

CHHATTISGARH STATE POWER TRANSMISSION CO. LTD. (A Govt. of Chhattisgarh undertaking) (A successor company of CSEB) CIN- U40108CT2003SGC015820 GSTIN-22AADCC5773E1ZX

**OFFICE OF EXECUTIVE DIRECTOR (PLANNING & PROJECT)** 

Third Floor, SLDC Building, CSEB Campus Dangania, Raipur (C.G.)-492013

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## TENDER SPECIFICATIONS

## TR-20/05

### (VOLUME – I OF III)

### PACKAGE FOR CONSTRUCTION OF 220/132/33 KV SUB-STATIONS AT DALDALSEONI (RAIPUR) AND ASSOCIATED 220 KV DCDS RAITA-DALDALSEONI LINE (RL-30 KM APPROX.) ON TURNKEY BASIS (Through E-Bidding)

RFx No. 8100021991

DATE & TIME OF PRE BID CONFERENCE DATE : 15.06.2021 (TIME 11:30 HRS)

LAST DATE & TIME OF SUBMISSION OF TENDER DATE : 30.06.2021 (TIME 15.00 HRS)

DUE DATE & TIME OF OPENING OF TENDER DATE : 30.06.2021 (TIME 15.30 HRS)

**Cost of Tender Document: - Rs.10,000 + Applicable GST** 

#### OFFICE OF EXECUTIVE DIRECTOR (PLANNING & PROJECT) CHHATTISGARH STATE POWER TRANSMISISON CO. LTD. DAGANIYA, RAIPUR (C.G.)

TR-20/05

#### PACKAGE FOR CONSTRUCTION OF 220/132/33 KV SUB-STATION AT DALDALSEONI (RAIPUR) AND ASSOCIATED 220 KV DCDS RAITA-DALDALSEONI LINE (RL-30 KM APPROX.) ON TURNKEY BASIS

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CHHATTISGARH STATE POWER TRANSMISSION CO. LTD

(A Government of Chhattisgarh Undertaking) **O/o** Executive Director (Planning & Project)

Address : Third floor, SLDC Building, Danganiya Raipur-492013.

TR-20/05

Website : www.cspc.co.in email: cepnp.csptcl@cspc.co.in Phone: 0771-2574209/14/41 Fax: 0771-2574246

#### **TENDER FORM**

#### **TENDER SPECIFICATION TR-20/05 FOR** PACKAGE FOR CONSTRUCTION OF 220/132/33 KV SUB-STATION AT DALDALSEONI (RAIPUR) AND ASSOCIATED 220 KV DCDS RAITA-**DALDALSEONI LINE (RL-30 KM APPROX.) ON TURNKEY BASIS**

Tender document SL.No*	
Issued to M/s	*
Cost of Tender documents Rs	
D.D.NoDtd	
Name of Bank	
* Not required in case tender document is downloaded	

#### Signature & Seal of Issuing Authority **CSPTCL**; Raipur

The undersigned hereby tender and offer (subject to CSPTCL's conditions of tendering), the Chhattisgarh State Power Transmission Company 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 & Annexures to the specification TR-20/05 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 the inferred from the said tender documents for the sum and at the rates set out in schedules annexed hereto.

It is confirmed that:

- Questionnaire for Commercial terms and conditions. (I)
- (II) Questionnaire for Technical specifications of the Equipments, and
- (III) All other conditions wherever described in the tender documents have been replied in full giving clear details. It has been noted that in case any reply is not given or any reply is incomplete/ambiguous the 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 .....

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



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**O/o** Executive Director (Planning & Project)

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Raipur/dtd. 29.05.2021

No.02-04/NIT/TR-20/05/271

### **E-NOTICE INVITING TENDER**

Sealed tenders are invited from experienced bidders for taking up the following project on turnkey basis:-

TR-20/05

S. No.	Tender No.	Particulars	Cost of Tender Documents (Non-refundable)		Earnest money	Due date of opening
			Printed Tender form	E-tender form online (Downloaded from website)		
1.	TR-20/05 RFx No 8100021991	Construction of 220/132/33 KV sub-station at Daldalseoni (Distt. Raipur) comprising 2 No. 220/132/33 KV, 160 MVA & 2 Nos. 132/33 KV, 63 MVA Power Transformer, 6 Nos. 220 KV bays, 7 Nos. 132 KV bays & 13 Nos. 33 KV bays. and Construction of 220 KV DCDS line from 400/220 KV S/s Raita to proposed 220/132/33 KV S/s Daldalseoni (Approximate RL 30.0 Km)	Rs.11,200/- (including 12 % GST)	Rs.11,800/- (including 18 % GST)	Rs. 5.00 lacs	30.06.2021

#### SCOPE OF WORK:

- All civil works associated with construction of all 220/132/33 KV sub-stations and EHV Line viz (i) construction of foundation, cable trench, control room building, bay marshalling room, external water supply arrangements & road etc. shall be as per CSPTCL'S drawings along with supply of cement, steel and other required material.
- Supply of galvanized steel structures & towers as per CSPTCL's design, all equipments including (ii) 160 MVA, 220/132/33 KV & 63 MVA/ 40 MVA, 132/33 KV Power transformer & other material required for construction of sub-station & EHV line conforming to relevant I.S.S./ International Standards as per tender specification & as approved by CSPTCL.
- Design, supply of all switch yard and control room equipments, IEC 61850 based substation (iii) automation system including hardware and software for control and supervision from local substation as well as remote station alongwith associated equipments.
- Erection, Testing & commissioning of individual equipments and energization of complete (iii) substation and erection, testing & commissioning of EHV Line.
- Supply of testing equipments, T&P, furniture etc. (iv)

#### NOTE:-

- Bidders are requested to participate in all the works included in the tender. Part bidding is not i) acceptable.
- In case any of the above date is declared as holiday, then the particular date will automatically get ii) shifted to next working day.
- Any notice for extension of due date of tender opening shall not be published in newspapers. It will iii) be displayed only on official website of the company.

- iv) The tender will be processed through e-bidding module of SAP-SRM. Bidders are advised to visit our website <u>www.cspc.co.in/csptcl</u> for viewing detailed instructions regarding submission of offer through SAP-SRM.
- v) Pre bid conference shall be held in the O/o ED/CE (P&P) SLDC building danganiya Raipur on dtd. **15.06.2021 at 11.30 Hrs**.

#### **TERMS AND CONDITIONS:-**

- (i) The tender documents can be obtained from the office of the ED/CE (Planning & Projects) in person on payment of cost of tender document in the form of D.D. only made out in the name of MANAGER (RAO : HQ), CSPTCL, Raipur accompanied with firm's application on its letter head. If tender document is required by post, Rs.280/- (i.e., 250/- + 12% GST) shall be paid by D.D. additionally along with the cost of documents. If more than one tender document is required, separate DDs should be furnished for each tender. CSPTCL shall not be responsible for any postal delay in receipt/ nonreceipt of tender documents. No receipt of tender shall be issued in any case.
- (ii) The tender document can also be downloaded from official website of CSPTCL "www.cspc.co.in" (go through Chhattisgarh State Power Transmission Co. Ltd. Tender Notice) and Rs.11,800/- (i.e. Rs.10,000 /- + 18 % GST) in form of DD in favour of Manager (RAO: HQ), CSPTCL, Raipur payable at Raipur should be submitted along with cost of Earnest Money Deposit (EMD) in separate envelope. The envelope containing DDs towards cost of tender document & EMD should be suitably super scribed "DDs containing cost of tender document and EMD". The details of DDs should be mentioned on the outer side of the envelope also. Please note carefully that in absence of aforesaid requisite tender fee, further bid shall not be considered for opening.
- (iii) Tender documents and the detailed specification can be obtained on any working day one day prior to the due date. The tenders duly filled in shall be dropped/get dropped in the specified tender box up to 15:00 Hrs. on the due date. Any other means of delivery shall not be accepted. No receipt of tender shall be issued in any case. The tender box shall be locked/sealed at 15:00 Hrs. on the due date and shall be opened at 15:30 Hrs. on the same date.
- (iv) After publication of NIT & before the date of opening of TC Bid, corrigendum/ other information (if any) shall be displayed on our official website and in SAP SRM (E-bidding Portal only). The bidders are requested to remain in contact with this office or visit our web-site for any development/ clarification/amendment issued subsequently.
- (v) CSPTCL reserves the right to accept or reject any or all the offers, in part or full without assigning any reason whatsoever.

Website: - www.cspc.co.in/csptcl

Executive Director (Planning & Project) CSPTCL: Raipur

#### GENERAL DESCRIPTION OF PROJECT & SCOPE OF WORK

# THIS COMPLETE TURN KEY PROJECT COVERS DESIGN ENGINEERING & SUPPLY OF EQUIPMENTS, CONSTRUCTION & ERECTION OF ALL EQUIPMENTS ASSOCIATED WITH 220/132/33KV SUB-STATION & EHV LINE.

The tentative scope of works are as under :

Project	Particulars
1.	<ol> <li>(1) Construction of 220/132/33 KV sub-station at Daldalseoni (Distt. Raipur) comprising 2 No. 220/132/33 KV 160 MVA &amp; 2 Nos. 132/33 KV, 63 MVA Power Transformer, 6 Nos. 220 KV bays (comprising of 2 Nos transformer bays, 2 Nos feeder bays, 1 No. Bus transfer bay &amp; 1 No. Bus Tie bay), 7 Nos. 132 KV bays (comprising of 4 Nos transformer bays, 2 Nos feeder bays, 1 No. Bus transformer bays, 2 Nos feeder bays, 1 No. Bus transformer bays, 8 Nos feeder bays, 1 No. Bus transfer bay &amp; 2 Nos. Cap.bank bays) substation automation system including hardware and software (for control and supervision from local substation as well as remote station), alongwith associated equipments &amp; other works</li> <li>(2) Construction of 220 KV DCDS line from 400/220 KV S/s Raita to proposed 220/132/33 KV S/s Daldalseoni (Approximate line length 30.0 Km)</li> </ol>

### Bidders are requested to participate in all the above sub-station & line construction works. Part bidding is not accepted.

#### I. <u>DESCRIPTION OF SUB-STATION WORKS :</u>

The scope of works also includes the following works:

- 1. All civil works associated with construction of all 220/132/33 KV sub-station and EHV Line viz construction of foundation, cable trench, control room building, bay marshalling room, external water supply arrangements & road etc. shall be as per CSPTCL'S drawings along with supply of cement, steel and other required material.
- 2. Supply of galvanised steel structure for equipments, gantry, bus-bar as per design & drawing of CSPTCL & tubular pole/ high mast lighting arrangements.
- 3. Design of sub-stations and supply of 220/132/33 KV, 160 MVA & 132/33 KV, 63 MVA Power Transformer, all equipments for 220 KV, 132 KV and 33 KV switchyard and control room equipments, control cables etc.
- 4. Supply of testing equipments, T & P & furniture etc.
- 5. Erection, Testing, Commissioning and Energization of substation.
- 6. Wherever, bus/bay extension works are involved in existing sub-station, the bidder should take care to match with the existing system for aesthetic view. Bidders are requested to visit the site before participating in the tender.
- 7. The 220 KV Bus Arrangement at 220/132/33 KV substation is two main bus & one Transfer Bus. The 132 KV & 33 KV Bus Arrangement at all Sub-stations is one main bus & one Transfer Bus. The bus conductor for all main bus shall be double zebra and for all transfer bus single zebra. A tentative layout diagram of all substations is enclosed with this tender showing all the 220 KV, 132 KV & 33 KV main & transfer bus arrangements, feeders, transformer to be constructed.
- 8. 220 KV, 132 KV & 33 KV GI structures for gantry and equipments shall be as per the design of CSPTCL. Therefore, these structures are to be provided as per the standard design of CSPTCL. The weights in MT of each type of structure have been indicated in tender document.

## System fault level is 40 KA for 220 KV, 31.5 KA for 132 KV switchyard equipments & 25 KA for 33 KV switchyard equipments. However, the short time current ratings of various equipments have been

mentioned in their technical specification and the equipments are to be supplied with the desired Short time current rating.

SUPPLY, ERECTION, TESTING & COMMISSIONING OF THE FOLLOWING EQUIPMENTS:-

Supply of all equipments and accessories for 220/132/33 KV Substation, which includes supply of

- (i) 160 MVA, 220/132/33 KV auto Transformer alongwith Nitrogen Fire prevention sheme and Online dissolved gas monitoring scheme.
- (ii) 63 MVA, 132/33 KV Power Transformer alongwith Nitrogen Fire prevention sheme and Online dissolved gas monitoring scheme.
- (iii) 220 KV equipments viz SF6 Circuit Breakers, CVT, Wave Traps, LA and Isolators (220 KV CT & PT shall be provided by CSPTCL).
- (iv) 132 KV equipment viz; SF6 Circuit Breakers, Lightning Arrestor and Isolators. (132 KV CT & PT shall be provided by CSPTCL).
- (v) 33 KV equipments viz vacuum Circuit Breaker, CT, PT, Isolator, LA, and Coupling Capacitor.
- (vi) 33 KV CT, PT, Isolator, LA, 33 KV PT insulation level 72.5 KV, 33 KV Isolator insulation level 72.5 KV and 39 KV LA for tertiary side of 220/132/33 KV, 160 MVA Power Transformer.
- (vii) Luminaries,
- (viii) High Mast,
- (ix) GI Steel structures,
- (x) Control & Relay Panels,
- (xi) Complete Substation automation including hardware and software for local control stations as well as for remote control station along with associated equipments and AC bay marshalling rooms, for 220 KV, 132 KV & 33 KV bays (bay as defined in technical specification)
- (xii) PLCC equipments (Carrier Cabinet, Coupling Device & Coaxial Cables),
- (xiii) 220V, 600 AH & 48V, 600AH Battery sets,
- (xiv) 220V, 600 AH & 48V, 600AH Battery Chargers,
- (xv) ACDB/DCDB Boards,
- (xvi) Marshalling/Junction box,
- (xvii) Control& power Cables, OFC/ any other cable
- (xviii) GI Cable trays,
- (xix) ACSR conductor, earth wire.
- (xx) Hardware, clamps & connectors.
- (xxi) Disc & post insulators,
- (xxii) Earth-mat & earthing material,
- (xxiii) Testing equipments and T&P,
- (xxiv) Visual Monitoring System
- (xxv) Furniture etc.
- (xxvi) Any other equipment/ material required for construction of 220/132/33 KV Substation.
- (xxvii) Additional 220 KV, 132 KV & 33 KV bays for following shall also be constructed with civil foundations (including foundation bolts), cable trenches, site levelling/metal spreading, laying earth mat, bus extension etc and associated structures **<u>but without equipments</u>**
  - (a) 1 No. 1x160 MVA, 220/132 KV Transformer bay for future.
  - (b) 1 No. 1x63 MVA, 132/33 KV Transformer bay for future.
  - (c) 1 No. 132 KV feeder bay for future.
  - (d) 1 No. 33 KV feeder bay for future

CIVIL WORKS: - The scope of work shall include but shall not be limited to civil works for the following -

- (a) Foundation of 160 MVA, 220/132/33 KV & 63MVA, 132/33 KV Auto transformers.
- (b) Foundation for equipments & gantry & busbar structures.
- (c) Foundation for lighting poles & High mast.

