of this contract.

In such case (s) CSPTCL under the provisions of this contract shall take one or more of the following penal actions:-

- (a) Terminate the contract.
- (b) Forfeiture of EMD and/or Security deposit, if available.

- (c) Debar the firm for future business with CSPTCL for a period of two years from the date of issue of letter to this effect.
- (d) This debarring may be applicable in respect of other Chhattisgarh State Power Companies also as may be decided by their management.

**(II)** In case the contractor fails to commence the work within the reasonable period as decided by CSPTCL or fails to complete the works within the contractual completion period or the progress is not commensurate with the time period provided for completion of entire substation or within a period for which extension has been granted by CSPTCL, one or more of following penal actions may be taken by CSPTCL against the contractor.

- (a) Terminate the contract.
- (b) Forfeiture of security deposit, if available.
- (c) Debar the firm for future business with CSPTCL for a period of two years from the date of issue of letter to this effect.
- (d) This debarring may be applicable in respect of other Chhattisgarh State Power Companies also as may be decided by their management.
- (e) The payment of pending RA bills of the instant contract shall be withheld.
- (f) The payment of pending RA bills of the other running contracts shall also be withheld.

In case the work included in the tender is not completed in accordance to relevant clause of the tender “completion of work” and CSPTCL does not terminate the contract, the contractor shall continue to execute the work, in which case he shall liable to CSPTCL for deduction of liquidated damages for delay as per relevant clause of this contract until the project is completed.

## **29. REJECTION OF WORKS**

In the event of any of the work done by the contractor is found defective workmanship or otherwise not in conformity with the requirement of this contract specification, the CSPTCL shall either reject the work or request the contractor to rectify the same. The contractor on receipt of such notices shall rectify the work free of cost. If the contractor fails to do so the CSPTCL may:-

- (a) As its option replace or rectify such defective materials and/or works and recover the extra cost so involved from the contractor plus 15% (fifteen percent) from the contractor and/or terminate the contract for balance work/supplies with enforcement of penalty as per contract.
- (b) Defective workmanship will not be accepted under any conditions and shall be rejected outright without compensation. The contractor shall be liable for any loss/damage sustained by CSPTCL.

## **30. FORCE MAJEURE**

The contractor shall not be liable for any penalty for delay or for failure to perform the contract for reasons of FORCE MAJEURE such as acts of God, acts of public enemy, act of Government, cyclones, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes provided that the contractor shall within 10 (ten) days from the beginning of such delay notify the CSPTCL in writing of the cause of delay. The CSPTCL shall verify the facts and grant such extension as facts justify.

### **31. TERMS OF PAYMENT**

- a. The contractor shall present at the end of each calendar month a bill for the works completed, inspected and duly certified by CSPTCL Engineer in charge, during the month at the charges/rates accepted. 90% value of the work done along with full GST applicable shall be paid usually within a period of one month from the date of presentation of the bills. However no interest shall be payable on delayed payment if any. The payment will be done through Electronic mode i.e. RTGS, NEFT etc. / account payee Cheque. Balance 10% shall be retained by the CSPTCL which shall be released after satisfactory completion and handing over of the completed work by the contractor.
- b. After completion of the work, the contractor shall submit its bill within three months from its completion positively.

### **32. PENALTY FOR DELAY IN COMPLETION OF CONTRACT**

- a. If the contractor fails to perform the work within the specified period given in the order or extension granted thereof, with respect of successful completion of testing & commissioning of transmission lines, the Contractor shall pay to CSPTCL as liquidated damages, a sum of half percent (0.5%) of the basic contract price exclusive of GST of work for each calendar week or part thereof of delay on cost of uncompleted portion of the work. If the line is taken over in un-energised condition due to non-availability of feeding source, then for the purpose of penalty, the date of taking over of the line shall be reckoned as the date of completion of work. The total penalty shall not exceed 5% (five percent) of the total contract price exclusive of GST.
- b. The payment or deduction of such damages shall not relieve the contractor from obligations to complete the works, or from any of other obligations and liability under the contract.

### **33. EXTENSION OF TIME**

If the completion of construction of lines is delayed due to reason beyond the control of the contractor such as strikes, lockouts, fire accident, delay in approval of drawings, force Majeure conditions etc, then the contractor shall request to the CSPTCL in writing of his claim for an extension of time without delay. The CSPTCL on receipt of such request may agree to extend the contract date of the work as may be reasonable but without prejudice to other terms and conditions of the contract.

### **34. GUARANTEE PERIOD:**

The work done by the contractor as per the contract specification should be guaranteed for satisfactory operation and against any defect workmanship for a period of 12 (twelve) months from the date on which the Line has been put to service. The above guarantee certificate shall be furnished in triplicate to the purchaser for his approval. Any defect noticed during this period should be rectified by the contractor free of cost to CSPTCL upon written notice provided such defects are due to bad workmanship. The date of delivery of line as used in this clause shall mean the date of taking over the Line by the Engineer, CSPTCL will arrange supply to Line with in one month from the date of completion of Line. If Line is taken over un-energized condition due to non completion of feeding source then guarantee will be for 18 (eighteen) months from the date of taking over

or 12 (twelve) months from the date of charging of the line on rated voltage whichever is earlier.

**35. PERFORMANCE GUARANTEE:**

- (a) After successful completion of work, the contractor shall provide a Performance Bank Guarantee from a Nationalized/Scheduled Bank for an amount of 5% (five percent) of the contract price in the approved Proforma of the CSPTCL. This Bank guarantee shall be executed on stamp paper worth Rs. 250/- or any other amount as per the M.P./C.G. State stamp duty Act and shall be kept valid till completion of the guarantee period mentioned in the foregoing Clause plus six month claim period or 2 years from the date of signing of "Pre-contract integrity pact" whichever is later.
- (b) No interest shall be paid by CSPTCL for the aforesaid bank guarantee. In case of non-performance of the line as per the contract specification, the performance bank guarantee shall be forfeited.

**36. TAKING OVER**

When all performance tests called for by the specification have been successfully carried out, the line shall be accepted and taken over when it has been satisfactorily put into operation on site, or within one month of its being ready to be put into operation, whichever shall be the earlier and the Engineer shall forthwith issue a taking over certificate.

The Engineer shall not delay the issue of any taking over certificate contemplated by this clause on account of minor defects in the line which do not materially effect the commercial use thereof provided that the contractor shall undertake to make good the same in due course.

**37. NON-ASSIGNMENTS:**

The contractor shall not assign or transfer the work orders issued as per this contract or any part thereof without the prior approval of CSPTCL.

**38. CERTIFICATES NOT TO AFFECT RIGHTS OF CSPTCL:**

The issuance of any certificate by CSPTCL or any extension of time granted by CSPTCL shall not prejudice the rights of CSPTCL in terms of the contract not shall this relieve the contractor of his obligations for due performance of the contract.

**39. SETTLEMENT OF DISPUTES**

- (a) Except as otherwise specifically provided in the contract, all disputes concerning question of fact arising under the contract shall be decided by CSPTCL provided a written appeal by the contractor is made to CSPTCL. The decision of CSPTCL shall be final to the parties hereto.
- (b) Any disputes or difference including those considered as such by only one of the parties arising out of or in connection with this contract shall be to the extent possible be settled amicably between parties. If amicable settlement cannot be reached then all disputes issues shall be settled by Arbitration as provided in this contract.

#### **40. ARBITRATION**

- (a) No dispute or difference arising between the contractor and the Owner under or relating to or in connection with the Contract shall be referred to Arbitration unless an attempt has first been made to settle the same amicably.
- (b) Where any dispute is not resolved amicably then such disputes shall be referred to & settled by Arbitration under and in accordance with the provisions of the Arbitration and Conciliation Act-1996 and any statutory modification thereof, by three Arbitrators. One to be appointed by each party and the third to be appointed by the two Arbitrators appointed by the parties at the commencement of Arbitration proceedings and falling agreement between them, in accordance with said Act, the third Arbitrator so appointed shall act as the presiding Arbitrator. The award shall be final and binding upon the parties. The venue of Arbitration shall be Raipur.
- (c) The language of the arbitration proceedings and of all documents and communications between the parties shall be English. Arbitration award shall be speaking, final and binding.
- (d) Notwithstanding anything to the contrary contained herein the work under the Contract shall continue during the pendency of any disputes or differences in Arbitration proceedings and no payment due from the Owner shall be withheld on account of such proceedings except to the extent which may be in dispute and the Owner shall be entitled to make recoveries of amounts, if any, due from the Contractor, as per the provisions of the Contract.