- (d) RCC Cable trenches along with covers and RCC sump tank.
- (e) Cable trench crossings with roads, rail tracks, culverts etc.
- (f) All roads within and outside (approach and diversion) of the substation area shall be in the scope of the bidder. All roads within substation fence shall be Concrete road.
- (g) Stone spreading and anti weed treatment of complete switchyard area.
- (h) Rain water harvesting system
- (i) Permanent water supply systems for control room, earthing pits.
- (j) Substation fencing and gates.
- (k) Foundation of 500 KVA Station transformer.
- (l) Control room (Type-II) for the substation along with Bay Marshalling Rooms complete in all respects.
- (m) Contouring and substation levelling.
- (n) Detailed Soil investigation including soil resistivity measurement.
- (o) Water storage and bore wells
- (p) Retaining wall, stone pitching, drains, cutting/levelling/filling of s/s area, diversion of roads, nallah, etc. required as per site condition due to any reason and for any purpose, required for successful completion of s/s works.

Complete design and detailed engineering shall be done by the Contractor based on specifications and conceptual drawing of the sub-station attached with the tender document.

Design of sub-station and its associated electrical & civil auxiliary system includes preparation of foundation & cable trench layout, finalizing various levels of S/S on the basis of contour drawing to ensure effective drainage, electrical and physical clearance diagrams. Control and protection schematics, wiring and termination schedules, outdoor lighting/ illumination and other relevant drawings & documents required for engineering of all facilities within the fencing to be provided under this contract are covered under the scope of the Contractor.

#### II. <u>DESCRIPTION OF LINE WORKS</u>:

- 1. In the transmission system of Chhattisgarh 220 KV DCDS line from 400/220 KV S/s Raita to proposed 220/132/33 KV S/s Daldalseoni (Approximate line length 30.0 Km) is required to be constructed on turnkey basis. The specification covers the supply of fabricated galvanised towers materials along with its accessories. The work involves supply of Galvanized towers, ACSR Conductor, Ground wire, supply of all line materials i.e. G.I. Bolts & Nuts, spring washer, galvanised earthing rods with clamps, danger board, number plate, phase plate, Anti-climbing Devices (Including fixing arrangements and barbed wires), conductor and ground wire accessories, insulators, stringing hardware etc. and complete construction i.e. reconnaissance survey, preliminary survey, route alignment, detailed survey, check survey, profiling, tower spotting, optimisation of towers, stringing of the line etc. required for turnkey project. Cement and reinforcement steel, metal, sand for foundation of towers shall also be provided by the tenderer. The details of work and technical specifications are given in various sections of this specification.
- 2. CSPTCL shall provide structural drawings and Bill of Materials of 220 KV towers and extensions, to the contractor along with foundation drawings after placement of award in sequence, suiting the project requirement. The contractor shall prepare Workshop drawings for fabrication of towers promptly. Before taking up the mass fabrication, the contractor will fabricate proto tower and offer the proto assembly for inspection. Proto assembly of tower shall be inspected by CSPTCL's authorized representative.
- 3. Bidders are required to quote for all materials and works as detailed in the specification. They shall furnish full particulars as called for in addition to filling and completing the Annexures of this specification.
- 4. All the line materials like ACSR conductor, ground wire, EHV Line tower, disc insulators, Stringing Hardware & accessories etc. required for completion of the line are to be supplied by contractor and should be considered for assessing the total of insurance cover.
- 5. The quoted rate of concreting should include the cost of Cement, Metal, Sand, Water & curing, backfilling etc. Similarly, the rate of reinforcement will include the cost of materials also.

- 6. The general conditions of tendering and commercial conditions for supply of G.I. Towers & other line materials and erection of the transmission line have been specified in the tender.
- 7. Bidder shall submit his offer taking into consideration that the design details of towers/extensions shall be provided by CSPTCL and design rights will strictly remain with CSPTCL.

Bidders are advised to visit the sub-station site to acquaint & satisfy themselves with its surrounding, topography, condition of soil strata, availability of construction material, labour, approach road, availability of water for construction purpose etc. and other local parameters, infrastructure and means to access the site, prior to submission of offer.

Bidders shall be deemed to have full knowledge of the site, whether he inspects it or not and no extra charges towards visit or otherwise shall be allowed. Submission of the offer by the bidder implies that he has read the tender document and made himself aware of the scope of the work to be done, local conditions and all other factors bearing on execution of the work.

Any other item which are not specifically mentioned in the bill of quantities/price schedule, but are essential for completion of the project and its satisfactory operation, are deemed to be included in the scope of the work unless specifically excluded. Such works, which are beyond the scope of the contract, shall have to be done by the contractor as per clause-4 of GCC and as per approved drawing, specifications and as per direction of engineer-in-charge of CSPTCL.

#### **VARIATION IN QUANTITIES: -**

The quantities of equipments indicated in the schedules/Annexure B-1 to B-10, C-1, D-1 & D-2 and AL-1 & AL-2 are tentative and there may be variations at the time of execution of the work. The contractor shall have to complete the works as per prevailing site and field conditions/requirements/approved drawing/scope of work/specifications and will have to ensure complete supply of equipments, steel structures including civil work etc. and also erection & commissioning of equipment in the sub-station as per the direction of concerned engineer- in-charge of CSPTCL.

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#### <u>SECTION-I</u>

TR-20/05

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

The price bid against tender specification No. **TR-20/05** is to be processed through e-bidding. For participation in E-bidding, it is mandatory for prospective bidders to get registered online through our website & portal http://www.cspc.co.in & https://ebidding.cspcl.co.in:50724/irj/portal, on registration the bidders will get User ID and Password for participating in the tender.

The techno commercial bid is to be submitted in hard copy whereas the price bid is to be submitted online (E-Bidding portal). Details of NIT & Tender Document are available on our website and portal as indicated above.

The bidder may download the same from the above site. In e-bidding portal, tender documents will be displayed in online tender display at Technical RFx section.

For bidders, it is recommended to open the e-bidding portal by the following the path www.cspc.co.in->e-Bidding->"click here for e-Bidding Web portal".

Last date & time of submission of bid in hard copy and also in softcopy is **30.06.2021 upto 03:00 pm** and due date & time of opening of techno-commercial bid is **30.06.2021 upto 03:30 pm**.

#### **Important Instructions :-**

- 1. Please note that this tender shall be processed online as well as offline. The bidder has to submit all the documents in hard copy as per tender specifications in four envelopes.
- 2. The abstract (total) amount of Annexure from B-1 to B-10, C-1, D-1 & D-2 and AL-1 & AL-2 are to be filled in the item tab in e-bid in SAP SRM System (online e-tender). Amount should be quoted online & in specified fields only. It is required to upload scanned copy of ONLY price bid SCHEDULES DULY FILLED IN AND SIGNED WITH SEAL OF FIRM IN THE specified FOLDER along with the duly filled excel sheets of price schedules.

Discount (if any) offered by the bidder should be filled in the respective field in the SAP SRM system (E-bidding Portal) only. Discount for each of the schedules i.e. B-1 to B-10, C-1, D-1, D-2, AL-1 & AL-2 is to be indicated separately in the respective fields. No discount offer shall be considered which is indicated elsewhere for the purpose of evaluation and comparative statement. Once the rates are filled, the bidders may change their rates upto the due date and time of submission of tender. After due date and time, no change on any ground whatsoever will be accepted.

- 3. After scrutiny of techno-commercial bid, the price bid will be opened in e-bidding system only of eligible bidders for which suitable intimation will be given to the bidders offline & through email.
- 4. Please note that e-mail is always system generated, hence bidders are advised to regularly check their inbox/junk mail box.
- 5. CSPTCL shall not assume any responsibility for non-supporting of system, internet, line & associated hardware & software for bidding their tender. No extension in time shall be granted on such grounds. The bidder should submit their bid well before submission dead

line to avoid any system related problem. It is strongly recommended not to wait for submission of bid in last minutes as internet/technical problem may disrupt their works.

- 6. Reference time for submission dead line shall be the time displayed in the portal and shall be treated as final.
- 7. After end of submission deadline, no alteration in the tender will be allowed by the system. However, in case of extension of due date of opening of tender, the bidders will be allowed to submit revised bid in the system.
- 8. CSPTCL will not accept incomplete bid.
- 9. The bidder must have a valid Digital Signature (class –III digital certificate) to establish the identity of the bidder & SAP SRM User ID. User ID & Password from CSPTCL and Digital Signing Certificate and Digital Encryption Certificate from any recognized digital signature issuing authority are required for participation in any Tender. The bidder shall intimate in advance regarding details of digital signature issuing authority for ensuring the reliability of the same.
- 10 The e-bidding vendor user manual displayed on websitehttps://ebidding.cspcl.co.in:50724/irj/portal for the help of the bidders. For any further queries the bidder may contact at Helpline no. 0771-2576672/73 (EITC, CSPDCL, Raipur)
- 11. Tender shall be opened in the scheduled time as notified. If the due date of opening/submission of tender documents is declared a holiday by the Govt. or local administration, it will be automatically shifted to next working day for which no prior intimation shall be given. Tender opening shall be continued on subsequent days, in case the opening of all tenders is not completed on due date because of the technical constraints of system on the day of opening. It may be noted that the due date of opening/time may be altered/ extended if desired by CSPTCL without assigning any reason. However, intimation shall be available on company's tender portal/bidders email (if participation shown). The bidders are requested to keep track of the same.
- 12. Amendment in tender specification will be published on our website as well as in SRM system and the intimation regarding amendment in date extension will be conveyed through system generated e-mail to registered bidders only.
- 13. Before participating the bidder shall carefully read all the instructions and processes.
- 14. Tender duly completed in all respects will be accepted online up to due date & time and will be opened on the due date at specified time in the presence of tenderers or their authorized representatives. In case of authorized representative(s) they shall bring the original authorization letter with their signature attested by the bidder.

#### EXECUTIVE DIRECTOR (P&P) CSPTCL: RAIPUR

#### 1. **INSTRUCTION TO BIDDERS**

c)

- 1.1 Sealed Tenders in duplicate in Four envelopes (each complete with all details in the manner specified together with drawings, test reports, descriptive literature if any) and declarations form duly signed by the bidder are to be submitted in the office of the **E.D/C.E** (**Planning & Project**), **CSPTCL**, **Dangania**, **RAIPUR** (**CG**) in double sealed cover & super scribed on each of the covers the relevant tender specification number and due date of opening as indicated in "Notice Inviting Tenders".
- 1.2 This tender Specification is divided into following three parts namely:-
  - 1. Volume-I : Commercial part.
    - a) Section- I Instruction to Bidders
    - b) Section- II General Conditions of Contract in two parts:-

Section-IIA - for 220/132/33 KV Substation

- Section-IIB for EHV Line
- Section- III Annexures, schedules & formats
- d) Section –IV Price bid Annexures for substation and EHV Line
- e) Section- V Vendor List

#### 2. Volume-II: Technical Specification for

- a) Section-I Construction of Substation
- b) Section-II Construction of EHV Line
- c) Section-III Price variation Formulae for EHV Substation equipments and
- line materials
- 3. Volume-III: Drawings
  - a) Section-I Drawings related to EHV Sub-station
  - b) Section-II Drawings related to EHV Line
  - c) Section-III Civil foundation drawings for EHV Sub-station
- 1.3 The Company reserves the right to alter the quantities with respect to materials/equipments/ volume at the time of placing of order.
- 1.4 Tenders will be opened online as well as offline in the O/o E.D/C.E (Planning & Projects), CSPTCL in the presence of the bidders or their authorised representatives (limited to two persons only with a valid authorisation from their employer). At the time of opening, the techno-commercial bid and other relevant details will be read out. Price bid of Techno commercially successful bidder would be opened only in online SAP SRM Module (E-bidding Portal) at a later date with due information to all the successful bidders.
- 1.5 The bidder may deviate from the specification while quoting if in his opinion such deviation is in line with the manufacturer's standard practice and conductive to a better and more economical offer. All such deviations should however be clearly indicated giving full justifications for such deviations in separate sheet(s) under "Deviations/ Departures" title in Annexure-A-9 & A-10.

# It may please be noted that any deviation mentioned elsewhere (other than the prescribed formats of Technical deviation (Format "A-9") & Commercial deviaton (Format "A-10") shall not be considered and shall have no effect.

- 1.6 Only those who have purchased / downloaded the copy of relevant Specification No. TR-20/05 can submit their tender. Tenders submitted by others will be rejected. The Tender form duly signed by the bidder with the seal of the company must be furnished with the bid, failing which the tender may be rejected.
- 1.7 CSPTCL reserves the right to reject the lowest or any other tenders or all tenders without assigning any reason what so ever if it is considered expedient in the overall interest of CSPTCL.
- 1.8 The Tenders shall be submitted in <u>DUPLICATE</u> in Four envelopes should be enclosed in sealed cover both addressed to the E.D/C.E (Planning & Project), CSPTCL, Dangania, RAIPUR and online price bid in SAP SRM Module (E-Bidding Portal )of CSPTCL. Both inner and outer cover envelops should be sealed and super scribed with tender specification No. **TR-20/05** and date of opening.

- 1) **Envelope No. 1** should contain a covering letter with EMD & cost of tender document (if tender document is downloaded from the website).
- 2) **Envelope No. 2** shall contain the original and duplicate copy of documents in support of PQR & check list along with Pre-contract Integrity pact (for entire project).
- 3) **Envelope No. 3** shall contain the technical & commercial parts of the specification with Annexure-A-1, A-2, A-8, A-11, A-14 & A-15 & Un-priced Annexures B, B-1 to B-10, C-1, D-1, D-2, AL-1 & AL-2 complete in all respect in duplicate copy.
- 4) **Envelope No.4** should contain all the above three envelopes.

No any envelope apart from above mentioned envelope shall be entertained.

The tender should be dropped in specified tender box, kept at the office of the Executive Director/Chief Engineer (Planning & Project), CSPTCL, Raipur before due date and time of submission of tender or by post / courier. No receipt will be issued for tender received through post/courier. It is responsibility of bidder to drop/get dropped the tender in respective tender box. Any other means of delivery shall not be accepted. The tender box shall be locked/sealed at 15.00 hrs of due date and offers received after will not be accepted.

- 1.9 Tenders received after due date and time shall be returned without being opened.
- 1.10 FAX or E-mail tenders shall not be accepted under any circumstances.
- 1.11 The submitted offer by the bidders should contain page numbers along with Index.
- 1.12 Discount (if any) offered by the bidder should be indicated in E-bidding portal only. No discount offer shall be considered which is given elsewhere for evaluation and comparative statement.
- 1.13 <u>"Bidders to note this to avoid rejection of their bid"</u> It will be the responsibility of the sole bidder/ partners of joint venture (JV)/ consortium 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 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/confirmations within specified time limit.

If a bidder has quoted 'NIL' deviations in Annexure A-9 (Deviation from technical specification / condition) and Annexure A-10 (Deviation from Commercial conditions of contract), this will have an overriding effect on any other conditions noted as deviations elsewhere in the bid.

1.14. <u>CHECK LIST:</u> - The check list (Annexure-28) in respect of various documents/ schedules etc. in respect of PQR and other eligibility requirement is required to be submitted by the bidder without which the tender will be considered incomplete and liable for rejection. The bidder should submit all schedules duly filled in along with this offer.

#### 2. <u>EARNEST MONEY DEPOSIT</u>:

- 2.1 The tender shall be accompanied by Earnest Money Deposit of **Rs.5 lacs (Rs. Five Lakh)** only. The Earnest Money Deposit shall be offered in the form of demand draft, subject to conditions mentioned below:
  - i. Bank Draft to be drawn in favour of "Manager (RAO-HQ) CSPTCL, RAIPUR (CG)".
  - ii. No interest shall be paid on Earnest Money Deposit.
  - iii. No adjustment towards Earnest Money Deposit shall be permitted against any outstanding amount with CSPTCL.
  - iv. In the case of unsuccessful bidder, the Earnest Money will be refunded after finalization of tender. In case of successful bidder Earnest Money will be refunded only after furnishing Bank Guarantee against security deposit & its acceptance.