#### **41. SUBLETTING OF CONTRACT:-**

The contractor shall not without the consent in writing of the Engineer or purchaser, assign or sublet his contract, or any substantial part thereof, other then for raw materials, for minor details for any part of the work of which the makers are named in the contract, provided that any such consent shall not relieve the contractor from any obligation, duty or responsibility under the contract.

The activities which can be allowed for subletting are excavation, transportation of materials, backfilling, de-watering, shoring and shuttering and other minor works. The contractor will inform the site engineer in writing about such subletting of works. The fabrication and galvanizing of towers in case of supply and placement of reinforcement steel, concreting, tower erection & stringing in case of construction will be done by the contractor himself by using their own gangs etc.

#### **42. ACCESS TO SITE AND WORK ON SITE:-**

Suitable access to the site shall be afforded to the contractor by the purchaser in reasonable time. The day to day minor problem like free access to the site and other local problems would be solved by the contractor at his own cost. However, the purchaser would extend necessary cooperation/assistance in this respect. The necessary road permits required for transportation of men/material would be arranged by the contractor at his own cost.

In the execution of the work no persons other than the contractor, or his duly appointed representative, subcontractors and workman shall be allowed to do work on the site, except by the Special permission, in writing of the Engineer of his representative, but access to the works at all times shall be accorded to the Engineer and his representative, and other authorized official or representatives of the purchaser.

Nevertheless, the contractor shall permit the execution of the work by other contractors or tradesman whose name shall have been previously communicated in writing to the contractor by the Engineer, and afford them every facility for the execution of their several works simultaneously with his own. The contractor shall provide all the skilled and unskilled labour necessary for the erection of work included in the contract.

**43. LAWS GOVERNING CONTRACT**

The contract shall be constructed according to and subject to the Laws of India and jurisdiction of the High Court of Chhattisgarh, Bilaspur.

**44. JURISDICTION OF THE HIGH COURT OF CHHATTISGARH**

Suits, if any, arising out of this contract shall be filed by either party in a Court of Law to which the jurisdiction of the High Court of Chhattisgarh extends.

**45. CORRESPONDENCE**

- (a) Any notice to the contractor under the terms of the contract shall be served by registered mail or by hand to the authorized local representative of the contractor and copy by post to the contractor's place of business.
- (b) Any notice to CSPTCL shall be served to the Executive Director (C&LM), CSPTCL Dangania, Raipur(CG) 492013 in same manner.



## **SECTION III**

### **COMMERCIAL TERMS AND CONDITIONS OF LINE ERECTION**

#### **1 SCOPE**

This specification provides the work river crossing by height raising of existing 33 KV Birkona (Koni) feeder to 33/11 KV Circuit house sub-station on labour contract basis which includes check survey, excavation, stub setting, concreting, erection of tower, welding, painting, stringing, final checking etc.

#### **2 PRICES AND QUANTITIES**

Prices for various items of erection of transmission line are to be quoted in the manner specified in schedules appended with this specification. The prices will include the cost of labour, all tools and plants except otherwise specifically mentioned in this specification and other incidental charges in connection with the erection work, pertaining to each items as indicated in the schedules, unless otherwise indicated in the specification. **The quoted price shall be FIRM and inclusive of all taxes which ever applicable except GST.** The rate of GST & its amount should be specifically mentioned in price schedule III of the specification.

The quantities indicated in Annexure-I are based on tentative route length of the line. Thus the quantities of towers & extension etc. assumed are only provisional as also the number of locations in various type of soils. The quantities of various works indicated are only provisional and may vary depending on actual type of soils condition encountered in the field depending on approved profile. The work is to be completed as per actual site conditions and on same rate as offered and on similar terms and conditions.

The drawing showing the details of weight of towers and extension, excavation and concreting volume in different type of soil will be provided to successful bidder at the time of execution of the work.

**In the event of revision of quantity on completion of works, total value of work shall be worked out with the unit rates of other bidders. In case the total value when calculated with unit rate of other bidder (viz L-2 or so on) is found lower than the revised value of order value, the total payment shall be limited to the lower of the two. This condition may be kept in view while quoting the rates.**

#### **3 COMPLIANCE WITH REGULATIONS**

Unless otherwise specified, all works shall be carried out in accordance with the Indian Electricity Act 2003; Indian Electricity Rules-1956 with any amendments or revisions thereof which may be issued during the currency of the contract and the requirement of any other Regulations and Acts as applicable in India (including local statutory bodies) which the CSPTCL may be subjected to. Contractor shall also compliance with the Minimum Wages Act and the payment of Wages Act and the rules made their under in respect of any employee are workman employed are engaged by him or his sub contractor.

All railway tracks, power / communication line, or other important road crossings etc. or routing the line through air field region shall conform to the relevant rules and procedure laid down by railway, communication, aviation or other concerned authorities.

Suitable arrangements for aviation signal shall be provided at the top of the towers in the vicinity of Civil / Military aerodromes of air field regions, if any.

Similar arrangements will also be provided on the special river crossing towers, if used.

#### **4 TAXES & DUTIES ETC.**

- i. Goods and service tax (GST):-** The suppliers /service providers should be registered under GST Act-2017. All items of “Price Bid” should be quoted exclusive of Goods and Service Tax (GST). Rate of GST should be mentioned in the price bid specifically at appropriate place. The suppliers /service providers shall have to disclose the taxes separately. Any variation in GST within scheduled completion period shall be to the account of CSPTCL. If the rate of applicable GST beyond contractual completion period undergoes upward revision, the payment will continue to be made only on the basis of rates prevailing during completion period. In case the rate of GST undergoes downward revision then the delayed works beyond contractual completion period will attract reduced rate of GST. CSPTCL GST Registration No. is 22AADCC5773E1ZX.
- ii. Cess under “Building and other Construction Workers Act, 1996:-** The contractor for carrying out any construction work in Chhattisgarh State must get themselves registered from the Registering office under section 7 (1) of the “Building and other Construction Workers Act, 1996” and rules made thereto by the Chhattisgarh Govt. and submit certificate of Registration issued from the registering officer of the Chhattisgarh Govt. (Labour Deptt.) for enforcement of this Act. The cess @ 1% of the cost of construction work shall be borne by the contractor and same shall be deducted from each bill. Any variation in this respect within scheduled completion period shall be to the account of CSPTCL. If the rate of applicable cess beyond contractual completion period undergoes upward revision, the payment will continue to be made only on the basis of rates prevailing during completion period. In case the rate of cess undergoes downward revision then the delayed works beyond contractual completion period will attract reduced rate of cess.
- iii. Payment of other taxes/duties/levies/charges which are not described above:-** The bidder should be aware of the various taxes, duties, levies imposed by the Central Government, State Government / local bodies applicable in the present contract as on the date of TC bid opening. Further, in the price bid, it should be specifically stated regarding each tax / duty whether it is inclusive or exclusive. However, if there is no specific mention of any tax/duties/levies as exclusive in the price bid, it will be presumed to be inclusive if it is applicable as on the date of TC bid opening and will not be paid extra. But if any new tax/ duty/ levy is imposed either by central Government or by Stat Govt. / local authorities after the date of opening of T.C. Bid, the same shall be payable by CSPTCL extra within stipulated completion period on production of documentary evidence. However, tax due to increase of Turnover or withdrawal of tax exemption earlier available to the vendor etc. will not be reimbursed.
- iv. Income Tax: -** Income Tax will be deducted at source as per rules enforced.

## **5 RESPONSIBILITY FOR OBTAINING INFORMATION AND TAKING ACTION IN TIME**

Whenever any information or clarification in respect of construction of line has to be obtained from various authorities, the contractor shall be responsible for taking action well in time so that there are no delays on this account. The completion period offered in the tender shall be deemed to include the time taken for such incidental works. Request for extension of the completion date on such ground will not be entertained.

## **6 PERMITS AND PRIORITIES**

Necessary permits, if any, required for the execution of the contract shall be arranged by the contractor himself. The contractor shall obtain the necessary license as per central /state / local statutory bodies at his cost. The CSPTCL may, however, furnish to the contractor such certificates as may be required for the necessary permits / priorities for the execution of the work, if CSPTCL considers demand justified. The CSPTCL will, however, not be responsible for the delay in execution of the contract, if permits / priorities are not granted in time.