- v. Earnest Money will be forfeited if the bidder fails to accept the letter of intent and / or work order(s) issued in his favour.
- vi. Tenders not accompanied by Earnest Money shall be disqualified.
- vii. Cost of tender document is not refundable.
- 2.2 Fully owned Under Taking of the State Govt. / Central Govt. e.g. BHEL etc. are exempted from furnishing the EMD as per rules on furnishing documentary proof.

#### 2.3 FORFEITURE OF EARNEST MONEY:-

The Bid security is required to protect CSPTCL against the risk of Bidder's conduct, which would warrant the Earnest Money's forfeiture, due to following reasons:

- a) If a Bidder withdraws his Bid during the period of Bid validity specified.
- b) In the event of refusal to accept the Letter of Intent placed by CSPTCL within the validity period.
- c) In case of a successful Bidder, if he fails to sign Agreements and fails to furnish Security Deposit as specified in the Tender Specification.

The successful Bidder's Earnest Money will be discharged only after the execution of various Agreements and Security deposit by the Bidder (as specified in this tender Specification).

- 2.4 **VALIDITY:** The tenders should be kept valid for a period of <u>180 days</u> from the date of opening of the tenders as notified in the tender notice and subsequent amendment thereof, failing which the tenders will be rejected.
- 2.5 Bidders are expected to be fully conversant with the meaning of all the clauses of the specifications before submitting their tenders. In case of doubt regarding the meaning of any clause, the bidder may ask for clarification in writing from the O/o Executive Director/Chief Engineer (Planning & Project), CSPTCL that must reach at least 15 days before the scheduled date of opening of tender. This however, does not entitles the bidder to ask for time extension beyond due date of opening of the tender.

#### 3. <u>PRE-QUALIFYING REQUIREMENTS</u>:-

The bidder should comply the following requirements along with the offer:-

#### 3.1 <u>FINANCIAL CRITERIA OF PQR</u> :-

- i) <u>Net Worth</u>:- Net Worth of the sole bidder/each partner of joint venture (JV)/ consortium for each of the last three Financial Years (2017-18, 2018-19 & 2019-20) should be positive. 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.
- ii) <u>MAAT :-</u> The sole bidder/partners of joint venture (JV)/consortium collectively must have minimum average annual turnover (MAAT) for best 3 years out of last 5 financial years (i.e., FY 2015-16 to FY 2019-20) equal to **Rs.52.68 Cr.** Self-attested copies (i.e., copies attested by authorised signatory of the tender) of the audited Balance Sheets and profit & loss accounts for last 5 years of sole bidder/each of the partners of the joint venture should be furnished in support, duly certified by chartered accountants of the firm. For calculation of turnover, other income indicated in balance sheet shall not be taken into account.

In case of joint venture/consortium, the lead partner should meet not less than **Rs.31.61 Cr**. of minimum financial criteria regarding turn over requirement. The other partner should meet not less than **Rs.13.17 Cr**. of minimum financial criteria regarding turn over requirement. Both the partners of joint venture/consortium shall collectively meet the minimum financial criteria.

iii) <u>Liquid Assets:</u>- The bidders (sole bidder/ members of joint venture collectively) shall currently have (i) liquid assets (LA) not be less than Rs.8.78 Cr. or (ii) evidence of access to or availability of fund based credit facilities not be less than Rs.8.78 Cr. or (iii) sum of

liquid assets and access to availability of fund based credit facilities of not less than **Rs.8.78 Cr**.

A certificate from Chartered Accountant indicating details of Net Worth, turn over of last five FY & (break up) of available liquid assets (issued on a date not earlier than date of issue of NIT) should be furnished {as per Annexure-A-6} in support of this. *Liquid assets would include cash (and equivalents), bank deposits, securities that can be freely traded and receivables which has general certainty of getting received.* 

As regards certificate pertaining to evidence of access to or availability of credit facilities, a certificate from their banker(s) {as per Annexure-A-7} indicating various fund based / non fund based limits sanctioned to the bidder/ JV partners and the extent of utilisation as on date. Such certificate should have been issued not earlier than 3 months prior to the date of bid opening. Wherever necessary, CSPTCL may make queries with the bidder's banker.

In case bidder is a holding company, the Financial Position criteria referred above (i.e., Networth, MAAT & LA), shall be that of holding company only (i.e. excluding its subsidiary/group companies)

In case bidder is a subsidiary of a holding company, the Financial Position criteria referred above, shall be that of subsidiary company only (i.e. excluding its holding company).

### **Note :- For the instant tender, the turnover** for best 3 years out of **last 5 financial years** i.e. 2015-16, 2016-17, 2017-18, 2018-19 and 2019-20 shall be considered for calculation.

#### iv) **Cash Flow Requirement**:

The bidders (sole bidder/ members of joint venture collectively) must demonstrate access to, or availability of financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet out the cash flow during the contract period, estimated as not less than **Rs.8.78 Cr**. taking into account the bidder's overall cash flow requirements for this contract and his current works' commitment for other contracts. Bidder shall submit above information (Financial Resources) in **Annexure (A-13/A)** and information regarding current contract commitments/ works in progress in **Annexure (A-13/B)** provided in bid documents.

Difference of Total proposed Financial Resources to be available during the period of execution of work against the instant tender as per Annexure (A-13/A) and Total Expected value of work to be carried out against bidder's other current contracts commitments/works in progress during the completion period against instant tender as per Annexure (A-13/B) must be positive & should not be less than **Rs.8.78 Cr**.

- v) The sole bidder/Lead partner as well as other partner of the joint venture shall submit certificates (in original as per prescribed Annexure A-29) issued by CA confirming fulfilment of following criteria:-
  - a) Sole bidder/ Lead partner as well as other partner of the joint venture should have discharged all its payment obligations (principal/interest) on outstanding debentures (i.e. debentures which have not yet been redeemed), if any and no such payments as on 31.12.2020 should be outstanding / overdue.
  - b) Sole bidder/ Lead partner as well as other partner of the joint venture should not be presently in default in payment of any bank loan or interest thereon for more than three months or any loan account of the bidder should not have been classified as NPA (Non performing assets) by the creditor/ lending bank, as on date of issue of NIT.
  - c) Sole bidder/ each partner of JV should not be under process of insolvency or liquidation as on the date of issue of NIT. Even, if at a later date up to opening of price bid against the instant tender, if it comes to the notice of CSPTCL that the sole/ any partner of JV has been going through the process of insolvency or liquidation, their bid will be rejected.

vi) The sole bidder/each partner of JV should not be debarred/ blacklisted by Bank/State Govt/Central Govt/State PSU/CPSU/SEB/public utility as on date of issue of NIT. A declaration in this regard (as per prescribed Annexure A-30) shall be furnished by the sole bidder/each partner of JV (Separately).

However, the bid may not be considered for further processing in following cases also:

- a. If sole bidder/any partner of JV is debarred/ blacklisted by Bank/State Govt/Central Govt./State PSU/CPSU/SEB/public utility up to date of opening of price bid of the instant tender.
- b. If case comes to notice regarding submission of forged/ fake document in any other tender under process in CSPTCL, up to date of opening of price bid in the instant tender.
- vii) All the documents/ statements/ attachments/ information submitted by the sole bidder/each partner of JV in proof of the qualifying requirements must be authentic / genuine /correct and in case, any of the said documents / statements / attachments / information is found to be false / fake / misleading, the bidder will be disqualified and action will be taken against the bidder as per relevant provisions of the tender. A declaration in this regard (as per prescribed Annexure A-30) shall be furnished by the sole bidder/each partner of JV (Separately).

### 3.2 <u>TECHNICAL EXPERIENCE CRITERIA OF PQR</u>:-

Bidders are requested to carefully note the Pre-qualification requirement mentioned hereunder in respect of technical experience capability. They are required to furnish selfattested documentary proof in support of having the following Pre-Qualifying Requirement (PQR)

S.No.	Voltage Class	Sole bidder or Joint Venture / consortium bidder
1	220 KV	<ul> <li>(A) Project Capability :- Sole bidder or Joint Venture / consortium bidder should have constructed &amp; commissioned at-least following substation and transmission line on turnkey basis during last five financial years i.e. FY 2015-16 to FY 2019-2020 (between 1st Apl'2015 &amp; 31st March'2020) against order issued by following Indian entities:</li> <li>a. Power utilities owned and controlled by Central or</li> <li>b. State Govt or PSUs or</li> <li>c. Government organisations</li> <li>1 No. 220 KV S/S (or above voltage class) of at-least two voltage level on turnkey basis (with or without supply of power transformer). The date of order should not be older than 7 years from the date of issue of NIT of the instant tender,</li> <li>Atleast one No. of above substation should be in successful operation for minimum one year as on date of issue of NIT.</li> <li>At-least 100% of route length (i.e., 100% of tendered route length) of 220 KV (or above voltage class) Transmission line (cumulative) OR 25 km of route length of 220 KV (or above voltage class) transmission line (cumulative), ), whichever is higher i.e. 30 KM in the instant case, on turnkey basis (with or without supply of conductor) and the same should be in successful operation for minimum 1 (one) year as on date of issue of NIT. The date of order should not be older than 7 years from the date of order than 7 years from the date of order should be in successful operation for minimum 1 (one) year as on date of issue of NIT. The date of order should not be older than 7 years from the date of issue of NIT of the instant tender.</li> </ul>
		B) Manufacturing facilities: The sole bidder or any one partner of the JV/consortium should also have its own manufacturing & galvanising facilities for transmission line tower and should have fabricated and galvanized at least estimated

quantity (740 MT) required in contract per year during last three years
(2017-18, 2018-19 & 2019-20).
OR
The sole bidder or any one partner of the JV/consortium should also
have its own manufacturing & galvanising facilities for transmission
line tower and should have fabricated and galvanized at least 444 MT
per year during last three years (2017-18, 2018-19 & 2019-20) & the
bidder must furnish the undertaking from tower manufacture in a
prescribed format given in the Annexure-31 in the bid to outsource
balance quantity of <b>296 MT</b> transmission line towers from them.
OR
Alternative to above, the firm may have assured access from tower
manufacturers meeting the requirements i.e. <b>740 MT</b> per year for last
three years (2017-18, 2018-19 & 2019-20).
A Joint deed of undertaking with the manufacturers in a prescribed
format given in the <b>Annexure-16</b> in the bid should be furnished.

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The bidder shall submit complete detailed work order copies and performance certificate of corresponding work order for satisfactory operation of sub-station & EHV line issued from the <u>entities mentioned in (a), (b) & (c) above</u> in the name of participating bidder, indicating date of commencement of work and it's commissioning.

The word "Commissioning" shall mean energization of Sub-station duly certified by above entities mentioned in (a), (b) & (c) above

Note:-

- (i) In case of Sole bidder, the experience of the bidder shall be that of "Sole bidder" or "any other partner of the JV/ consortium" in the projects executed by them earlier.
- (ii) In case the bid is submitted by JV / consortium, either of the JV i.e., the "Lead partner" or the "Other partner" or both partners jointly should meet the requirement as required for sole bidder.

The experience of any one of the partner of the joint ventures / consortium (lead partner or other partner) meeting the above 'Project Capability' criteria shall either be as "Sole bidder" or "Any other Partner of the JV/ consortium" in the projects executed by them earlier.

Bidders may note that evaluation of various pre-qualifying experience criteria shall be done on the basis of documents / certificates submitted by the bidder, for which responsibility to furnish essential authentic, genuine & correct documentary proof / statements / attachments / information etc., entirely rests on the participating bidder(s). CSPTCL will not be responsible if the bid is considered non-responsive and rejected in the absence of such documentary proof.

**3.3** <u>**PRE-CONTRACT INTEGRITY PACT:**</u> - The bidder shall have to submit pre contract integrity pact in the format enclosed as **Annexure A-25** on non judicial stamp paper worth Rs 300/- duly signed by the bidder for the project along with 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 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.

#### 4. <u>OTHER ELIGIBILITY CRITERIA:-</u>

- i) **Sole bidder** or joint venture / consortium (not more than 2 firms) shall be eligible to participate in the tender.
- ii) The sole bidder / **lead partner** of the joint venture / consortium should submit a certified copy of 'A' class electrical contractor license issued by **C.G. Anugyapan Mandal /CG State licensing Board** along with his offer and the license should be valid as on the date of opening of tender <u>OR</u> the bidder shall furnish an Undertaking to submit 'A' class electrical contractor

license issued by C.G. Anugyapan Mandal / CG State licensing Board within 30 days after issue of Letter of Award (LOA).

- iii) The sole bidder/**lead partner** of the joint venture/consortium should have EPF code number allotted by EPF Commissioner and a copy of registration certificate should be submitted alongwith the T/C Bid.
- iv) The sole bidder/joint venture or consortium partners should collectively have adequate tools & plants, financial and technical resources and infrastructure backed with qualified agencies to execute the work properly and expeditiously within the specified time frame.
- v) Power of attorney issued to legally authorised signatory should be submitted with the TC bid.
- vi) Those bidders which are not registered under GST shall not be allowed to participate in the tender.
- vii) Detailed information on any litigation or arbitration arising out of contracts completed or under execution by it over the last five years (counted from the date of bid submission) shall be provided in **Annexure A-12** by the sole bidder/joint venture or consortium partners. A consistent history of awards involving litigation against the bidder or any partner of JV may result in rejection of bid.
- viii) A certificate to be produced by the bidder (sole bidder/ members of joint venture) as per format given in Annexure-32 as per order No. F.No.6/18/2019-PPD dated 23/07/2020 issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India.

#### In case of Joint Venture (JV)/Consortium, the following conditions shall also apply:-

- (i) No bidder/member of a JV/consortium can participate in more than one bid.
- (ii) One of the partners shall be nominated as lead partner and the joint venture/consortium shall be represented by Lead Partner. An agreement for authorizing one partner to act as "Lead partner" in Annexure A-24 (Form of Power of attorney for Joint Venture) signed by legally authorized signatories of both the partners on nonjudicial stamp paper duly attested by Public Notary with seal and revenue stamp affixed thereon should be submitted with the technical bid. The "Lead Partner" shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the Joint Venture/Consortium. The "lead partner" shall be responsible for timely execution & completion of all the activities. Entire execution of the contract shall be done by the "Lead Partner" and payment under the contract shall be received by the "Lead Partner" on behalf of the Joint Venture/Consortium as per power conferred to him in the Power of Attorney. All the correspondences etc., shall be done exclusively with the "lead partner" only.
- (iii) The partners of the Joint Venture/Consortium shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a statement to this effect shall be included in the authorization mentioned under (ii) above as well as in the Bid Form and in the Contract Form (in case of a successful bid). The lead partner shall be authorized to incur liabilities and receive instructions for and on behalf of all the members.
- (iv) The agreement entered into, signed by the Joint Venture/Consortium partners, shall be submitted with the bid. Original copy of JV Undertaking in Annexure A-23 (form of undertaking by the Joint Venture Partners) on judicial stamp paper duly attested by Public Notary with seal and revenue stamp affixed thereon indicating joint and several liabilities among the parties to the Joint Venture should be provided with the bid. No joint venture will be accepted after submission of the tender bid. The joint venture/consortium shall remain valid for entire contractual period and the same shall be mentioned in the agreement. In case of any breach of contract by any of the joint venture/consortium partners during execution of the contract, the same shall be deemed to be default by both the partners. It will be the sole discretion of CSPTCL to allow the other partner to complete the work or to terminate the total contract.
- (v) The bid shall be signed so as to be legally binding upon both the partners of the joint venture/consortium. The non-judicial stamp paper shall be purchased in the name of joint venture and the date of purchase should not be later than six months of date of execution of the undertaking/agreement. The undertaking/agreement shall be signed on all the pages by authorized representatives of each of the partners and should invariably be witnessed.

The bidders are required to submit tenders in the manner described in following clauses. All documents / information as per Annexure, schedules and formats enclosed in Volume – I of this

tender document and as described below shall be placed in a sealed envelope containing four separate sealed envelopes as mentioned below.

In certain cases confusion takes place regarding furnishing of Earnest Money Deposit since the Envelopes are not properly super-scribed and sealed by the bidder. It is therefore, intimated that envelopes shall be submitted by bidders as under:

- a) **Envelope-I:** This envelope should contain a covering letter (in company's letterhead) with earnest money deposit (EMD) in the form of Demand Draft and cost of tender document. The cover of envelope should be suitably super-scribed with details of E.M.D. and cost of tender document. The envelope should be sealed properly.
- **b) Envelope-II:** This envelope should contain the documents meeting the Pre-Qualifying Requirements (PQR). The Main documents to be furnished should be:-
  - 1) Self-attested copies (i.e copies attested by authorised signatory of the tender) for profit & loss account statement and audited balance sheets for last 5 financial years (i.e., FY 2015-16 to FY 2019-20).

A statement **as per Annexure-A-6** showing 'Annual Turnover' for the last five financial years (FY 2015-16, 2016-17, 2017-18, 2018-19 & 2019-20) & 'Net worth' including assets and liability of the sole bidder/lead partner of JV as well as for the other partner of JV, issued by chartered accountant for the last three financial years (FY 2017-18, 2018-19 & 2019-20) shall be furnished.

2) A certificate <u>as per Annexure-A-6</u> of Chartered Accountant indicating details (break-up) of available 'Liquid assets' (LA) for sole bidder/lead partner of JV and also other partner of JV, self attested by authorised signatory shall be furnished.

The bidder shall also furnish certificate (in original) from their banker(s) (as per prescribed **Annexure A-7**) indicating various fund based /non fund based limits sanctioned to the bidder/ JV partners and the extent of utilization as on date.

Such Certificate should have been issued not earlier than 3 months prior to the date of bid opening.

- 3) The bidders (sole bidder/ members of joint venture collectively) must demonstrate overall cash flow requirements for this contract and his current works' commitment for other contracts. Bidder shall submit above information (Financial Resources) in Annexure (A-13/A) and information regarding current contract commitments/ works in progress in Annexure (A-13/B) provided in bid documents.
- 4) The bidder/ JV partners shall submit Certificates (in original as per prescribed Annexure A-29) issued by CA, confirming fulfilment of following criteria :
  - a) Sole bidder/ Lead partner as well as other partner of the joint venture should have discharged all its payment obligations (principal/interest) on outstanding debentures (i.e. debentures which have not yet been redeemed), if any and no such payments as on **31.12.2020** should be outstanding / overdue.
  - b) Sole bidder/ Lead partner as well as other partner of the joint venture should not be presently in default in payment of any bank loan or interest thereon for more than three months or any loan account of the bidder should not have been classified as NPA (Non performing assets) by the creditor/ lending bank, as on date of issue of NIT.
  - c) Sole bidder/ each partner of JV should not be under process of insolvency or liquidation as on the date of issue of NIT. Even, if at a later date up to opening of price bid against the instant tender, if it comes to the notice of CSPTCL that the sole/ any partner of JV has been going through the process of insolvency or liquidation, their bid will be rejected and action will be taken against the bidder as per relevant provisions of the tender.

This certificate shall be submitted by sole bidder / Lead partner as well as Other partner of the joint venture.

5) A declaration by the sole bidder/lead partner of JV as well as other partner of JV (Separately) (as **per prescribed Annexure A-30**) that their firm is not debarred / black-listed by Bank / State Govt. / Central Govt. / State PSU / CPSU / SEB / Public utility as on date of issue of NIT and in case any of the document/ statements / attachments / information is found to be faulse / fake / misleading, the bid will be disqualified and action will be taken against the bidder as per relevant provisions of the tender.

- 6) A declaration by the sole bidder/lead partner of JV as well as other partner of JV (Separately) (as **per prescribed Annexure A-30**) that all the documents / statements / attachments / information submitted by the bidder in proof of the qualifying requirements are authentic / genuine /correct and in case any of the said documents / statements / attachments / information are found to be false / fake / misleading, the bidder will be disqualified and action will be taken against the bidder as per relevant provisions of the tender.
- 7) Detailed order copy and performance certificate issued by competent authority towards successful operation duly notarized in support of PQR alongwith Annexure A-16/A-31 as mentioned in (3.2) above for fulfilling the technical experience criteria of PQR.
- 8) Copy of Valid 'A' class Electrical Contractor License issued by CG anugyapan Mandal/ CG state licensing board in the name of sole bidder / lead partner of the joint venture/ consortium <u>or</u> an undertaking to submit 'A' class electrical contractor license issued by C.G. Anugyapan Mandal / CG State licensing Board within 30 days after issue of LOA, by the sole bidder or lead partner of the joint venture/consortium.
- 9) Copy of EPF code number/ EPF registration No. allotted by EPF Commissioner in the name of the sole bidder / Lead partner of the joint venture / consortium.
- 10) Pre-contract Integrity pact in prescribed format in Annexure A-25 on non judicial stamp paper worth Rs 300/- duly signed by legally authorized signatory of sole bidder or lead partner of the joint venture/consortium.
- 11) Bidder shall enter deviations/departures (if any) from the technical specification/ commercial conditions of contract clearly indicated giving full justifications for such deviations in separate sheet(s) under "Deviations/ Departures" title in Annexure-A-9 & A-10.
- 12) In case of JV, an Undertaking entered into, signed by the Joint Venture/Consortium partners, in proforma A-23 (form of undertaking by the Joint Venture Partners) on Non-judicial stamp paper worth Rs.100/- duly attested by Public Notary with seal and Rs. 1/- revenue stamp affixed thereon indicating joint and several liabilities among both the parties in case of Joint Venture/Consortium.

The non-judicial stamp paper shall be purchased in the name of Joint Venture and the date of purchase should not be later than six months of date of execution of the Undertaking. The Undertaking shall be signed on all the pages by the authorized representatives of each of the partners and should invariably be witnessed.

13) In case of JV, an agreement for authorizing one partner to act as "Lead partner" in proforma A-24 (form of power of attorney for Joint Venture) signed by legally authorized signatories of both the partners on non-judicial stamp paper worth Rs.100/- duly attested by Public Notary with seal and Rs. 1/- revenue stamp affixed thereon in case of Joint Venture/Consortium.

The non-judicial stamp paper shall be purchased in the name of Joint Venture and the date of purchase should not be later than six months of date of execution of the Agreement. The Agreement shall be signed on all the pages by the authorized representatives of each of the partners and should invariably be witnessed.

- 14) Bidder shall also furnish undertakings (as prescribed in Annex.-4 & Annex.-5) in support that the bidder has adequate sub-station design infrastructure, erection facilities, capacity and procedures including quality control.
- 15) Power of attorney issued to legally authorised signatory should be submitted with the TC bid.
- 16) Detailed information on any litigation or arbitration arising out of contracts completed or under execution by it over the last five financial years (counted from the date of bid submission) shall be furnished in prescribed Annexure A-12 by sole bidder / Lead partner as well as other partner of the JV.
- 17) **Check list**: The check list (**Annexure-28**) in respect of various documents/ schedules etc. in respect of PQR & other eligibility requirement is required to be submitted by the bidder without which the tender will be considered incomplete and liable for rejection. The bidder should submit all schedules duly filled in along with this offer.
- 18) <u>Vital document to be submitted with the T/C bid</u>: Duly filled in "Check list" in Annexure A-28 and "Questionnaire" in Annexure A-3 attached with this tender document, indicating Name of organisation with address, Turnover details, and guaranteed losses of offered transformer and capacitor bank etc. <u>The losses should not exceed the permissible limit specified at clause 5.2.1 of section-I of Volume-II of this tender document under technical</u>

specification of transformer. In case any of the offered losses (i.e. no load loss, load loss or auxiliary loss) quoted by the bidder is more than the maximum permissible limits or not quoted in Annex. A-3, the bid shall be considered as non-responsive and shall be out rightly rejected without any correspondence in the matter.

- 19) A certificate to be produced by the bidder (sole bidder/ members of joint venture) as per format given in Annexure-32 as per order No. F.No.6/18/2019-PPD dated 23/07/2020 issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India.
- c) Envelope-III: This envelope should contain the Technical Bid and Commercial Bid complete in all respects in duplicate. The bidders are requested to invariably furnish all the Un-priced price bid schedules B-1 to B-10, C-1, D-1, D-2, AL-1 & AL-2 to assess the quantities being offered. For evaluation of techno-commercial bid, duly filled in Annex. A-1, A-2, A-8, A-11, A-14 & A-15 shall be furnished by the bidder.
- d) **Envelope-IV**:- This large envelope should contain all the above Three envelops.

In case above instructions are not followed properly and any of the envelope of the bidder is not available for inspection on opening, no representation at the time of tender opening shall be accepted and such offers shall not be opened. The large envelope should be properly superscribed with Tender No., Due Date & Name of Project in Bold & should bear complete address of the Bidder.

### It may be noted that in no case the request for return of offer/bid, dropped in the tender box shall be considered.

e) For submission of online price bis, may please refer the "Special Instructions to bidders for submission of bid through SAP-SRM Module (E-bidding)" annexed with this tender document. The bidders are required to submit the Summaries of the prices bid annexures {B-1 to B-10 (supply of materials for sub-station), C-1 (civil works), D-1 (Erection charges), D-2 (Testing & Commissioning charges), AL-1 (Supply of materials for lines) & AL-2 (Construction charges for lines)} in E-bidding portal and to upload these schedules in form of excel sheets as well as the scanned copies of all these annexure duly filled in & signed by the bidder.

#### 5. <u>PRICE-BID & ITS EVALUATION :-</u>

Bidders must quote their price in accordance with 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.

Price Part of only those Bidders shall be opened (on-line) who are determined as having submitted substantially responsive bids and are ascertained to be qualified to satisfactorily perform the Contract. Such Bidders shall be intimated about the date and time for opening of Price Part by the Employer.

The Employer will open Price Bid on-line at the specified time and date in the presence of bidders' designated representatives who choose to attend, at the time, date, and location stipulated in the intimation for opening of price bid. The bidders' representatives who are present shall sign a register evidencing their attendance.

The bidders' names, the Bid Prices or any discounts, and any such other details as the Employer may consider appropriate, will be announced by the Employer at the opening. The prices and details as may be read out during the bid opening and recorded in the Bid Opening Statement would not be construed to determine the relative ranking amongst the Bidders, or the successful Bidder, and would not confer any right or claim whatsoever on any Bidder. The successful Bidder (also referred to as the L1 Bidder) shall be determined as per the provisions of this evaluation criteria.

The Employer shall prepare minutes of the bid opening, including the information disclosed to those present who present at the time of opening

Bidders must quote their price in accordance with 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. In the event of noticing arithmetical errors viz. multiplication of price & quantity, grand total of total amount etc. these shall be corrected and computation shall be done accordingly.
- ii. The quoted price should be kept valid for the contractual period/ completion of the project. However the provision of price variation shall be applicable as per the relevant clause of the tender.
- iii. All columns shall be completely filled up properly.
- iv. No conditional prices should be quoted.
- v. The evaluation of price bids shall be done by comparing the Grand total (i.e. Total of all the price bid annexures) quoted by the bidder in price schedule Annex-B, B-1 to B-10, C-1, D-1, D-2, AL-1 & AL-2 of all the items including GST & levies. Based on the comparative evaluation, LOA shall be placed on the L-1 bidder (lowest quoted price for entire project) on the final accepted price.
- vi. The loading of the items for which the prices are not being quoted by bidder: In such cases, loading will be done at highest prices quoted amongst the participating bidder. But, while ordering, lowest price amongst the bidders will be considered.
- vii. If the quantity quoted is less than B.O.Q. /or required for turnkey completion of the job, loading will be done on the pro-rata basis.
- viii. In case the bidder makes contradictory statement in the Technical & Commercial Bid or for items for which the prices are not being quoted by bidders, loading will be done at highest prices quoted among the participated tenderers. But, while ordering, lowest price among the bidders will be offered.
- ix. All the equipments/material, accessories, including charges for erection & commissioning etc required for construction & commissioning of Sub-station & associated EHV line have been included in the price schedule i.e. B-1 to B-10, C-1, D-1, D-2, AL-1 & AL-2. If there is discrepancy between the Unit Price and the total price that is obtained by multiplying the unit price & Quantity, the Unit Price shall prevail and total price shall be corrected accordingly.
- x. For price bid evaluation, the losses of Power transformer quoted by the bidder in Annexure-A-3 (Questionnaire) shall be taken into account for computation purpose. The losses of 160 MVA, 220/132/33 KV Power transformer & 63 MVA, 132/33 KV transformer should be within the range prescribed below for respective losses (without any positive tolerance):

S.N.	Particular	160 MVA, 220/132/33 KV Power transformer		63 MVA, 132/33 KV Power transformer	
		Min.	Max.	Min.	Max.
1.	No load loss in KW	31.5	35	22.5	25
2.	Load loss in KW at rated voltage, rated frequency and rated current at 75°C	184.5	205	133	147.5
3.	Auxiliary loss in KW	4.5	5	2.3	2.5

The bidder shall have to offer No load loss, load loss or auxiliary loss separately in Annexure A-3.

In case any of the offered losses (i.e. no load loss, load loss or auxiliary loss) quoted by the bidder is more than the maximum permissible limits or not quoted in Annexure A-3, the bid shall be considered as non-responsive and shall be out rightly rejected without any correspondence in the matter.

In case, any of these losses are below the minimum range prescribed above, the bid shall be treated as responsive. However, for price bid evaluation purpose, the minimum range of the respective losses prescribed above shall be considered.

**CAPITALISATION OF LOSSES:** The capitalisation of no load loss, load loss and auxiliary loss for the bidder who has quoted the losses within the respective range of losses specified above, shall be done on following rates (differential of quoted loss and minimum value of the range of respective loss):-

- i. For differential no load loss above minimum value : Rs.
  - : Rs. 4,01,840.00 per KW
- ii. For differential load loss above minimum value : Rs. 2,13,780.00 per KW

iii. For differential auxiliary loss above minimum value : Rs. 1,60,700.00 per KW

In case a bidder quotes any of the losses below the minimum value of the range prescribed above, the value of loss shall be considered equal to minimum of the range specified above for respective loss for price bid evaluation purpose. An illustrative example for capitalization of losses is indicated in Annexure- A-27.

However, it should be clearly noted that during detailed Engineering & final testing of transformer, the measured losses individually (i.e. No load, load & auxiliary losses as applicable) should not exceed the values quoted by the bidders in Annex. A-3. In case, any of the losses exceed the quoted losses, transformer shall not be accepted.