## **7 WAY LEAVE:**

The bidder is requested to go through the following provisions of payment of way leave and other charges while quoting the rates:-

### **(a) Payment of compensation of land :-**

In compliance to the CG Govt.'s orders No. F 7-7/Seven-1/2014 dtd. 20.02.2015 dtd. 07.05.2015 and dtd 01.06.2016 regarding payment of compensation towards utilization of the private land for erection of tower and laying of transmission line, the cases for payment of land compensation to the owner of land shall be prepared by the Contractor. The payment for above compensation shall be borne and made by the CSPTCL as per the provisions contained in these orders.

### **(b) Payment of compensation towards damage of crops :-**

The necessary proposal for payment of compensation towards damage of crops en-routing the transmission line during execution of work, shall be prepared by the contractor and shall be submitted to the OIC of the work. The necessary approval shall be obtained by CSPTCL and the payment of above compensation shall be borne and made by CSPTCL.

### **(c) Forest proposal :-**

In case the line is passing through the forest, the preparation of forest proposal, its approval etc. shall be arranged by CSPTCL. The tree cutting and related works in forest land will be arranged by the CSPTCL. Relevant charges shall be borne by the CSPTCL.

### **(d) Tree cutting in Revenue/ Govt./ Private Land :-**

The proposal for tree cutting in Revenue/ Govt./Private land will be prepared by the contractor and approval for the same shall be arranged by the CSPTCL. For all Statutory compensation, registration fee, tree cutting etc., payment will be borne and made by the CSPTCL and tree cutting and related works in Revenue/Govt / Private land will be arranged by the CSPTCL.

### **(e) Railway crossing :-**

The Railway track crossing cases with drawing, questionnaire etc. will be prepared by the contractor and will be submitted to the Engineer I/C and CSPTCL will arrange the approval. All statutory payment like supervision charges, approval fee etc. will be borne and made by the CSPTCL directly to the Railway Department.

The Railway Block charges if any will be borne by the CSPTCL for maximum of one hour per circuit per crossing. The Railway block charges beyond one hour per circuit per crossing will be borne by the contractor.

(f) **Statutory Payments :-**

In addition to above, statutory payment to all government agencies shall be borne by the CSPTCL. Any payment which becomes due on account of introduction of new policy of Govt. of India / Govt. of CG announced after issue of N.I.T., shall be made by CSPTCL.

(g) **Payment of damages for access of site :-**

Any payments / charges required for access of site and damage of crops on way to the site shall be to the contractor's account.

(h) **Submission of proposals of way leave etc. :-**

It shall be responsibility of the contractor to submit the required proposal of way leave (viz. railway crossing, tree cutting in revenue/private land, crops compensation etc.) in reasonable period, so that work is not hampered due to non availability of right of way for these.

**8 USE OF PRIVATE ROAD/ APPROACH ROAD TO SITE**

The CSPTCL will help in getting necessary permission for use of private/ forest/ canals for transport of materials and construction personnel, wherever possible under the rules. Any charge levied by the concerned authorities for use of such roads etc. shall be borne by the contractor.

During the erection work, if approach roads are required to be constructed for reaching the construction sites for transportation of men/materials, the cost of construction of such approach roads and any other expenses incurred in obtaining clearance/ permission shall be borne by the contractor.

**9 MATERIALS TO BE ARRANGED BY THE CONTRACTOR:**

The contractor shall arrange the cement for foundation work as per quality indicated in I.S. 269 (latest revision). The cost of cement, metal & sand, tor steel and binding wire etc., shall be deemed to be included in the quoted unit rates for casting of foundations of different types of towers in different types of soils. The cement used shall be procured from reputed manufacturer.

Metal, sand and stones required for foundation/ revetment work shall also be arranged by the contractor. The contractor will also arrange steel rods and binding wires for foundation reinforcement works. The transport, octroi, levy or duty on these materials shall be borne by the contractor himself and the Company will not accept any liability on this account.

**10 TOOLS AND PLANTS TO BE ARRANGED BY THE CONTRACTOR**

The contractor shall be required to provide at his own expenses all necessary erection tools and plants for carrying out complete erection of the line i.e. survey, soil investigation, excavation, measurement of earth resistance, stub setting under tension and testing of the line etc as indicated in specification. The contractor will have to arrange at his cost all tools and equipments such as surveying instrument, earth tester, soil investigation equipment, excavation equipment, form boxes for stub setting, winches, ropes and all tools for stringing conductor etc. The contractor will furnish in the relevant schedule, the list of all tools and plants as indicated above, which are available with him. Similarly, contractor will arrange

at his cost all machinery and light and heavy vehicles such as jeeps, tractor, compressors for rock drilling, cranes for conductor drum handling, truck etc.

#### **11 IDLE / MOBILIZATION / DEMOBILIZATION CHARGES**

No idle / Mobilization / Demobilization charges will be payable by the CSPTCL for any reason whatsoever to the contractor for stoppage of work.

#### **12 INSURANCE**

The contractor shall arrange secure and maintain insurance as may be necessary and for all such amount to protect his interest and the interests of the CSPTCL against all risks as detailed herein. The contractor's failure in this regard shall not relieve him or any of his contractual responsibilities and obligations.

Any loss or damage to the line materials during handling, transporting, storage and erection till such time the line is taken over by the CSPTCL shall be to the account of the contractor. The contractor shall be responsible for preferring of all claims and make good for the damage or loss by way of repairs and/or replacement of the portion of the works damaged or lost. The transfer of title shall not in any way relieve the contractor from the above responsibilities during the period of the contract. The contractor shall submit to CSPTCL with a copy of all insurance policies and specifications taken out by him in pursuance of the contract. Such copies of specifications shall be submitted to the CSPTCL immediately after such insurance coverage is obtained. The contractor shall also inform the CSPTCL in writing at least Thirty (30) days in advance regarding the expiry, cancellation and/or change in any of such documents and ensure revalidation/renewal etc. as may be necessary, well in time.

All costs on account of Insurance liabilities covered under the contract will be on contractor's account and will be deemed to be included in contract price. The contractor shall cover insurance with Indian Insurance Companies only.

The contractor shall arrange above insurance for the total completion period of transmission line (period in months) as quoted by him in the completion schedule. For delay in the completion of the transmission line, up to 3 (three) months, due to any reason whatsoever, the contractor shall bear the charges of extension of insurance policy.

Any other insurance including the insurance of erection personnel employed by the contractor / his subcontractor shall also be the responsibility of the contractor and shall be arranged, if required, at his own cost.

#### **13 MATERIALS TO BE ARRANGED BY THE CSPTCL:**

CSPTCL will supply to the contractor following line materials for erection of the line.

<b>Sl.</b>	<b>Materials</b>	<b>Qty. with wastage</b>
1	Stub and cleats	Actual -> No Extra
2	Materials for grouting of tower i.e., earthing rods, connecting clamps & connecting wire/counterpoise wire	Actual -> 1% Extra
3	Tower and their extensions	Actual -> No Extra
4	Bolts & nuts, spring washers flat washers	Actual -> 2% Extra

	& step bolts.	
5	Danger/Number/Phase plates	Actual -> No Extra
6	Barbed wire for anticlimbing devices	Actual -> 2% Extra
7	Conductor & ground wire	Actual(on route length) - > 1% Extra towards sag, jumpers & wastage
8	Conductor & Ground wire accessories	Actual -> 2% wastage
9	Insulators	Actual -> 2% wastage
10	Minor accessories such as hangers, U bolts etc.	Actual -> No Extra

The materials shall be supplied from departmental store/ site store as detailed in relevant section i.e. instruction to the bidders of this specification, by the concerned OIC of the work, which will be collected by the contractor from Company's store deploying his own transport to the work site.

#### **14 MATERIAL TO BE ARRANGED BY CONTRACTOR**

All the materials of the foundation work such as tar steel; binding wire (for reinforcement work), cement metal and sand (for concreting work) will be supplied by contractor.