The capitalised value of the losses worked out on differential loss basis as mentioned above shall be loaded on the total cost of the project for price bid evaluation purpose.

xi. Losses for Capacitor Bank :- For comparison of offers, capitalization on account of differential losses of capacitor bank quoted by the bidders in their offer shall be done @ Rs.4,01,840/- per KW & evaluation shall be on the basis of differential prices. The permissible losses in Kilowatt at rated voltage and rated frequency shall be between 0.18 W/KVAR to 0.2 W/KVAR. The minimum value (0.18 W/KVAR) shall be taken as base value and the difference between base value & that quoted by a particular bidder shall be considered as differential loss. Capacitor bank losses at 50° Celsius should be offered.

In case losses higher than the upper limit of 0.2W/KVAR is offered, the loss capitalization shall be done as per offered value of losses. However, in such case bidder shall be asked to confirm that maximum losses shall not be more than the upper limit permissible. In case of non-confirmation the bid shall be rejected. However, in case of confirmation, the loss capitalization shall be done as per original offered losses only.

**NEGOTIATION OF PRICES:** - CSPTCL reserves the right to hold negotiation with L-1 bidder as deemed necessary. Procedure adopted by CSPTCL for holding negotiation shall be final and binding on all bidders.

Although details presented in this tender specification have been compiled with all reasonable care, it is the responsibility of the bidder to satisfy himself that the information given in each section are adequate and there are no conflicts between various clauses/sections/specifications. The clarification/decision of the Executive Director / Chief Engineer (Planning & Project) shall be final and conclusive.

#### 6. <u>TAXES</u>

The bidder should furnish valid GST registration number in Annexure A-1. In absence of GST registration the offer shall not be accepted.

- (i) GST and other levies in respect of supplies and services under the Contract, should be indicated separately in respective columns in the Price Bid Proposal Sheets. The ITC (Input tax credit) available to bidder should be duly considered while quoting the rate. Any variation in tax rate during scheduled completion period will be on CSPTCL<sup>\*</sup>s account.
- (ii) Cess under "Building and other Construction Workers Welfare cess Act, 1996:- The contractor for carrying out any construction work in Chhattisgarh State must get themselves registered under section 7 (1) of the "Building and Other Construction Workers Welfare Cess Act, 1996" and rules made thereunder by the Chhattisgarh Govt. and submit Certificate of Registration issued by the Registering Officer of the Chhattisgarh Govterment (Labour Department) for enforcement of the Act. The cess @ 1% on cost of supply of materials (except cost of power transformer) and construction charges including civil works shall be borne by the contractor and same shall be deducted from each bill. <u>Any variation in this respect within scheduled completion period shall be to the account of CSPTCL</u>.

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/charges which are not described above:-The bidder should be aware of the various taxes, duties, levies imposed by the Central Government, State Government or Local Bodies applicable in this contract as on the date of TC bid opening. Further, in the price bid, it should be specifically stated regarding each tax whether it is inclusive or exclusive. However, if there is no specific mention of any 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.

(iv) Any variation in statutory taxes within stipulated completion period shall be in the account of CSPTCL.

**Tax Beyond contractual completion period**: - If the rate of applicable taxes / duties beyond contractual completion period undergoes upward revision, the payment will continue to be made only on the basis of rates prevailing during scheduled completion period. In case the rate of statutory levies undergoes downward revision then the supplies/ work performed beyond contractual completion period will attract reduced rate of taxes.

- (v) Any other new tax: If any other tax or duty becomes payable during the completion period of contract, (after TC bid opening) the same shall be paid extra by CSPTCL to the contractor as per actual on submission of documentary evidence, having paid the same as per the rules. However, tax due to increase of Turnover or withdrawal of tax exemption earlier available to the vendor etc. will not be reimbursed.
- vi) The contractor shall be solely responsible for payment of all taxes, duties, license fee etc. if any, for all the equipments and materials covered under this contract to the concerned authority as may be applicable from time to time.

#### 7. <u>PRE-BID CONFERENCE :-</u>

A pre-bid conference of all the prospective bidders participating in Tender No TR-20/05 shall be conducted at 11.30 Hrs on ....2021 in the O/o CE (Planning & Project), SLDC Building, Dagania, Raipur. The prospective bidders may depute maximum two authorised representatives along with authority letter on Company's letter head. The bidders are requested to go through the tender specifications TR-20/05 available on the web-site <u>www.cspc.co.in/csptcl/tender notice/Planning & Project</u> office thoroughly and send their queries to the O/o Executive Director/Chief Engineer (Planning & Project) through fax message on Fax no. 0771-2574246. The query letters should positively reach this office by ....2021.

Any shortcomings or items which in the opinion of the bidders are essential for completion of work but have not been mentioned in the tender specification should also be pointed out in the queries. The queries raised by bidders shall be discussed in the pre-bid conference and based on the discussions, amendments, if any, in the tender specifications shall be issued & made available on the CSPTCL's web-site.

Although details presented in this tender specification have been compiled with all reasonable care, it is the responsibility of the bidder to satisfy himself that the information given in each section are adequate and there are no conflicts between various clauses/sections/specifications. The clarification/decision of the Chief Engineer (Planning & Project) shall be final and conclusive.

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## SECTION-II

### (GENERAL CONDITIONS OF CONTRACT)

#### Clause No. PARTICULARS Definition of Terms 1 2 Contract document 3 Manner of execution Variation, additions & omissions 4 5 Inspection during erection Completion of work 6 7 Contractors default liabilities Force majeure 8 9 Rejection of works 10 Extension of time 11 Guarantee period 12 Performance guarantee 13 Terms of payment Liquidated Damage for delay in completion of contract 14 15 Security Deposit 16 Insurance 17 Inspection of equipments 18 **Dispatch** instructions 19 Payment due from the contractor Jurisdiction of High Court of Bilaspur 20 21 Contractors responsibility: 22 Responsibility to rectify loss & damage 23 Non-assignments Certificates not to affect rights of CSPTCL 24 25 Settlement of dispute Arbitration 26 27 Laws governing contract Language and measures 28 29 Correspondence Secrecy 30 Agreement 31 32 Time schedule & clarifications 33 Safety precautions 34 Engagement of workers by contractor 35 Nature of contract 36 Prices 37 Design of 220 KV Substation switch yard 38 Issue of structural drawings 39 Variation in weight of structure/earth flats/quantity of equipments 40 Engagements of sub vendors 41 Power and water supply for construction work 42 Award of contract. Storage & shipment of equipment/material 43 44 Unsatisfactory performance 45 Drawing & literatures 46 Discrepancy with approved drawing 47 Electrical inspector fee 48 Compliance with regulations 49 Full time site engineer EPF code 50 List of vendors 51 52 Limitatiion of Liability

### SECTION - II A GENERAL CONDITIONS OF CONTRACT FOR SUB-STATION WORKS

TR-20/05

#### **SECTION - II A**

TR-20/05

#### GENERAL CONDITIONS OF CONTRACT FOR SUB-STATION WORKS

#### **1. DEFINITION OF TERMS:**

In writing this General Condition of Contract, the specification and bill of quantity, the following words shall have the meaning hereby indicated, unless there is something in the subject matter content inconsistent with the subject.

- **"CSPTCL**" shall mean the Chhattisgarh State Power Transmission Company represented through the Executive Director/ Chief Engineer (Procurement & Projects).
- "The Engineer- in- Charge" shall mean the Engineer or Engineers authorised by the Chief Engineer (P&P) for the purpose of this contract.
- "CSPTCL Engineer" shall mean an Engineering person or personnel authorised by the CSPTCL to supervise and inspect the erection of the sub-station.
- "The Contractor" shall mean the successful bidder awarded with the contract or their successors and permitted assigns.
- "Contract Price" shall mean the sum named in or calculated in accordance with the provisions of the contract as the contract price.
- "General Conditions" shall mean these General Conditions of Contract.
- "**Owner**" shall mean CSPTCL.
- "Specification" shall mean the specification annexed to these General Conditions of Contract and shall include the Schedules and drawings attached thereto or issued to the contract as well as all samples and patterns, if any.
- "Month" shall mean calendar month.
- "Writing": shall include any manuscript, typewritten, printed or other statement reproduced in any visible form whether under seal or under hand.
- "Package" shall mean & include combination of all the project(s) described in Scope of Work.
- "**Project**" shall mean the EHV Substation and EHV Line.
- "Date of Tendering" shall mean the original due date of opening of TC bid.

#### 2. CONTRACT DOCUMENT:

The term "Contract" shall mean and include the General Conditions, specifications, Annexures, drawings, work orders issued against the contract Annexures of price or the final general conditions, any special conditions applying to the particular contract specification and drawings and agreement to be entered into. Terms and conditions not here in defined shall have the same meaning as assigned to them in the Indian Contract Act falling that in CG Act.

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

- 3.1 The manner of execution shall be such that the supply of materials/ equipments reaches the site, only when the foundation/Control Room etc are ready to take up erection work of the respective equipment. Construction of the sub-station shall be carried out in an approved manner as outlined in the technical specification or where not outlined, in accordance with latest relevant Indian Standard Specification, to the reasonable satisfaction of the Engineer-in-charge.
- 3.2 The contractor shall within 15 days after the date of acceptance of letter of award (LOA) submit to the ED/CE (Planning & Projects), a detailed program for the execution of work for his consent. This detailed programme should be in the form of a P.E.R.T. Network/Bar Chart within the time frame agreed considering adequate number of activities covering various key phases of the works such as Design, procurement, manufacturing, shipment & Erection activities. The P.E.R.T. chart shall be approved by ED/CE (Planning& Projects) & shall form a part of contract document. Based on this P.E.R.T. network, fortnightly progress shall be submitted by the contractor to O/o ED/CE (Planning & Projects). The contractor shall whenever required by the CSPTCL 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.
- 3.3 If at any time it should appear to CSPTCL that the actual progress of works does not conform to the program to which consent has been given under sub-clauses (b), the contractor shall produce at the

request of CSPTCL a revised program showing the modifications to such program necessary to ensure completion of the works within the time of completion.

#### 4. VARIATION, ADDITIONS & OMISSIONS:

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 variations in accordance with the rates specified in the contract, so far as they may apply.

**Item not Included in BoQ**:- In case of requirement of material(s) which is not included in the price schedule and rates are not available but mandatory as per site conditions, prior approval of order placing authority should be obtained before using such unscheduled items. The rates of such items shall be finalized by the nominated committee and approved after obtaining competent approval.

#### 5. INSPECTION DURING ERECTION:

The Engineer-in-Charge or his authorised representative(s) shall be entitled at all reasonable times to inspect and supervise and test during erection of sub-stations. Such inspection will not relieve the contractor from their obligations under this contract.

In addition to the routine inspection to be carried out by the Engineer-in-charge, the field officers from Civil, EHT & Testing of the level of Superintending Engineer shall carry out inspection at least once in two months at different stages of construction i.e. marking of civil foundations, excavation, structure erection, transformer erection, breaker & CT PT erection, testing & commissioning. The Senior Engineer from the contractor's side shall be present during such inspection and the guide lines issued by the SEs shall be noted and complied by the contractor. A copy of the inspection note and its compliance shall also be submitted to the ED/CE (Planning & Projects),

If after testing & commissioning, the material is found to be defective, the same shall be replaced free of cost immediately and commissioning charges for equipment will not be paid.

#### 6. COMPLETION OF WORK:

6.1 Time being deemed to be the essence of contract on the part of the contractor, the construction of the Sub-station & EHV lines shall be completed within the period specified i.e. **24** (Twenty four) months from the date of handing over of substation site of individual Project. The letter of handing over of the site for construction of Sub-station shall be issued by Engineer in-charge for civil works authorized by CSPTCL.

Please note that the work of Construction of 220/132/33 KV sub-station and EHV line in the Project shall commence as far as possible simultaneously and the work will go in tandem. The date of handing over of substation site shall be reckoned as commencement date of the Project. The completion period includes the period of rainy season and accordingly, no additional period due to rainy seasons will be allowed.

- 6.2 **Handing over of Sub-station site**: The construction sites free from hindrance shall be separately handed over to the contractor. The date of letter conveying handing over of site issued by concerning civil division shall be the date of handing over of site. This letter shall be issued by OIC for civil works, after joint inspection by SE (EHT: C&M), SE (Civil-Trans), SE (T&C) in presence of contractor's representative.
- 6.3 **Taking over of sub-station and EHV line**:- Upon receipt of intimation about completion of the substation & EHV line (if any) and after inspection, CSPTCL Engineer-in-charge of EHT works of that project shall issue a taking over certificate in which he shall certify the date on which the project has been so taken over.

It may be noted that particular project shall be taken over only after completion of all the works involved in it. In case the substation and line are completed on different dates, the date of taking over shall be the date of completion of substation or line whichever is later.

The necessary certificate of taken over of completed work shall be issued within 30 days of the notice/ intimation received from the contractor.

6.4 The issuance of taking over certificate shall in no way relieve the contractor of his responsibility for the satisfactory operation of the sub-station & line in terms of the specifications.

#### 7. CONTRACTOR'S DEFAULT LIABILITIES:

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 security deposit, if available or EMD.
- (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.
- (III) 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.

#### 8. FORCE MAJEURE:

The contractor shall not be liable for any liquidated damages 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 etc provided that the contractor shall within 10 (ten) days from the beginning of such delay notify CSPTCL in writing, the cause of delay. CSPTCL shall verify the facts and grant such extension as facts justify.

#### 9. **REJECTION OF WORKS:**

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

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

#### 10. **EXTENSION OF TIME:**

If the completion of the sub-station is delayed due to reason beyond the control of the contractor, the contractor shall without delay give notice/intimation to CSPTCL in writing of his claim for an extension of time. CSPTCL on receipt of such notice/ intimation may agree to extend the contract

delivery date of the sub-station with or without levy of liquidated damages as may be reasonable but without prejudice to other terms and conditions of the contract.

#### **11. GUARANTEE PERIOD:-**

- 11.1(a) The work done, material/ equipment except power transformer supplied by the contractor as per the contract specification should be guaranteed for satisfactory operation and against any defect in material and workmanship for a period of 24 (Twenty Four) months from the date on which the sub-station is taken over. Any defect noticed during this period should be rectified by the contractor on free of cost basis upon written notice. The date of delivery of sub-station as described in this clause shall mean the date of taking over the sub-station by the Engineer. If the sub-station is taken over in un-energised condition due to non- completion of feeding line then guarantee will be for 30 (Thirty) months from the date of taking over or 24 (Twenty Four) months from the date of energization of substation whichever is earlier.
- (b) Guarantee for power transformers:- <u>The Power transformer shall be guaranteed for a period of 42 months from the date of satisfactory commissioning of transformer along with all accessories.</u> Please note that the date of commissioning of last accessory will be treated as date of commissioning of transformer. The transformer found defective/ failed within the above guarantee period shall be got replaced/repaired by the contractor free of cost, within four months from date of issue of intimation letter to the contractor by CSPTCL regarding its defect/failure.

If the contractor fails to arrange repair/replace the failed/defective transformer within four months, the contractor shall be liable to pay penalty charges for delayed repairs at the rate of 0.5% of the cost of transformer per week of delay or part thereof, subject to a maximum ceiling of 10% of the cost of the transformer. This penalty shall be in addition to the liquidated damages as per clause 14.1 of GCC for delay in completion of the contract.

If the defective/failed transformer is not lifted for replacement/ repairing within 2 months from the date of intimation by CSPTCL regarding defect/ failure OR one month from date of acceptance of additional Indemnity Bond submitted by the contractor, (in case the transformer is required to be taken back to the works for repairing) whichever is later.