#### **15 CONDUCTOR / EARTHWIRE, DURMS ETC. AND RECOVERIES FOR NON-RETURN OF LINE MATERIALS**

- (i) Empty cement bags, conductor / earth wire, wooden drums and empty wooden crates/cases and bags of insulators, hardware's/accessories are not returnable. The Bidder should give due weight age/rebate on account of above while quoting the prices for erection of transmission line.
- (ii) Conductor and ground wire length above 20 mts. shall be treated as good. Conductor and Ground wire length of 20 mts and below will be treated as scrap/wastage. However, the number of conductor pieces of length more than 20 mts. should be commensurate with the number of angle points. On completion of work the contractor will return all the balance items over and above actually used on the line. Wastage, if any, available shall also be returned either in damaged condition or otherwise. While returning the balance materials (above permissible wastage), to the CSPTCL 's store, these materials should be packed by the contractor, in the same manner as were on the line. All the available wastage shall be returned loose/unpacked. It may however, be noted that only one conductor/Ground wire length shall be packed in one conductor/Ground wire reel (as the case may be), while returning these items to the CSPTCL 's stores at their cost. The contractor should render full accounts of material issued to him and return all balance materials over and above actually used on the line within reasonable time of the completion of contract to the CSPTCL 's store at their own cost. However, should the necessity arises to deliver these items to contractor in excess of the permissible wastage or in case of non-return of materials above the permissible wastage, procurement cost prevailing at the time of replacement (in case of non-return of materials, the cost prevailing as on the date of recovery) shall be recovered from the contractor.

- (iii) The contractor will return all the balance materials including wastage, if any, available to the CSPTCL's store at their own cost.

**16 DEPARTMENTAL STORES FOR DISTRIBUTION / RETURN OF MATERIALS**

All the line materials will be supplied to the contractor from the departmental stores as detailed in relevant section i.e. instruction to the contractor of the specification.

The contractor shall intimate the Company item wise quantity of each material, which he proposes to receive from above store. This information should be supplied sufficiently in advance (at least one month) so that the materials could be arranged accordingly. In case of any difficulty in availability of materials the matter should be referred to the order placing authority of the CSPTCL.

The contractor shall be responsible for loading the material, transporting them to different stores established by him or to the site of work including unloading, stacking /storing etc. without any extra charges from the CSPTCL. The contractor shall be responsible for the proper handling, storage and proper maintenance of the materials received by him from the date of their receipt till the end of completion of work & taken over of the line by the CSPTCL and balance materials are duly returned to the stores.

The contractor shall arrange necessary equipment for proper handling, transport of conductor drums at his cost.

**17 STORAGE OF MATERIALS**

The contractor will set up site stores as per convenience of line work at his own risk and cost. The store will be opened for inspection by the CSPTCL staff as and when desired.

**18 INSURANCE FOR TRANSPORT, STORAGE, ERECTION & WORKMAN**

The transit, storage and erection insurance shall be arranged by the contractor to cover the materials against risks mentioned above, at his own cost and **the quoted prices shall be inclusive of such insurance charges.**

Any other insurance including the insurance of erection personnel employed by the contractor/his sub-contractor shall also be the responsibility of the contractor and shall be done, if required at his own cost.

**19 DEVIATION FROM SPECIFICATIONS**

**No deviation/departure from the tender specification** in any respect is allowed. In questionnaire bidder must confirm that the all terms & conditions of this tender specification are agreeable to them in toto. In case of any departure the price-bid will not be opened and will be returned unopened.

**20 QUESTIONNAIRE**

The Questionnaire schedule enclosed herewith contains a set of question and Bidder is requested to answer each and every question clearly and without ambiguity.

## **21 CHECK LIST**

The checklist in respect of various schedules etc. required to be submitted by the Bidder without which the tender will be considered incomplete and liable for rejection. The Bidder should submit all schedules duly filled-in along with their offer.

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## **SECTION - IV**

### **TECHNICAL PARTICULARS & TECHNICAL CONDITIONS** **FOR CONSTRUCTION OF LINE.**

#### **1 SCOPE**

This specification provides the work river crossing by height raising of existing 33 KV Birkona (Koni) feeder to 33/11 KV Circuit house sub-station on labour contract basis which includes check survey, excavation, stub setting, concreting, erection of tower, welding, painting, stringing, final checking etc.

#### **2 LINE MATERIALS**

##### **(I) TOWERS**

- i) The towers to be used in transmission line are double circuit towers. NB / BN series denoting 220 KV double circuit towers & ND or DN series denoting 132 KV double circuit towers.

The types of towers to be used are as under:

(a)	NB-0/BN-0/ND-0/ DN-0	Tangent tower (BN-2/NB-2/DN-2/ND-2) to be used at location between angle towers.
(b)	NB-30/BN-30/ND-30/ DN-30: Type of tower	Angle tower to be used at locations having a line deviation between 0-30°
(c)	NB-60/ BN60/ND60 /DN60: Type of tower	Angle tower to be used at location having a line deviation between 0-60 with square cross-arm on outer side. This tower is also used at dead end tower of the line with triangular cross arms on both sides.
(d)	Multi circuit towers	About 51 mtrs. High towers suitable for 220 KV/132 KV four circuits and also suitable for deviation angle up to 60 as well as for dead-end conditions.

##### **(II) EXTENSION OF TOWERS**

Various towers may have any of extensions mentioned as below and shall be used where required

- (i) NB-and ND series towers                      3 Mtrs., 5 Mtrs. 7.5 Mtrs, 10 Mtrs extensions  
(ii) BN and DN series towers                      3 Mtrs, 6Mtrs.9 Mtrs, 10 Mtrs extensions  
With 132 KV or 220 KV Towers with suitable extensions as per design & drawing.

##### **(III) CONDUCTORS & GROUNDWIRES**

- (a) **Conductor:** The Conductor used on 132 KV transmission line will be Panther ACSR (30/3.00mm AL + 7/3 .mm steel)  
And  
(b) The Conductor used on 220 KV transmission line will be Zebra ACSR (54/3.18 mm AL + 7/3.18 .mm steel)  
(c) **Ground wire:** The Ground wire will be 7/3.66 mm. 95Kg.mm<sup>2</sup> quality galvanized steel stranded wire.

##### **(IV) INSULATOR STRINGS WITH HARDWARE FITTINGS**

- (i) Single suspension and double tension strings will be used on the line as under:

(a)	At suspension location:	<p>(i) On 220KV line, 13 disc single, double suspension string having 70 KN E&amp;MS 255x145 size disc insulator with AGS type clamps will be used with compressor type deoderd clamps.</p> <p>(ii) On 132KV line, 9 disc single, double suspension strings having 70KN E&amp;MS, 255x145mm size disc insulators with AGS type clamps will be used with Compression Type deoderd clamps.</p>
(b)	At Tension Location:	<p>(i) On 220KV line, 14 disc single/double tension strings with 160KN E&amp;MS disc insulators of 280x170mm size discs will be used with compression type dead end clamp.</p> <p>(ii) On 132KV line 10 Nos. single/double tension string with 90KN 235/145mm discs will be used.</p>

- (i) Pilot strings will be used at deep angle towers for restraining the swing of jumpers.
- (ii) In case of Railway/State, National Road/River/other transmission line crossing double suspension/tension insulators strings will be used.

#### (V) CONDUCTOR ACCESSORIES

AGS type suspension clamps shall be used for all suspension locations. Vibration dampers (4-R type) shall be used for Conductors and Ground wire.

#### (VI) MISC. ITEMS

Enameled number plates, phase plates, and danger Board, earthing sets, along with connecting wire of size 7/8 SWG galvanized Ground wire tower accessories like 'D' shackle, hanger etc. and anti-climbing device (including barbed wire) shall be used on towers.

### 3. ROUTE OF THE TRANSMISSION LINE

The route alignment and profiling of the proposed line shall be carried out by the CSPTCL. The survey is to be conducted by the CSPTCL and the approved profiles after marking of towers will be handed over to contractor. The profile will be prepared on cm. Graph paper on scale 1:200 horizontal and 1:20 vertical.

### 4. APPROVED PROFILE

The approved profile will be handed over to the contractor duly marked with locations and type of towers to be erected, span between locations, line deviations etc. the contractor will be responsible for the correct setting of tower as shown in the approved profile. If towers after erection are found to be out of the approved alignment/position in the profile, the contractor will dismantle and re-erect them correctly at his own cost and without extension of time.

### 5. (a) CHECK SURVEY

The check survey shall be conducted by contractor after getting approved profiles. The check survey shall include checking the chain age of section from one angle point to another, checking of deviation angles, checking levels of proposed locations and at critical points for adequate clearance.

Discrepancies, if any, shall be brought to the notice of CSPTCL and final approval shall be obtained before setting the stubs.

If due to site conditions, the change in the tower location/provision of the extension is considered necessary, compared to approved profiles, the contractor shall bring the same to the knowledge of the Site Engineer in time and get revised approval of the profile before setting the stubs.

#### **(b) EVALUATION OF LAND COMPENSATION**

The contractor shall prepare land compensation case and corresponding details of each location & corridor of transmission line i.e. 27 m belt for 132 KV lines and 35 m belt for 220 KV lines as per CG Govt.'s orders No. F 7-7/Seven-1/2014 dtd. 20.02.2015 dtd. 07.05.2015 and dtd 01.06.2016.

### **6. EXCAVATION**

- 6.01 Except as specifically otherwise provided, all excavation for footings shall be made to the lines and grades of the foundation. The excavation walls shall be verticals and the pit dimensions shall be such as to allow a clearance of 150mm of all sides from the foundation pad where form boxes are used. In undercut/stepped slab type foundations where form box is not required to be used at the base, the pit dimensions should be as per the standard drawings. All excavation shall be protected so as to maintain a clean sub-grade, until the footing is placed, using timbering, shorting or casing, if necessary And, mud slit or other undesirable materials which may have accumulated in the excavation, shall be removed by the contractor before placing concrete.
- 6.02 The soil to be excavated for tower foundations shall be classified as under for the purpose of payment for excavation.
- (a) Dry Soil: Soil removable by means of ordinary pick axes and shovels (normal soil, intermediate soil and black cotton soil come in this category.
  - (b) Wet Soil: Soil where the sub-soil water table is encountered within the range of foundation depth the soil below the water table and that at locations where pumping or bailing out of water is required due to presence of surface water, will be treated as wet soil.
  - (c) Rocky Soil: i) Soft rocks - this will mean fissured rock i.e., decomposed rock, hard gravel, kankar, limestone, laterite or any other solid of similar nature which can be excavated with pick axe or spade.
  - (d) Hard rocks- hard rock will be that which required chiseling or drilling and blasting. The cost of drilling and blasting shall be included in the quoted rates.
- 6.03 No extra charges shall be admissible for the removal of fallen earth in the pit, when once excavated.
- 6.04 If water is encountered in the fountain pit, dewatering will have to be done also shoring and shuttering; Necessary equipments for dewatering will be arranged by the contractor at his cost. For foundation in rock, where blasting is unavoidable, care should be taken to minimize amount of concrete necessary for filling up the blasted area. The blasted area shall be reduced to the minimum possible so that specified form for the foundation could be obtained. Payment for excavation in hard rock shall be limited to the design excavation volumes only. The excavation in rock will include drilling in the base of the foundation, of required no. of holes of specified dimensions of grouting of reinforcement bars. No extra payment shall be made if concrete volume exceeds the designed volume due to excessive blasting.

6.05 This is to specify here that during excavation if hard rock, soil is encountered but keeping in view the soil strata actually encountered, soft rock foundation is adopted then the rates for excavation for hard rock shall be limited to the extent of approved rate for excavation in soft rock.

6.06 The contractor shall arrange requisite blasting material, excavation and drilling equipments at his own costs and rates shall be deemed inclusive of such cost.

## **7. SHORING OF PITS**

Shoring of pits with shuttering on the internal wall surrounding the vertical facing of approved dimensions of pit shall be done when the soil condition is so bad that there is likelihood of accident due to falling of surrounding earth in foundation pit. However, prior approval of engineer shall be obtained before shoring of pit with shuttering is done.

## **8. TOWER SITE LEVELING**

In case of foundation located on slopping ground it may be necessary to level the ground for locating the tower. In leveling the tower site, only excavation will be allowed extra payment of excavation for the purpose of site leveling shall only be admissible. The requirement of excavation of tower site leveling will be decided by the site Engineer.

## **9. SETTING OF STUBS**

The stub shall be set correctly in accordance with approved method at the exact location and alignment in precisely correct levels. The stub-setting templates shall be used for proper setting of stubs. Stubs shall be set in the presence of CSPTCL representative available at site whenever required and for which adequate advance intimations shall be given to the Site Engineer by the contractor. The foundations are to be as per designs and drawings made available by the CSPTCL. Extend of the work as defined by such drawings shall not be exceeded except in very exceptional cases where the prior approval of CSPTCL has to be obtained. Each tower shall be provided with suitable foundation as per design and drawing, after classification of soil. The soil classification shall be done after digging a small section of a pit upto full depth (excluding hard locations). The soil should be classified strictly as per details encountered in the foundation pit for example dry soil foundation should be adopted at the locations where dry soil is encountered in the full depth of foundation. Similarly the wet type of foundation should be adopted at the locations where water table is met at a level of 1.5 mt. or below the ground level or in paddy fields or other places, which are in surface water for long period, with water penetration not exceeding one meter below the ground level. Deviations, if any, from the approved/specific conditions shall be brought to the notice of ED (C&LM) through Site Engineer before taking up the work and his decision shall be final and communicated through site Engineer. If a later date it is found that the contractor has carried out some work, not according to the specification and without taking specific approval then in that case, all the payments made to the contractor for carrying out such works shall be recovered and the contractor will have to rectify the same at the rate indicated in the order for carrying out such works and without extension of time.

The setting of stubs in hard rock foundation may require cutting of stubs depending on depth at which hard rock is encountered. The cutting of stubs and drilling of

new holes for fixing cleats etc. shall be considered inclusive in stub-setting rates in hard rock foundation. No extra payment will be made for such works.

Setting of stubs at each location shall be approved by the Company's representatives. The approval shall not however, absolve the contractor of his responsibility of correct setting of stubs and casting of foundations. If necessary, contractor will be required to rectify the faulty work at his own expenses.

## **10. PLACEMENT OF REINFORCEMENT**

If reinforcement required to be grouted in foundation, the reinforcement bar will be properly cut, bent in a required shape and placed in foundation in approved manner after due cleaning of rods of soil grease or organic matter. The reinforcement shall be properly tight by binding wire which shall be arranged by contractor only.

## **11. CONCRETE**

The cement concrete used for the foundations shall be of 1:2:4 mix M-15, 1:3:6 M-10 & 1:1.5:3 M-20 as mix -ratio with 20 mm (3/4") B.T. stone metal for chimney portion and 40mm (1.5") B.T. stone metal for pyramid or slab portions. The cement required for the purpose of foundation work etc. shall be arranged by the contractor. No deduction will be made from the volume of concrete towards volume of reinforcement bars and stubs angle for purpose of payment.

In case of hard rock foundation where blasting is resorted to resulting in increase in dimensions of foundations pit compared to designed dimensions, the payment for concrete will be restricted to extent of design volume of concrete. The sand used for the concrete shall be river sand composed of hard siliceous materials. It shall be clean and of a sharp angular grit type and free from earth or organic matter and deleterious slots. The aggregate shall be of clean broken hard granite or other stone specified or approved by the CSPTCL. It shall be of hard, closed grained quality. It shall also be as far as possible cube like preferably angular but not flaky, perfectly clean and free from earth, organic or other deleterious matters. 40mm aggregate shall be of size as will pass through a mesh of 40mm measured in the clear and 20mm aggregate through 20 mm square mesh measured in clear. The water used for mixing concrete shall be fresh, clean and free from oil, acid and alkali, organic materials or other deleterious substances. Saltish or blackish water should not be used. Potable water is generally satisfactory. The concrete shall be mixed in a mechanical mixture. However, in case of difficult terrain, hand mixing on M.S .sheet may be permitted at the discretion of our site Engineer. Mixing shall be continued until there is uniform distribution of material and the mix is uniform in colour and consistency but in no case the mixing be done for less than two minutes. Normally mixing shall be done close to the foundation but in case it is not possible the concrete may be mixed at the nearest convenient place. The concrete shall be transported from the place of mixing to the place of final deposit as rapidly as practicable by methods which shall prevent the segregation or loss of any ingredient. The concrete shall be placed and compacted before setting commences .The concrete should be mixed as stiff as the requirement of placing the concrete in the form boxes with ease and the degree to which the concrete resists segregation. Hence the quantity of water used should not be too much. Proper form boxes adequately braced to retain proper shape while concreting should be used for chimney or pyramid and slab portion. The form boxes should be made watertight so that the cement should not come out leaving only sand and jelly consequently forming honey combing in the concrete. The form boxes shall be cleaned and oiled

before these are used for concreting. The concrete shall be laid in 150 mm layers and consolidate well so that the cement cream works upto the top and no honey combing is left in the concrete. Concreting is to be done continuously so that the subsequent layers are laid before the initial setting of the bottom layer begins. After concreting the chimney portion to the required height, the top surface should be finished smooth with slight slope towards the outer edge to drain off the rain water falling on the coping. In wet locations, the site must be kept completely dewatered both during the placing of the concrete and for 24 hours after completion. There should be no disturbance of concrete by water during this period. The form boxes shall not be removed before a lapse of about 24 hours after the completion of concreting. After removal of the forms boxes the concreted surface where required shall be repaired with a rich cement of sand mortar in the shortest possible time.