#### OR

not repaired within **seven months** from date of lifting of failed/ defective transformer, penal action may be taken which will include forfeiture of performance guarantee of transformer and debarring of turnkey contractor in addition to the other applicable penalty.

The above provisions shall be applicable for second time failure also, if any.

#### 11.2 EXTENDED GUARANTEE PERIOD POST REPAIRS OF TRANSFORMER:-

The following extended guarantee shall be applicable, in case the transformer fails within guarantee period.

#### a) First time failure within guarantee period:

- i) If the transformer fails within 12 months from the initial commissioning, the guarantee period shall get extended to 42 months from the date of satisfactory re-commissioning of transformer after repairs along with all accessories.
- ii) If the transformer fails after 12 months within the original guarantee period, the original guarantee period shall get extended for a period equal to the time period lapsed between date of failure to date of re-commissioning after repairs i.e. the residual guarantee period or 12 months from date of re-commissioning after repairs, whichever is later.

#### b) Second time failure of transformer within guarantee period:

If the transformer fails again (second time) within the original/extended guarantee period, the guarantee shall automatically get extended for further period of two years from the date of recommissioning (post repair) or from the end of the original/ previously extended period, whichever is later. Further the contractor shall be required to submit an additional performance bank Guarantee equivalent to 10 % of the FOR destination price of Power Transformer with validity up to expiry of extended guaranteed period plus six months additional claim period. This performance bank Guarantee shall be in addition to 10 % performance guarantee submitted as per clause no. 12.1 (i).

#### c) Third time failure of transformer within guarantee period:

If the transformer fails within guarantee /extended guarantee period for third time, this will be treated as adverse performance of contractor as well as manufacturer and in such case penal action shall be taken which will include

- i) Forfeiture of 10% BG submitted against Performance of transformer.
- ii) Forfeiture of additional 10% performance BG of transformer furnished subsequent to second time failure.
- iii) The contractor shall be debarred from future business with CSPTCL and other Chhattisgarh state power companies for a period as decided by management.
- iv) The name of the transformer manufacture shall be deleted from the vendor list of CSPTCL for power transformer of the capacity supplied for the instant case and higher capacities for forthcoming turnkey project and shall not be considered for procurement cases of CSPTCL as well as other Chhatishgarh state power companies for a period as decided by management.

If, for the purpose of replacement/ repairs, the equipment/material is required to be dispatched to manufacturer's works, all charges towards transportation/ insurance/ packing / forwarding will have to be borne by contractor for to and fro dispatches.

In this connection, please note that the following additional conditions will also be applicable in case any damages/defects are noticed in the transformer or its accessories-

If the material develops defect within guarantee/ extended guarantee period after installation at site or subsequent to installation after repairs ( $1^{st}$  or  $2^{nd}$  time), for the purpose of replacement/repairs, the same will have to be dismantled and taken out by CSPTCL, in such cases actual cost of dismantling and replacement of the transformer will also be recoverable from contractor.

In case, transformer fails during guarantee/ extended guarantee period, the following terms shall also be applicable (in first or second time failure both)-

- (i) An additional Indemnity Bond on stamp paper of Rs.250.00 shall be required to be submitted by the contractor, in case the transformer is required to be taken back to the works for repairing. The value of this Indemnity Bond shall be equal to the cost of transformer along with all taxes, duties, freight and testing charges. The transformer shall be handed over for repairing only after submission and acceptance of additional indemnity bond.
- (ii) The transformer should be offered for inspection after completion of repairing work. The repaired Transformer shall be tested for all routine, additional routine, type and special test as per IS-2026 & as narrated in section-III-B, clause-6 under head "Tests" of technical specification of transformer.
- (iii) The Transformer should be offered for inspection after repairing within four months from date of intimation of failure by CSPTCL.
- (iv) The dispatch instructions shall be issued for repair transformer after its satisfactory inspection. The transformer should reach the destination (anywhere in C.G. state) within 45 days from date of issue of dispatch instruction failing which actual date of receipt of repaired transformer at site shall be treated as date of delivery of the repaired transformer for all contractual purposes.
- (v) In case of failure / defect in transformer (first or second time) within guarantee / extended guarantee period, the validity of performance guarantee for transformer submitted by the contractor against the contract as per clause 12.1(i) of GCC should be extended up to expiry of extended guarantee period with additional claim period of six months. In case, contractor fails to extend the guarantee period of transformer, claim shall be lodged with the issuing bank for encashment of the all performance bank guarantee for transformer.
- **11.3.** Guarantee period of equipments commissioned subsequent to charging of sub-station:- If any equipment is not charged/commissioned at the time of substation charging, the guarantee period of that particular equipment shall be counted from its date of commissioning.

In case of failure of any equipment within guarantee period, the contractor shall be liable for the replacement/repairing of that particular equipment. However, the guarantee period of the replaced/repaired equipment shall be for a further period of **24 months** from the date of commissioning of replaced/ repaired equipment for its faithful performance.

#### **12. PERFORMANCE GUARANTEE:** (Separately for all orders)

- 12.1 Before issue of final taking over certificate by the engineer-in-charge of CSPTCL, contractor shall furnish CSPTCL, following performance bank guarantee from a nationalised/Scheduled Bank in the approved proforma of the CSPTCL for value equivalent to
  - i) 10% of the total FOR destination price of the power transformer and
  - ii) 5% of the contract price (i.e., Supply+Civil+ETC & excluding cost of power transformer).
- 12.2 These bank guarantee shall be executed in a stamp paper worth Rs.250/- or any other amount as per the CG state stamp duty act and shall be kept valid for a period exceeding 90 days from completion of original/extended guarantee period of particular equipment/power transformer as specified in foregoing clause-11 (Guarantee Period) plus six months claim period.
- 12.3 The bank guarantee mentioned at 12.1 (i) & 12.1 (ii) shall be released after successful completion of original/extended guarantee period of particular equipment/power transformer as specified in foregoing clause-11 (Guarantee Period) and issue of no liability certificate from the Engineer-in-charge of work.
- 12.4 No interest shall be paid by CSPTCL for the aforesaid Bank Guarantee. In case of non-performance of the equipment/power transformer as per the contract specification, the performance Bank Guarantee shall be forfeited.

#### **13. TERMS OF PAYMENT:**

**13.1** After completion of the work, the contractor shall submit its bill within three months from its completion positively.

The payment on running bills will be allowed in the following manner to relieve the contractor from financial hardship, if any, so as to facilitate him for timely completion of the work.

- (A) <u>SUPPLY</u>: The payment against supply of equipments /materials shall be released in the following manner.
  - i) 70% of the value of equipments/materials supplied, duly verified by Engineer-in-charge at accepted rates shall be paid normally within a month from the date of presentation of bill with required documents stipulated at clause (D) below. The contractor shall present the bill as soon as the equipments/material is supplied, for verification & processing to the Engineer-in-Charge.
  - ii) 20% of value of equipments/materials shall be released after erection of the corresponding equipment/material normally within a month from the date of presentation of bill, complete in all respect for erection of equipment/material & its due verification by Engineer-in-Charge.
  - iii) Balance 10% retention amount of the value of equipments/materials shall be released after successful completion of work in all respect and taking over of sub-station by CSPTCL.

## Note :- 90% payment for RTU, Substation Automation System and Data Logging System of energy meter shall be released only after it's successful commissioning. Part payment against supply of these items will not be done.

(B) <u>CIVIL</u>:- The contractor shall present at the end of each calendar month, a bill for the completed civil works during the month. On the basis of accepted rates, 90% of cost of completed civil works duly verified by the Engineer-in-charge shall be released normally within a month from presentation of bill, complete in all respect. Balance 10% retention amount shall be released after successful completion of work and taking over of sub-station by CSPTCL.

	Progressive	payments
	(in % of the c	ost of control room)
i	Plinth level	13%
ii	Internal cable trenches	20%
iii	Lintel level	24%
iv	Roof slab level	33%
V	Outer plaster	38%
vi	Inner plaster	44%
vii	Fixing of doors & window	53%
viii	Concealed wiring, internal water supply, fixing of tube light fans	58%

The 90% payment for control room building shall be released in accordance with the progressive work as detailed below –

	etc.	
ix	Complete painting work	64%
х	External water supply, I/C fixing of tank with inlet, outlet & over	68%
	flow arrangement	
xi	Balance finishing work, plinth protection, steps, porch tiling,	90%
	false ceiling etc.	

Note – The aforesaid percentages have been worked out taking into consideration the deduction of 10% towards retention amount.

#### (C) <u>ERECTION, TESTING & COMMISSIONING</u>: -

The contractor shall present at the end of each calendar month, a bill for the completed Erection, Testing & Commissioning works etc. during the month. On the basis of accepted rates, 90% of cost of completed works duly verified by the Engineer-in-charge shall be released normally within a month from presentation of bill, complete in all respect. Balance 10% retention amount shall be released after successful completion of work and taking over of sub-station by CSPTCL.

- (D) The contractor shall furnish following documents for claiming the payments:-
  - (i) Original invoice.
  - (ii) Material inspection report.
  - (iii) DI (Dispatch Instruction) issued by ED/CE(Planning & Project) CSPTCL.
  - (iv) Original packing list/Delivery challan.

The invoices raised by the vendor should be in the name of contractor and A/c (Name of EHV S/s) CSPTCL.

#### (E) The payments shall be made through RTGS/NEFT. Please furnish following details :-

- (i) Name of Bank and its address.
- (ii) Bank A/c Number.
- (iii) Bank IFSC Number.
- (iv) e-mail ID & mobile number of Principal officer.
- (F) The contractor shall also furnish following documents with the first RA bill (Supply or Civil) for claiming the payment:-
  - (i) Copy of the letter issued by order placing authority, conveying acceptance of indemnity bond towards safe custody of various material/equipments as per Annexure A-21.
  - (ii) Copy of the letter issued by order placing authority, conveying acceptance of PERT chart.
- 13.2 ADVANCE PAYMENT:- If requested by the contractor, CSPTCL may at its option grant an advance payment of maximum 10% of contract value after obtaining approval of competent authority. "The advance shall attract interest at the rate notified by PFC for capital projects of STU's in category under which CSPTCL falls plus a margin of 2%. The interest shall be charged monthly outstanding advance. Presently, CSPTCL is rated as 'A+' and rate notified by PFC for capital works of 'A+' category STU's is 11.25% p.a. which implies that applicable interest rate at present would be 13.25% to be charged on monthly basis". Separate order shall be issued to this effect. The contractor will furnish an unconditional and irrevocable Bank Guarantee from a Nationalized/Scheduled Bank in favour of CSPTCL for an amount equal to the advance granted plus interest upto the completion period calculated on it. The bank guarantee shall be initially valid till six months (180 days) after expiry of completion period and shall be extended from time to time 180 days as required. This B.G. may be reduced on pro-rata on quarterly basis based on contractor's request. The advance, if granted, shall be recovered from the running bills along with accrued interest as per CSPTCL's terms and conditions which shall be brought in the order for advance payment. The Bank guarantee shall be released on recovery of entire amount of advance granted plus interest.

#### Procedure for reduction in the Advance Payment Security Guarantee :-

The BG furnished towards advance payment may be considered to be reduced in every three months in case the validity of bank guarantee is more than one year. It should be clearly under stood that reduction in value of advance Bank Guarantee shall not in any way dilute the contractor's responsibilities under the contract including in respect of the facilities for which reduction in the value of securities is allowed.

**13.3 DEDUCTION OF ADVANCE PAYMENT: -** The advance payment with interest accrued on the advance made to the contractor will be adjusted against their running bills. The adjustment of advance will be done from the running bills of the contract proportionately to the extent of 20% in supply of materials, 20% of civil works and 20% on ETC charges only till the total advance plus interest gets adjusted.

#### 14. LIQUIDATED DAMAGE FOR DELAY IN COMPLETION OF CONTRACT:

14.1 If the contractor fails to perform the works covered under the project, within the completion period specified in the work order or any extension granted thereto, in respect of commissioning of EHV Sub-station & its associated line, CSPTCL shall recover from the contractor as liquidated damages, a sum of (0.5%) of the total price of sub-station (Supply, Civil & ETC works) and price of associated transmission line (Supply & Construction charges) for each calendar week (or part thereof) for delay of the work covered under the package of this tender. For this purpose, the date of taking over by concerned EHT division shall be reckoned as the date of completion.

In any case, the amount of liquidated damages for the Contract shall be limited to a maximum of five percent (5%) of the price of transmission line (supply & erection) and contract price of substation (supply, civil works & ETC) of the package.

The payment or deduction of such damages shall not relieve the contractor from obligations to complete the work or from any of other obligations and liability under the contract.

- 14.2 In case transformer is found defective/failed within the guarantee period and the contractor fails to arrange repair/replace the failed/defective transformer within four months from date of issue of intimation letter to the contractor by CSPTCL regarding its defect/failure, the contractor shall be liable to pay penalty charges for delayed repairs at the rate of 0.5% of the cost of transformer per week of delay or part thereof, subject to a maximum ceiling of 10% of the cost of the transformer. This penalty shall be in addition to the liquidated damages recoverable as per clause 14.1 for delay in completion of the contract.
- 14.3 **Pending rectification works:** The OIC of the work shall intimate the contractor all the defects/ short comings noticed in the sub-station/line within 15 days of the commissioning. The rectification work shall be completed by contractor within three months of issue of such letter. In case of noncompliance of the observations in this time frame by the contractor, the pending works shall be got completed/executed by CSPTCL from other agency(ies) and deduction shall be made from contractor's bill as decided by a committee of officers of CSPTCL.

#### **15. SECURITY DEPOSIT:** (Separately for all orders)

- a. The contractor shall furnish a bank guarantee from a nationalized/scheduled bank for an amount of 10% (ten percent) of the cost of the contract (including GST) as a contract security. This bank guarantee shall be submitted within 30 days of receipt of individual orders and shall be kept valid for a period exceeding the scheduled completion date by two months with claim period of six months
- b. In case the project is delayed (running beyond schedule) on any account, the contractor will be required to extend the validity of BG well in advance for atleast for six months or period of expected delay plus six months claim period, whichever is more. This extension in validity will be at contractor's cost only. The validity of the bank guarantee shall be 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 shall be from a Nationalised/ Scheduled Bank in the prescribed form of CSPTCL. No interest shall be paid by CSPTCL on the security deposit. In case of non-fulfilment of contractual obligations by the contractor, the security deposit shall be forfeited.
- c. The security deposit will be released only after completion of entire works, issue of No dues certificate from the Executive Engineer in charge of work and after submission of performance B.G.

#### 16. INSURANCE:

- 16.1 The contractor shall arrange insurance coverage for the materials at his custody and substation under execution as per the conditions laid down in the relevant clause of the technical specification.
- 16.2 The contractor shall take up insurance or such other measures of his work force which covers the claim for damage arising under workmen's compensation Act and other applicable State/Central laws. CSPTCL shall not bear any responsibility on this account. The contractor shall insure the entire sub-station during construction and shall kept it insured against loss by theft, destruction or damage by fire, flood, riot, civil commotion, sabotage or rebellion for the full value of the sub-station from the time of delivery until the S/S is taken over.

The contractor shall ensure following insurances also :-

Workmen compensation insurance	:	This shall protect against claims applicable against workmen's Compensation Act, 1948 (Govt. of India)
Workmen's compensation	:	As per statutory provisions
Employees liability	:	As per statutory provisions

#### 17. INSPECTION OF EQUIPMENTS:-

The pre despatch inspection of the equipments / materials shall be carried out at the works of the manufacturer in accordance with the inspection Plan/schedule, placed at Annexure A-26 of Vol-I of tender document. The equipment/ material in the scope of CSPTCL shall be inspected by Company's authorised engineer/ agency. The expenses of CSPTCL Engineers for inspection shall be borne by CSPTCL.