## **12. BACKFILLING AND REMOVAL OF STUB TEMPLATE**

After opening of form boxes and removal of shoring and shuttering, if any, back filling shall be started after repairs, if any, to the foundation concrete. Back filling shall normally be done with the excavated soil unless it consists of large boulder which shall be broken to a maximum size of 80mm. The back fill materials should be clean and free from organic or other foreign materials. The earth shall be deposited in maximum 200mm layers, leveled and wetted and temped properly before another layer is deposited. The back filling and grading shall be carried to an elevation of about 155 mm above the finished ground level to drain out water. After back filling 50 mm high earthen embankment (band) will be made along the side of excavation pits and sufficient water will be poured in the back filled earth from at least for 24 hour. The stub setting template shall be opened only after the completion of back filling. After completing stringing work, if level of back fill is required at the location again, the same would be done by the contractor at no extra cost. No extra charges shall be payable if back filling is done from borrowed earth.

## **13. CURING**

The concrete after it is 24 hours old shall be cured keeping the concrete wet continuously for a period of 14 days after laying. The pit may be back filled with selected earth sprinkled with necessary amount of water and well consolidated in layers not exceeding 200 mm of consolidated thickness after a minimum period of 24 hours and there after both the back filled earth and exposed chimney above the back filled earth shall be kept wet providing empty cement jute bags dipped in water fully wrapped around the concrete chimney for curing and ensuring that the bags are kept wet by frequent pouring of water on them. The contractor may use anti curing paint. However, no extra payment shall be payable on this account.

## **14. BUILDING STONE REVETMENT**

The revetment work is not included in the scope of contract. The contractor however shall inform to the Engineer about the necessity of revetment work required to be list out.

## **15. TOWER EARTHING**

For the purpose of earthing, necessary earthing rod (25 mm dia, 2 meter long) connecting clamps. Connecting wire will be provided by the department. The earthing rods are to be hammered preferably in the foundation pit the connected to stub by 7/8 SWG earth wire and necessary connecting clamps before concreting the foundation. If it is not possible to tie the rod in the foundation pit i.e. in rocky

foundation they shall be buried near the foundation pit using connecting clamps. The earthing rods are to be provided in diagonally opposite legs of the tower.

## **16. TOWER ASSEMBLY**

The method followed for the erection of towers shall ensure the points mentioned below:

- (a) Straining of the members shall not be permitted for bringing them into position. It may however be necessary to match hole positions at joints and to facilitate this, Tommy bars not more than 450mm long may be used.
- (b) Before starting erection of an upper section the tower erection shall be completely braced and all bolts provided in accordance with approved drawings.
- (c) All plane diagonals relevant to a section of tower shall be placed in position before assembly of upper section is taken up.
- (d) The bolt positions in assembled towers shall be as per IS:5613(Part-II/Section-2)1976.
- (e) Tower shall be fitted with number plate and danger Board.
- (f) Anticlimbing devices
- (g) Barbed wire will be used at a height of about 2.5 to 3 Mtrs. As an anti climbing measure. At every location 3 layers of barbed wires will be provided each inside and outside the tower in horizontal plane. Spacing between the layer will be kept 140/150mm. The angle places with notches for an accommodating barbed wire shall be supplied with the tower members. After the barbed wire is placed in position in notches, the notch opening shall be welded to avoid the theft of barbed wire and anti-corrosive treatment with cold galvanizing paint shall be given.
- (h) All the blank holes if any left, after complete erection of tower is to be filled up by bolts and nuts of correct size.
- (i) The contractor will be responsible for the correct setting of tower as per approved profile. If tower erection is found to be out of the approved alignment the contractor will dismantle and re erect them correctly at his own cost and without extension of time.

The payment for tower erection work will be made on the basis of tower weights indicated in the drawing. The weight of bolts and nuts and washers and anti climbing device will not be taken into account for purpose of payment.

## **17. TIGHTENING AND PUNCHING OF BOLTS-NUTS**

All nuts shall be tightened properly using correct size spanners. Before tightening it will be seen that packing washers and plates are placed in relevant gaps between members, bolts of proper size and length are provided and spring washers used under each nut and in case of step bolt spring washers have been placed under the outer nuts. The tightening shall progressively be carried out from the top downwards. Care should be taken that all bolts at every level are tightened simultaneously. The threads of bolts projecting outside the nuts shall be punched at three positions on the diameter to ensure that the nuts are not loosened in course of time. If during tightening a nut is found to be slipping or running over the bolt threads the bolt together with the nut shall be replaced.

## **18. WELDING OF TOWER**

The electric welding will be carried out all around the periphery of nut-bolts so that the welding material becomes one mass. The welding of nut-bolts is required to be carried out up to bottom cross arm level from ground level for all type of towers

including its extension. The portable generating and electric welding sets along with all the tools & plants ladders etc. and man and material required for welding work will be arranged by the contractor at his own cost. The welding generator set must be of adequate capacity not be less than 16KVA capacity and the rods of 3.15/4.00 mm size of good quality should only be used, so that the nuts-bolts or tower parts does not get damaged at the time of welding. The workmanship should be of very good quality.

## **19. PAINTING OF TOWER**

The MS tower will be painted with one coat of red-oxide paint and two coat of Aluminum paint. The red-oxide and Aluminum paints will be supplied by Company for purpose of painting.

The consumption of paint for painting of towers with one coat of red-oxide paint and two coat of Aluminum paint shall be as given below:

- (a) For red-oxide painting: @4 ltrs per MT of tower weight
- (b) For Aluminum painting: @3.5 liters per MT of tower weight (For 1<sup>st</sup> coat) & @3 liters per MT of tower weight (For 2<sup>nd</sup> coat)

For painting, paint shall not be thin and it should be uniformly mixed with thinner. The painting will be done through brush in such a manner that paint should be uniformly spread on all the tower parts and shall not be blusterous. No part/parts of the tower member shall remain unpainted. Single coat red-oxide paint will be applied first. After complete drying of red-oxide paint, first coat of Aluminum paint will be applied, thereafter 2<sup>nd</sup> coat of Aluminum paint will be applied after complete drying of 1<sup>st</sup> coat Aluminum paint .at least after a gap of 8 days.

## **20 STRINGING:**

- (a) Suspension insulators strings shall be used on suspension towers and tension insulators strings on angle and dead end towers. They shall be fixed on all the towers just prior to the stringing. Damaged insulators and fittings if any shall not be used in the assemblies. Before hoisting all the insulators shall be cleaned in a manner that they will not spoil, injure or scratch the surface of the insulators but in no case any oil be used for this purpose. The yoke arrangement shall be horizontal for tension and longitudinal for suspension strings. Arcing horn shall be fitted in a approved manner. Torque wrench shall be used for fixing different line materials and their component like suspension clamp for conductor and earth wire etc. whenever recommended by our Site Engineer .Handling of conductor and earth wire contractor shall be entirely responsible for any damage to the towers or conductors during stringing. While running-out the conductor care shall be taken that conductor do not touch and rough on the ground or object which could cause scratch or damage to the strands. The conductor shall be run out of the drum from the top in order to avoid damage due to chafing. The drums stand shall be provided with a suitable braking device to avoid damage, loose running out and kinking of conductor. Proper care shall be taken to avoid injury to conductor while making it pass over the bull wheel of tensioner. After the tensioner the conductor will be pulled by the pull cable and consequently pass over the running out blocks. The groove of the running out blocks will be of such design that the seat of the semi-circular is larger than the diameter of the conductor and it does not sleep over or rub against the sides. The groove shall be lined with hard rubber or neoprene to avoid damage to the conductor and shall be mounted on properly lubricated



bearings. The running blocks shall be suspended in a manner to suit the design of the cross-arm. All running blocks especially those at the tensioning end, will be fitted on the cross-arm with jute cloth wrapped over the steel work and under the slings to avoid damage to the slings as well as to the protective surface finish of the steel work. The conductor shall be continuously observed for loose or broken strands or any other damage. While approaching to the end of the drum at least three coils shall be left, when stringing operations are to be stopped. These coils are to be removed carefully, and if another length is required to be run-out, new length already run out passing over the bull wheel of the tensioner after the joint passed-out of tensioner the compression joint shall be made in approved manner. The conductor joints and clamps shall be carried out in such a manner that no bird caging, over tensioning of individual wires or layers or other deformities or damage to the conductors shall occur. Clamps or bracing devices shall under erection conditions allow no relative movement of strands or layers of the conductors. Repairs to conductors, in the event of damage being caused to isolated strands of a conductor during the course of erection, if necessary, shall be carried out during the running-out operations, with repair sleeves. Repairing of conductor surface shall be done only in case of minor damage, scuff marks etc., keeping in view both electrical and mechanical safety requirements. The final conductor surface shall be clean, cuts smooth and shall be without any projections, sharp points, cuts abrasions etc. Repair sleeves may be used when the damage is limited to the outermost layer of the conductor and is equivalent to the severance of not more than one third of the strands of the outermost layer. No repair sleeve shall be fitted within 30 Mtrs of tension or suspension clamps or fittings, nor shall more than one repair sleeve per conductor be normally used in any single span. Conductor splices shall be so made that they do not crack or get damaged in the stringing operation. The Contractor shall use only such equipment/methods during conductor stringing which ensure complete compliance on this regard. Derricks shall be used where roads, rivers, channels, tele-communication or over-head power lines, railway lines, fences or walls have to be crossed during stringing operations. It shall be seen that normal services are not interrupted or damaged caused to property. Shutdowns shall be obtained when working at crossing of overhead power lines. The sequence of running out shall be from top to downwards i.e., the earth wire shall be run out first followed by the conductors in successions imbalances of loads on towers shall be avoided as far as possible. The proposed transmission line may run parallel for certain distance with the existing EHV lines which will remain energized during the stringing period. As a result there is a possibility of dangerous voltage build up due to Electro-magnetic and Electro-static coupling in the pulling cables, conductors and earth wires, which although comparatively small during normal operation can be severe during switching and ground fault conditions on the energized lines. It shall be the contractor's responsibility to take adequate safety precautions like use of discharge rods to protect his employees and others from this potential danger. After being pulled, the conductor/earth wire shall not be allowed to hang in the stringing block for more than 96 hours before being pulled to the specified sag.

**(b) STRINGING OF CONDUCTOR & EARTHWIRE**

The stringing of the conductor may be done by control tension method by means of tension stringing equipments or by the conventional method.

After being pulled, the conductor/earth wire shall not be allowed to hang in the stringing blocks for more than 96 hours before being pulled to the specified sag.

The Bidder shall give complete details of the stringing methods which he proposed to follow. Before, the commencement of stringing the contractor will be supplied with stringing charts for the conductor and earth wire showing the initial and final sags and tensions for various temperatures and spans along with equivalent spans in the lines.

**(c) JOINTING :**

All the joints of the conductor and earth wire shall be compression type. Each part of the joint shall be cleaned by wire brush to make it free of rust or dust etc., and properly greased with anti-corrosive compound as approved by our Engineer before the final compression is done with the compressors. The cost of such grease shall be deemed to be included in the stringing rates.

All joints shall be made at least 30 mt. away from the structures. No joints shall be made in the spans crossing over main roads, railways, rivers in tension spans. Not more than one joint per conductor shall be allowed in one span. Care shall be taken to mark the conductors for properly centering the compression clamp before compressing. During compression operation the conductor shall be handled in such a manner as to prevent lateral or vertical bearing against the dies. After pressing the joint the Aluminium sleeve shall have all corners rounded burrs and sharp edges removed and smoothened.

During stringing of conductor to avoid any damage to the joint while it passed over the traveler suitable protector shall be used.

**(d) SAGGING IN OPERATION**

The conductors shall be pulled up to the desired sag and left in running block for at least one hour after which the sag shall be rechecked and adjusted, if necessary, before transferring the conductors from the running blocks to the suspension clamps. The conductors shall be clamped within 36 hours of sagging in. The sag will be checked in the first and the last span of the section in case of sections up to eight spans and in one intermediate span also for sections which more than eight spans. The sag shall also be checked when the conductors have been drawn up and transferred from running blocks to the insulator clamps. The running blocks when suspended from the transmission structures for sagging shall be so adjusted that the conductors on running blocks will be at the same height as the suspension clamps to which it is to be secured. At sharp vertical angles, the sags and the tensions shall be checked on both sides of the angle the conductor and the earth wire shall be checked on the running block for equality of tension on both sides. The suspension insulator assemblies will normally assume vertical positions when the conductor is clamped.

Tensioning and sagging operations shall be carried out in calm weather when rapid changes in temperatures are not likely to occur.

**(e) TENSIONING AND SAGGING OF CONDUCTORS AND EARTH WIRES**

The tensioning and sagging shall be done in accordance with the approved stringing charts before the conductors and earth wires are finally attached to the towers through the earth wire clamps for the earth wire and insulator strings for the conductor. Dynamo meters shall be used for measuring tension in the conductor and earth wire.

**(f) CLIPPING IN**

Clipping of the conductors in position shall be done in accordance with the method approved by our Engineer. At suspension location three centre type suspension clamps with armored rod set or AG type suspension clamp will be used. The

jumper at the section and angle towers shall be formed to parabolic shape to ensure maximum clearance requirements. Pilot suspension insulator string shall be used if found necessary, to restrict the jumper swing to the design values. Fasteners in all fitting and accessories shall be secured in position. The security clip shall be properly opened and sprung into position.

**(g) FIXING OF CONDUCTOR AND EARTHWIRE ACCESSORIES**

Vibration dampers and other conductor and earth wire accessories supplied by the Company shall be installed by the contractor as per the design requirement and as per instructions of the Engineer. While installing the conductor and earth wire accessories proper care shall be taken to ensure that the surfaces are clean and smoothly no damage shall occur to any part of the accessories.

**21. REPLACEMENT**

If any replacement are to be affected after stringing and tensioning or during maintenance, leg members and bracings shall not be removed without reducing the tension on the tower with proper guying for releasing the conductor. If the replacement of cross-arms becomes necessary after stringing the conductor shall be suitably tied to the tower at tension points or transferred to suitable roller pulleys at suspension points.

**22. FINAL CHECKING, TESTING AND COMMISSIONING**

After completion of the work, final checking of the line shall be done by the contractor to ensure that all the foundations works, tower erection and stringing have been done strictly according to the specifications and as approved by the Company. All the works shall be thoroughly inspected keeping in view the following main points.

- a) Sufficient back filled earth is lying over each foundation pit and it is adequately compacted.
- b) Concrete chimneys and their copings are in good finely shaped conditions.
- c) All the tower members are correctly used strictly according to approved drawing and are free of any defect or damage, whatsoever.
- d) All bolts are properly tightened and punched.
- e) The stringing of the conductor and earth wire has been done as per the approved sag and tension charts and desired clearances are clearly available.
- f) All conductor and earth wire accessories are properly installed.
- g) All other requirement to complete the work like fixing of danger board, phase plate, number plate, anti climbing device aviation signals (wherever required) etc. are properly installed.
- h) The line insulation is tested by the contractor by providing his own equipments, labour etc. to the satisfaction of the Company.
- i) The line is tested satisfactorily for commissioning purpose.

\*\*\*\*\*

## **SCHEDULE – 1**

### **COMPLETION SCHEDULE (Based on Acceptance of Offer)**

S No.	Description of work	Period in weeks from the date of order. Commencement completion
1.		
2.		
3.		
4.		
5.		