The turnkey contractor shall ensure that pre-dispatch inspection for materials are intimated only when the material is completely ready for inspection. On due date of inspection, if it is found that materials are not ready in required quantities or the inspection could not be carried out due to non-availability of requisite calibrated certificate of instrument with the manufacturer, closing of works on scheduled date of inspection, non-availability of sufficient testing material/ handling staff at manufacturer works, etc., all expenditures incurred on deployment of various inspecting official along with a fine of Rs. 50,000/- (Fifty thousand) shall be recovered from the bills of the contractor.

#### **18. DISPATCH INSTRUCTIONS:-**

After inspection, the equipment / material shall be despatched to the site only on issue of Despatch Clearance from O/o ED/CE (Planning & Project). The contractor should ensure that the material (except power transformer) is delivered at site stores within 21 days of despatch clearance. In case material is not received within 21 days from date of issue of Dispatch instructions, the material is liable for re-inspection at the cost of contractor.

The despatch clearance of equipments, power transformers, structures, C&R panels shall be given on the basis of readiness at site.

- i) **Structure :-**D.I. will be issued after completion of respective foundations.
- ii) **Equipments :-**D.I. will be issued after the readiness of foundations and structural erection is under progress.

The DIs in respect of equipments which are supplied alongwith the structures and foundation bolts viz. circuit breaker, capacitor banks etc. shall be issued during process of laying of foundation.

- iii) **C&R panels, Carrier panel**:- D.I. will be issued after the readiness of Bay Marshalling Room for the placement of C&R panels directly in the Bay Marshalling Room.
- (iv) **SAS, AC/DC panels, Exchange, Battery & Battery charger** : D.I. will be issued after the readiness of Control Room Building for the placement of these panels directly in the control room.
- iv) **Power Transformers**: D.I. will be issued after the readiness of all the foundations of the Sub-station and completion of structural erection of equipments and the erection of gantries.
- v) **Cables** :- D.I. will be issued after readiness of main cable trenches and the Bay Marshalling Rooms.

However, ED/CE (Planning & Project) may issue dispatch clearance of various equipments/materials based on the assessment of the works, looking to its pace and review of progress of work, various site conditions, urgency of work and other factors like time required for transportation, loading and unloading etc.

**TRANSPORTATION:** - The contractor shall ensure that all the equipments/ materials required for the project are dispatched to site through vehicles, within their permissible load carrying capacity, sanctioned by Transport Department of state where vehicle is registered

#### **19. PAYMENT DUE FROM THE CONTRACTOR:**

All costs of damages for which the contractor is liable to the CSPTCL will be deducted by the CSPTCL from any amount due to the contractor under the contract.

#### **20.** JURISDICTION OF THE HIGH COURT OF BILASPUR:

Suit, if any, arising out of this contract shall be filed by either party in a Court of Law at Raipur within the jurisdiction of the High Court of Bilaspur.

# **21.** CONTRACTOR'S RESPONSIBILITY:

Notwithstanding anything mentioned in the specification or subsequent approval or acceptance of the substation by CSPTCL, the ultimate responsibility for satisfactory performance of the substation shall rest with the contractor.

# 22. **RESPONSIBILITY TO RECTIFY THE LOSS AND DAMAGE:**

If any loss or damage happens to the work or any part thereof or materials/ plant/equipments during storage, construction, erection & commissioning, the contractor shall be responsible for the damage / loss and he shall at his own cost shall rectify / repair or replace the same for which the contract may arrange necessary insurance cover at his cost.

#### 23. NON-ASSIGNMENTS:

The contractor shall not assign or transfer the work orders issued as per this contract or any part thereof.

The contractor for ease and expeditious completion of the assigned works, may appoint various agencies/sub-vendors. The intimation for appointment of such agencies/ sub-vendors should be furnished to order placing authorities.

CSPTCL shall not be responsible for payment of any dues to these agencies / sub-vendors appointed by the contractor and also default of any statutory requirement.

#### 24. 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 nor shall this relieve the contractor of his obligations for due performance of the contract.

#### **25.** SETTLEMENT OF DISPUTES:

- 25.1 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.
- 25.2 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.

#### **26. ARBITRATION:**

- i. No dispute or difference arising between the contractor and CSPTCL 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.
- ii. Where any dispute is not resolved amicably then such dispute shall be referred to & settled by Arbitration under and in accordance with the provisions of 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 failing 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.
- iii. 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.
- iv. Not withstanding 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 CSPTCL shall be withheld on account of such proceedings except to the extent which may be in dispute and CSPTCL shall be entitled to make recoveries of amounts, if any, due from the Contactor, as per the provisions of the Contract.

# 27. LAWS GOVERNING CONTRACT:

The contract shall be governed according to and subject to the Laws of India and jurisdiction of the High Court of Bilaspur & Civil Court at Raipur.

#### 28. LANGUAGE AND MEASURES:

All documents pertaining to the Contract including specifications, Annexures / schedules, notice correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in this contract.

# **29 CORRESPONDENCE:**

- 29.1 Any notice to the contractor under the terms of the contract shall be served by registered mail or by hand to the authorised local representative of the contractor and copy by post to the contractor's place of business.
- 29.2 Any notice to CSPTCL shall be served to the Chief Engineer (P&P), CSPTCL, Dangania, Raipur in same manner.

# **30. SECRECY:**

The contractor shall treat the details of the specification and other documents as private and confidential and they shall not be reproduced without written authorisation from CSPTCL.

#### 31. AGREEMENT:

The successful bidder shall have to enter into an agreement with the ED/C.E. (Planning & Project) in the approved contract agreement form latest within 15 days of the receipt of the work order for contruction of 220 KV S/s and Transmission line (hereby reffered as project).

#### 32. TIME SCHEDULE & CLARIFICATIONS: -

- a) It is necessary that the tender documents are read by Bidders carefully and clarifications, if any, required before furnishing of tenders is promptly obtained. For any delay in this regard, Company will not be responsible and any request for extension of due date will not be entertained.
- b) In case, the specification for the same item/material/work are noticed to be different in two schedules, the contractor should ask clarification before submitting the tender, otherwise whatever is beneficial to CSPTCL shall be considered and decision of CSPTCL shall be final in this regard.

# **33.** 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".

# 34. 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) The contractor shall submit a statement to the Engineer-in-charge showing:-
  - 1. Number of Labours 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 by 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.

c) In respect of all labourers employed in the works, the contractor shall comply-with all the rules framed by the Government from time to time for the protection of Health and Sanitary arrangement of the workers.

# **35. NATURE OF CONTRACT:-**

Notwithstanding anything stated elsewhere in the bid document, the contract to be entered will be treated as divisible in Supply, Civil works and Erection, Testing & Commissioning for construction of EHV sub-station and supply of material & construction charges for EHV line. The contract award shall be placed on successful bidder as follows:-

- 1. Supply of Transformers, 220 KV, 132 KV & 33 KV substation equipments, C&R Panels, conductors, hardware etc., Supply of GI steel structures, Supply of T&P, test equipments and furniture, substation automation system & other accessories.
- 2. Civil Works.
- 3. Erection of equipments & structure, Testing & commissioning charges.
- 4. Supply of EHV line material i.e. GI tower, ACSR conductor, Earth wire, Disc Insulator, Hardware etc.
- 5. Construction of EHV line i.e. checks survey, stub setting, tower erection, stringing etc

All the 5 contracts will contain interlinking cross fall breach clause specifying that breach of one contract will constitute breach of other contracts also.

#### 36. PRICES:-

36.1 The quoted price should be kept valid till the completion of the project. Bidders are requested to quote price only in the prescribed formats and excel sheets showing Ex-works price/unit rate and GST.

The prices for the following equipments shall be variable on the basis of Price Variation formula prescribed by IEEMA as per latest IEEMA circular, with base indices as issued by IEEMA in its circular one month prior to the due date of opening of TC bid. In case of extension of due date, the base date for working out the price variation shall be calculated as per the original due date of opening of TC bid.

- (i) 160 MVA, 220/132/33 KV & 63 MVA, 132/33 KV Power Transformers.
- (ii) 33 KV Current Transformer & Potential Transformer/CVT (as applicable) & Coupling capacitor.
- (iii) 220 KV, 132 KV & 33 KV Isolators.
- (iv) 220 KV, 132 KV & 33 KV LA
- (v) 220 KV, 132 KV & 33 KV Circuit breakers.
- (vi) All GI structures.
- (vii) Power Line carrier equipments & Wave Trap.

For all other equipments / materials prices should be offered on <u>FIRM</u> basis.

The prevailing price variation formulas prescribed by IEEMA for Power Transformer, instrument transformer & coupling capacitor, isolators & switchgear, Lighting arrestor, PLCC equipments, Wave trap, GI structures are enclosed in the Annexure PV-1 to PV-8.

In case IEEMA notifies either modification in prevailing formula or new formula for these equipments within contractual completion period, the price variation shall be applicable as per revised IEEMA PV Formula and guidelines issued by IEEMA in this regard.

The payment shall initially be done on the basis of base rate offered by bidder subject to price adjustment to reflect changes in the cost. **Price variation shall be applicable for ex-works component only.** 

The price adjustment shall be invoked by either party subject to the following further conditions:-

- a. For calculation of Price adjustment, date of notification regarding readiness of equipment/material for inspection at the works of the manufacturer, shall be reckoned as the "date of delivery". In case of delay of project beyond the scheduled date of completion, price variation up to scheduled completion period or actual date of delivery, whichever is advantageous to CSPTCL, shall be considered. CSPTCL shall be entitled to any decrease in the price which may be caused due to lower price adjustment amount in case of delivery beyond scheduled completion period, therefore, in case of delivery of equipments beyond the scheduled completion period, the liability of CSPTCL shall be limited to the lower of the price adjustment amount which may be worked out either on scheduled completion date or actual date of delivery (inspection).
- b. If price adjustment works out to be positive the same is payable to the contractor by CSPTCL and if it works out to be negative, the same is to be recovered by CSPTCL from the contractor.
- c. The contractor shall submit price adjustment invoices for supplies **positively within 6 (Six) months from date of supply of equipment/material**, whether positive or negative. The price

adjustment bills for supply of equipment/material submitted after six months (from the date of supply) shall not be entertained. However, negative variations shall be recoverable.

The invoices should be supported with calculation of price variation along with documentary evidence of different indices applicable for price adjustment. Payment of price adjustment invoices shall be made after due verification, as follows:-

- (i) 90% of the price adjustment for respective equipment shall be paid after verification of invoices & receipt of material.
- (ii) Balance 10% amount shall be paid after successful commissioning and handing over of substation.
- 36.2 The quoted prices should be clearly mentioning Ex-Works Price and GST making total unit price chargeable for the items quoted. Packing, forwarding & Freight charges (inclusive of insurance) should be quoted separately in the relevant columns. The freight shall be on FIRM basis irrespective of whether the ex-works prices are firm or variable. The total F.O.R. destination price should also be quoted in relevant column.

It may please be noted that statutory variations due to Govt. Regulation in the rate of GST shall be permitted by CSPTCL only within contractual completion period. In case supplies against the contract are affected late i.e. beyond contractual completion period and rate of GST undergoes upward revision, the payment will continue to be made only on the basis of rates prevailing during the contractual completion period. However, in case the rate of statutory levies undergoes downwards revision than the delayed supplies beyond contractual completion period will attract reduced rate of levies/GST.

36.3 The prices of standard and reputed manufacturer items in accordance with vendor list shall be quoted so that quality assurance and performance of equipments are guaranteed in future.

#### 37. DESIGN OF 220/132/33 KV SUB STATION SWITCH YARD:-

The contractor is required to submit the design & switchyard plan layout for 220/132/33 KV switchyards for sub-station and SLD as per tender specification. These should be developed in line with the tentative switchyard plan layout provided with the tender. All steel structure of 220/132/33 KV Switchyard shall be as per design & drawing of CSPTCL. The weight of steel structure shall be as per tender document. The successful bidder shall be provided two sets of CSPTCL approved drawing of structures for above purpose. Equipment & structures should be offered according to the tentative layout. The layout should take into consideration the Indian Electricity Rules, incorporating latest amendments, regarding ground clearances, sectional clearances and inter-phase clearances. The bidder has to take into consideration of the land in possession of CSPTCL, while designing the layout, Civil foundation, Equipment & structure should be offered accordingly to approved layout requirements.

- **38. ISSUE OF STRUCTURAL DRAWINGS:-** The structural drawings shall be issued to L-1 bidder by ED/CE (Planning & Projects). Since designing is in the scope of contractor, it is the sole responsibility of the contractor for
  - i) Observing all the required clearances (phase to phase, phase to earth, sectional clearances & ground clearances) as per tender specifications.
  - ii) Calculation of force at all the joints/sections and their load carrying capacity as per the tender specification.
  - iii) In case the structures do not comply with points (i & ii) given above, the contractor shall have to modify/replace the structure as the case may be and acceptable to CSPTCL without any cost implication.
     If any modification required the same should be submitted for prior approval from this office.

# **39.**(a) **VARIATION IN QUANTITY OF S/S STRUCTURES/ WEIGHT OF EARTH FLATS ETC:**-Since the weight of flats for earthing have been worked out by CSPTCL and unit rates have been quoted by the bidder; if during actual execution the weight of earth flats varies, the bidder will be paid the extra charges/ less charges due to increase/decrease in weight.

Since the design of S/s structures are being provided by CSPTCL & the quantity of the structures with standard weight have been worked out by CSPTCL and unit rates have been quoted by the

bidder; if during actual execution the weight of any structure varies, the bidder will be paid on the basis of actual weight subject to maximum weight of the structures as per standard weight (with tolerance of 2%) as stipulated in schedule-C, Vol.-II of this tender specification.

(b) **VARIATION IN QUANTITY OF EQUIPMENTS:** - In the event of revision of quantity on completion of project, total ordered value of supply of materials, civil works and erection charges of substation and associated line in the tender shall be worked out with the unit rates of L-2 bidders. In case the total value when calculated with unit rate of L-2 bidder 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.

# 40. ENGAGEMENT OF SUB-VENDORS – CLEARANCE OF THEIR DUES AND OBSERVANCE OF INDUSTRIAL/ LABOUR LAW.

- 1) The contractor shall furnish list of various agencies/sub-vendors proposed to be engaged for execution of different type of works under scope of this contract to the ED/CE (C&LM), CE (Civil) CSPTCL, Raipur and concerned Engineer-in-charge.
- 2) Wages and fringe benefits according to the Labour Law / Industrial Law and fixed by concerned District Collectorate as in force during the execution of the work shall have to be paid by contractor or his appointed sub-vendor. It shall be the sole responsibility of the main contractor for observing the prevailing laws and contractor shall be abided for such statutory requirements absolving CSPTCL fully in case of any dispute, if so arises. Notwithstanding above, CSPTCL reserves the right to make direct payment to the sub-vendors/sub-contractor in case of failure of the main contractor to do so within a reasonable time period on whatever ground and deduct from the bills due to the Contractor under this contract or any other contract with CSPTCL including his amount of performance / security for adjusting the aforesaid payment.
- 3) The termination/completion of the sub-vendor's job shall be informed to CSPTCL promptly. The contractor shall furnish a statement to the effect that all the dues of all sub-vendors/other agencies engaged by him for the execution of the contract have been fully cleared. The B.G. shall be released only after submission of the aforesaid statement to CSPTCL.
- 4) The contractor shall observe Labour Law/Industrial Law and Wages Law strictly with regard to payment and fringe benefits to be delivered to the labourers/workers engaged by the Contractor or his sub-vendor. It shall be the sole responsibility of main contractor for arranging due insurance of personnel / materials to meet out any exigencies. It shall be the sole responsibility of main contractor for observing all the prevailing Laws and CSPTCL shall not be held responsible for any liability / disputes or claim in any way if arises due to non-observance of such Laws. However, the decision of Honourable District Court / appropriate court of law shall be final and binding on CSPTCL, Contractor and sub-vendor in case of any dispute.