Date

Signature

:

Place

Name

:

Status

:

Seal of the Bidder

:

## **SCHEDULE –II**

### **QUESTIONNAIRE**

**Note:** The Bidders may please note that submission of this questionnaire duly and properly filled-in is essential while filling in entries against the questions given below no reference should be made to comments entered elsewhere in the tender. All queries should be answered and these answers should be complete in themselves. Please note that none of the column should be left blank and clear reply against all columns should be furnished. In case this is not done the offer will be liable for rejection.

1. Name and address of Bidder with phone
  - a. Address
  - b. Phone No.
  - c. Mobile No.
  - d. Fax No./ E-mail-
2. Whether the required earnest money has been furnished by you, if yes.
  - (i) In which form
  - (ii) Amount of earnest money furnished.
3. Whether bidder is participating in instant tender as sole bidder
4. Turn over for the last 5 years
  - (i)
  - (ii)
  - (iii)
  - (iv)
  - (v)
5. Have you submitted a certificate of CA regarding turn over.
6. Whether a list orders executed by you enclosed with full particulars of nature of work done.
7. Whether certificate of competent authority as a proof of having completed 400/220/132 KV line/S/s successfully have been furnished.
8. Whether a photo copy of A Class Electrical Contractor license (duly revalidated) has been furnished.
9. Whether Prices/Rates are firm.  
(Please quote the firm rates only).

10. What is the validity period of your offer.(Required 180 days)
11. Whether details of technical man power of head office and field organization furnished.
12. Have you furnished the power of attorney in respect of the person signing the tender on behalf of Bidder.
13. (i) Whether your firm is partnership firm.  
(ii)If so, indicate the name(s) complete address and designation of all partners.
14. Whether profit and loss account and balance sheets for the last 5 years have been furnished by you.
15. Whether agreeable to furnish security deposit in the form as indicated in tender.
16. Whether you agree to clause for arranging T&P and vehicles.
17. Please refer to clause 17 (section-III) (No deviation clause) whether same is acceptable to you, (please note if your answer is no your price-bid will not be opened and will be returned unopened)
18. Whether check list has been enclosed.
19. Integrity Pact in the prescribed format executed in non judicial stamp paper worth Rs.250/- has been enclosed

Date	Signature	:
Place	Name	:
	Status	:
	Seal of the Bidder	:

**Note:** The Bidder should use above questionnaire sheets in original for furnishing reply alongwith his offer. However, if separate sheets are used for this questionnaire it may please be ensured that the serial order and language of questions is maintained. Copies of the documents must be enclosed in support.

**SCHEDULE – III**  
**PRICE BID (CONSTRUCTION CHARGES)**

<b>River crossing by height raising of existing 33 KV Birkona (Koni) feeder to 33/11 KV Circuit house sub-station on labour contract basis (TR-492)</b>					
<b>Sl No</b>	<b>Particular</b>	<b>Unit</b>	<b>QTY</b>	<b>Rate (Rs)</b>	<b>Total Amount (Rs) (5*6)</b>
1	2	3	5	6	7
1	Check Survey including site clearance	KM	0.394		
2	Excavation in :-				
(i)	Dry soil (Normal+ BC + Sandy Soil)	CuM	375.00		
(ii)	Wet soil (Wet + PS + FS)	CuM	545.00		
3	Providing & placing sand bag / shuttering etc. for excavation of pits on river bank.	Job	1		
4	Setting of Template & fixing of earthing arrangement :- Both for Normal & Extension towers				
i	DN-60	Loc	2		
5	Concreting.				
(i)	Lean Concrete 1:3:6 ratio Mix M-10 including Back Filling, Muffing, Coping & Curing etc (including cost of Cement, Metal, Sand & water etc.)	CuM	7.10		
(ii)	Concrete 1:1.5:3 ratio Mix M-20 including Back Filling, Muffing, Coping & Curing etc (including cost of Cement, Metal, Sand & water etc.)	CuM	49.80		
6	Reinforcement Including cost of material	MT	3.90		
7	Erection of EHV Tower	MT	16.00		
8	Cost of peripheral welding of G.I. nuts & bolts above Ground Level upto bottom cross arm per tower.	LOC	2		
9	Tower Painting				
i	Single coat Red oxide Painting	MT	16.00		
ii	Double coat Aluminium Painting	MT	16.00		

10	Stringing of 06 nos. ACSR Panther conductor and 01 no. ground wire including insulator hoisting and clipping etc. complete in all respect at river crossing towers (span-394 mtr.)	Job	1		
11	Final checking and rectification fixing of ACD fixing of danger board, Number plate & phasse plate	LOC	2		
	Total amount of A (1 to 11)				
B	GST (indicate the applicable rate in column 6 & its amount in column 7)				
C	Grand Total (A + B)				
	Grand Total in words				

**Date :**  
**Place :**

**Signature:**  
**Name:**  
**Date :**  
**Seal :**

**Note :-**

1. Under section 171 of GST Act 2017 provides that any reduction in rate of tax on any supply of goods or services or the benefit of Input Tax Credit (ITC) shall be passed on to the CSPTCL by way of commensurate reduction in prices.
2. The above quantities are provisional & may vary during actual execution of the work as per approved profile.
3. The Rates will be FIRM during entire contractual period and no any other charges/duties other than mentioned above will be payable by CSPTCL.
4. All items of "Price Bid" should be quoted exclusive of Goods and Service Tax (GST). Rate of GST should be mentioned in the price bid specifically at appropriate place. The suppliers /service providers shall have to disclose the taxes separately. Any variation in GST within scheduled completion period shall be to the account of CSPTCL.



**SCHEDULE-IV**  
**PRE-CONTRACT INTEGRITY PACT**

*(On non-judicial stamp paper worth Rs.250/- duly signed by the bidder along with the  
Techno-Commercial bid)*

**1. GENERAL**

- 1.1 This pre-bid contract Agreement (herein called the Integrity Pact) is made on.....day of the month .....20..., between the CSPTCL acting through Shri.....ED/CE (C&LM), 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 or 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 Nationalised 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 Security Deposit shall be valid up to a period till complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and BUYER, including warranty period.
- 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 broker 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 dependant 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. INDEPENDENT MONITORS**

- 8.1. The BUYER will appoint Independent Monitors (hereinafter referred to as Monitors) for this Pact.
- 8.2. 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.
- 8.3. The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 8.4. 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.
- 8.5. 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.
- 8.6. 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.

**09. 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.

**10. 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.

**11. 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.

**12. VALIDITY**

12.1 The validity of this integrity Pact shall be from the date of its signing and extend up to 2 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.

12.2. If one or several provision of this pact turn out to be invalid; the reminder of this pact shall remain valid. In such case, the parties will strive to come to an agreement to their original intention.

13. The parties hereby sign this integrity Pact at .....on.....

BUYER  
ED (C&LM)  
CSPTCL, Raipur

BIDDER  
CHIEF EXECUTIVE OFFICER  
Department/PSU

**Witness**

**Witness**

(i)..... (i).....  
.....

(ii)..... (ii).....  
.....

### CHECK-LIST

S. No	Item	Reference	Declaration (strikeout whichever is not applicable)
1	Earnest money / Tender Cost enclosed	Page No -	Yes / No
2(i)	Copy of work orders and its performance / completion certificate	Page No -	Yes / No
(ii)	Copy of balance Sheet and profit & loss statement of last five year	Page No -	Yes / No
(iii)	Copy of Valid A-Class Electrical License (must be in the name of contractor)	Page No -	Yes / No
3.	Copy of EPF Registration (Allotted by EPF commissioner) or Undertaking	Page No -	Yes/No
4.	Copy of labour license or Undertaking	Page No -	Yes/No
5.	Completion schedule enclosed duly filled-in.	Page No -	Yes / No
6.	Questionnaire enclosed duly filled-in.	Page No -	Yes / No
7.	Duly signed Un-priced / un-filled price schedule with T/c bid	Page No -	Yes/No
8.	Integrity pact in the prescribed format executed in non judicial stamp paper worth Rs.250/- duly signed by witness has been enclosed.	Page No -	Yes/No
9.	Bank A/c Details with cancelled cheque / vendor No. with CSPTCL.	Page No -	Yes / No
10	Tender Book duly sealed & signed.	Page No -	Yes/No
11	Certified copies of PAN and GST registration	Page No -	Yes/No
12	Offer-form (Price Bid) enclosed	Page No -	Yes / No

Date

Place

Signature :

Name :

Status :

Seal of the Bidder :