# 41. **POWER & WATER SUPPLY FOR CONSTRUCTION WORK:**

For providing power supply required for construction, erection, testing & commissioning work, CSPTCL shall extend supply up to the site of the Sub-station. Any line extension work etc required for this purpose shall be done by CSPTCL at their own cost.

However, the connection required for availing supply shall be arranged by the contractor. The expenditure on this account and the energy charges shall be borne by the contractor. Water supply shall be arranged by the contractor at his own cost.

# 42. AWARD OF CONTRACT:-

The contract will be awarded to the successful bidder, (also referred as L-1 bidder), whose bid has been evaluated to be the lowest. However, CSPTCL reserves its right to accept or reject any or all the offers, in part or full, without assigning any reason whatsoever.

# 43.(A) STORAGE, SHIPMENT OF EQUIPMENT/MATERIAL:-

The indoor equipments received at site for the work under execution has to be stored under a temporary shed in proper manner so as to avoid entry of rain water, flood water and safe from theft & fire hazards etc. The outdoor equipments can be stored in open space free from water logging and fire hazard The Executing Division of the work to ensure that the bill raised by the contractor is passed only after storage of the equipments in proper manner. The site of the store shall be selected in consultation with engineer in charge of the work, in no way the store area shall create obstacles

for construction of main switch yard. DI of materials shall be issued by this office only after getting confirmation of construction of storage shed from engineer-in-charge.

Materials /equipment has to be transported in proper manner with suitable package /cartoon to protect the equipment from damages due to injury during transportation.

Impact recorder shall be provided with power transformer during the transportation to site from the manufacturer's works to record shock/jerk/vibration. The report of the impact recorder is to be analysed at the time of receipt of transformer in the presence of CSPTCL engineer. The officer in charge of the work will ensure that the MRC is issued only after ensuring the shocks/vibration/jerk during the transportation is within limit. The contractor shall arrange the technical expertise required for the analysis of impact recorder. If the data of the impact recorder is not within the tolerable limit the transformer may not be received.

All the oil connecting conduit pipes, radiators oil conservators & turrets are to be blocked with the dummy MS flanges & gaskets in order to avoid ingress of moisture.

# (B) SUBMISSION OF INDEMNITY BOND TOWARDS SAFE CUSTODY OF EQUIPMENT/ MATERIAL:-

The contractor shall submit indemnity bond (as per Annexure A-21) towards safe custody of various material/equipments equivalent to cost of material provided in price schedule of supply order, indemnifying CSPTCL towards loss and damages if any. This bond shall be valid till contractual completion period or actual completion period whichever is later.

#### 44. UNSATISFACTORY PERFORMANCE:

The bidder(s) who have been debarred/ blacklisted for future business with CSPTCL/ or any other successor power companies of erstwhile CSEB, or found to violate any provision(s) contained in the tender document during any stage of bid or during pre-contract stage, their bid shall not be considered for further evaluation and the bidder can be disqualified from tender process or the contract, if already awarded, can be terminated for such reason.

#### 45. DRAWING & LITERATURES:-

The contractor is required to submit 06 sets of drawings for approval before execution of the work. The contractor is also required to submit 06 sets of **as built** drawings before handing over the Substation to CSPTCL.

# 46. DISCREPANCY WITH APPROVED DRAWING:-

The suppliers are required to submit the drawings of the equipments/structures/T&P and all other materials strictly as per tender specifications. However, after approval of drawing, at a later stage, if it is detected that due to incorrect/incomplete/partially matching drawing with the tender specifications or due to any other reason the items actually supplied do not fulfil the requirements as per tender specifications the whole lot shall be liable for rejection unless the deviation is specifically approved by ED/CE (Planning & Project).

# 47. ELECTRICAL INSPECTOR FEE:-

All pre-commissioning tests on equipment shall be carried out by the contractor. Commissioning of the equipments shall be carried out after receipt of clearance from the engineer-in-charge and Chief Electrical Inspector. Payment of statutory Electrical Inspector Fees and filing of papers of such inspection shall be done by the contractor. All other materials required for erection, testing, and commissioning shall be supplied by the contractor at his own cost. Services of commissioning engineer wherever required would be on the contractor's account.

#### 48. COMPLIANCE WITH REGULATIONS:-

Unless other wise specified all works shall be carried out in accordance with the Indian Electricity Rules 2003 OR revision thereof which may be issued during the period of contract.

#### 49. FULL TIME SITE ENGINEER:-

Immediately on award of contract and handing over of the site, the contractor shall nominate one experienced site engineer having at least 3 years experience of similar work, who will be stationed near the substation site. The site engineer will execute all the works related to this substation on a full time basis. Immediately after handing over of the land, various activities are required to be carried out including preparation of lay out plan, soil investigation, fixing of levels etc. It is noted that some of the bidders have undertaken 2-3 projects but are carrying on with one site engineer only with the result that for achieving progress at one site, the works are delayed at other sites. Therefore,

full time site engineer for each substation is a must. After award of the contract, the firm shall immediately inform CSPTCL about nomination of a full time site engineer and his contact numbers who will be approachable to CSPTCL for all works related to the substation.

#### 50. E.P.F. CODE:

The contractor shall submit EPF code allotted by EPF Commissioner to the Engineer-in-charge of the work.

#### 51. LIST OF VENDORS:

All the equipments/materials shall be supplied strictly as per the "List of vendors" indicated in Section-V of Vol.-I of this tender document. This vendor list can also be viewed on CSPTCL's official web-site. The vendor list as on date of issue of NIT shall be applicable for instant tender. No deviation in the vendor list shall be permitted during execution of the project at any stage. The equipments/ materials which are not covered in this vendor list shall be of reputed make with prior approval of CSPTCL.

#### 52. LIMITATIION OF LIABILITY

Except in cases of gross negligence or willful misconduct,

- (a) the Contractor and CSPTCL shall not be liable to the other party for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the CSPTCL and
- (b) the aggregate liability of the Contractor to CSPTCL, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify CSPTCL with respect to patent infringement.

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# **SECTION-II-B**

# **GENERAL CONDITIONS OF CONTRACT FOR EHV LINE**

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# **SECTION-II-B**

# **GENERAL CONDITIONS OF CONTRACT FOR EHV LINE**

#### a. **DEFINITION OF TERMS:-**

In writing these General Condition of Contract, the specification and bill of quantity, the following words shall have the meaning hereby indicated, unless there is something in the subject matter content inconsistent with the subject.

- i. "**CSPTCL**" shall mean the CHHATTISGARH STATE POWER TRANSMISSION CO. LTD. represented through the Chief Engineer (P&P), Raipur.
- ii. The "**Purchaser/Owner**" shall mean the CHHATTISGARH STATE POWER TRANSMISSION CO. LTD. (CSPTCL).
- iii. **"The Engineer In Charge**" shall mean the Engineer or Engineers authorised by the Chief Engineer (P&P) for the purpose of this contract.
- iv. "**CSPTCL Enginee**r" shall mean an Engineering person or personnel authorised by the CSPTCL to supervise and inspect the material and construction of the Line.
- v. "**The Contractor**" shall mean the successful bidder awarded with the contract or their successors and permitted assigns.
- vi. **"Contract Price**" shall mean the sum named in or calculated in accordance with the provisions of the contract as the contract price.
- vii. "General Conditions" shall mean these General Conditions of Contract.
- viii. **"Specification**" shall mean the specification annexed to these General Conditions of Contract and shall include the Schedules and drawings attached thereto or issued to the contractor as well as all samples and patterns, if any.
- ix. "Tower" shall mean the design and type tested tower to be supplied by the contractor.
- x. "**Package**" shall mean & include combination of all the project(s) described in Scope of Work.
- xi. "**Project**" shall mean the EHV Substation and EHV Line.
- xii. **"Date of Tendering"** shall mean the original due date of opening of TC bid.

# 2. CONTRACT DOCUMENT:-

The term "Contract" shall mean and include the General Conditions, specifications, Annexure, drawings, work orders issued against the contract Annexure of price or the final general conditions, any special conditions applying to the particular contract specification and drawings and agreement to be entered into. Terms and conditions not here in defined shall have the same meaning as assigned to them in the Indian Contract Act and also that in the C.G. Act.

# 3. MANNER OF EXECUTION: -

- a) The manner of execution shall be such that the supply of materials reach the site in a phased manner as per the site progress after due approval from this office. Erection of the **220 KV LINE**, shall be carried out in an approved manner as outlined in the technical specification or where not outlined, in accordance with latest relevant Indian Standard Specification, to the reasonable satisfaction of the Engineer.
- b) The contractor shall within 15 days after the date of acceptance of letter of intent submit to the Engineer, a detail program for the execution of work for his consent .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.
- c) If at any time it should appear to the Engineer that the actual progress of works does not conform to the program to which consent has been given under clause, 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. VARIATION, ADDITIONS & OMISSIONS:-

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 variations in accordance with the rates specified in the contract, so far as they may apply.

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**Item not Included in BoQ**:- In case of requirement of material(s) which is not included in the price schedule and rates are not available but mandatory as per site conditions, prior approval of order placing authority should be obtained before using such unscheduled items. The rates of such items shall be finalized by the nominated committee and approved after obtaining competent approval.

# 5. INSPECTION DURING ERECTION:

The Engineer-in-Charge or his authorized representative(s) shall be entitled at all reasonable times to inspect and supervise and test the materials / works of Lines. Such inspection will not relieve the contractor from their obligations under this contract.

#### 6. 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:-

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

#### 7. 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 enmity, act of Government, cyclones, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes & natural calamities etc. 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 and shall also submit evidences in this regard. The CSPTCL shall verify the facts and grant such extension as facts justify.

# 8. **REJECTION OF WORKS:**

In the event of any of the material supplied/work done by the contractor is found defective in material or workmanship or otherwise not in conformity with the requirement of this contract specification, the CSPTCL shall either reject the material and/or work and request the contractor to rectify the same. The contractor on receipt of such notices rectify or replace the defective material and rectifies 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 fifteen percent from the contractor and/or terminate the contract for balance work/supplies with enforcement of penalty as per contract.
- b) Defective materials/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.

#### 9. 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.

#### **10.** CONTRACTORS RESPONSIBILITY:

Not withstanding 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.

#### **11.** NON-ASSIGNMENTS:

The contractor shall not assign or transfer the work orders issued as per this contract or any part thereof.

The contractor for ease and expeditious completion of the assigned works, may appoint various agencies/sub-vendors. The intimation for appointment of such agencies/ sub-vendors should be furnished to order placing authorities.

CSPTCL shall not be responsible for payment of any dues to these agencies / sub-vendors appointed by the contractor and also default of any statutory requirement.

#### 12. 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 nor shall this relieve the contractor of his obligations for due performance of the contract.

#### **13.** 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.

#### 14. ARBITRATION:-

- i. No dispute or difference arising between the contractor and CSPTCL 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.
- ii. Where any dispute is not resolved amicably then such dispute shall be referred to & settled by Arbitration under and in accordance with the provisions of 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 failing 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.

- iii. 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.
- iv. Not withstanding 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 CSPTCL shall be withheld on account of such proceedings except to the extent which may be in dispute and CSPTCL shall be entitled to make recoveries of amounts, if any, due from the Contactor, as per the provisions of the Contract.

#### **15. LAWS GOVERNING CONTRACT:**

The contact shall be constructed according to and subject to the Laws of India and jurisdiction of the High Court of Chhattisgarh or civil court of Raipur.

#### 16. LANGUAGE AND MEASURES:

All documents pertaining to the Contract including specifications, Annexures / schedules, notice correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in this contract.

#### **17. CORRESPONDENCE:**

- a) Any notice to the contractor under the terms of the contract shall be served by registered mail or by hand to the authorised 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 Chief Engineer (P&P.), CSPTCL, Dangania, Raipur (CG) 492013 in same manner.

#### **18. SECRECY:**

The contractor shall treat the details of the specification and other documents as private and confidential and they shall not be reproduced without written authorisation from CSPTCL.

# **19. 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".

#### 20. 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) The contractor shall submit a statement to the Engineer-in-charge showing:-
  - 1. Number of Labours 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 by 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.

c) In respect of all labourers employed in the works, the contractor shall comply-with all the rules framed by the Government from time to time for the protection of Health and Sanitary arrangement of the workers.

# 21. CONTRACTOR TO INFORM HIMSELF FULLY

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 officer concerned in writing, so that doubt may be removed.

#### 22. DESIGN AND DRAWINGS:-

- a) The CSPTCL will supply the structural drawing and Bill of Material for Stub & cleat, Stub setting templates of A-2, A-30, A-60 type tower along with their body extensions.
- b) The CSPTCL will supply all the relevant tower foundation drawings.
- c) The Contractor shall arrange for one number proto-assembly of body extensions / leg extensions to tower type A-2, A-30 and A-60 for 220 KV line as per site requirement, which shall be inspected by CSPTCL. After successful proto assembly inspection the Contractor shall make reproducible from the given drawings/documents, add the required note for the subject line, change the revision number of the drawing documents and incorporate changes, if required to be made during proto-assembly. The revised drawing/documents (including structural drawings, BOM etc) shall be submitted in four copies and will be finally approved by the CSPTCL.

The mass fabrication shall be taken up from the approved drawings. The overall responsibility of fabricating tower members correctly lies with the Contractor only and the Contractor shall ensure that all the tower members can be fitted while erecting without any undue strain on them.

- d) The drawing for tower accessories like number plate, danger plate, phase plate, anti-climbing device, step bolt, D-shackle etc shall be prepared by the Contractor as per drawing of CSPTCL and submitted to the CSPTCL, in ten copies, along with one reproducible, for record. These drawings shall be prepared in A4 size only.
- e) All the drawings shall have a proper name plate clearly displaying the name of CSPTCL on right hand bottom corner. The exact format of the name plate shall be handed-over to the successful bidder for incorporation of the same on all the drawings. Also all the drawings shall carry the following statement and shall be displayed conspicuously on the drawing :-

#### WARNING:- THIS IS PROPRIETORY ITEM AND DESIGN RIGHT IS STRICTLY RESERVED WITH CSPTCL. UNDER NO CIRCUMSTANCES THIS DRAWING SHALL BE USED BY ANYBODY WITHOUT PROPER PERMISSION FROM THE CSPTCL IN WRITING.

- f) The contractor will submit the drawings & GTP of stringing hardwares, GI Nut Bolts, Conductor, Earthwire, barbedwire and Disc Insulators etc of the approved sub-vendor alongwith the type test of Govt. approved test laboratory which should not be older than 5 years.
- g) The Engineer shall signify his approval or otherwise of the drawing submitted by the tenderer within a reasonable time generally not exceeding thirty days, from the date of receipt of such drawings.
- h) Within thirty days of the receipt of the contractor of the notification by the Engineer of his approval of such drawings, ten sets of the drawings as approved shall be submitted to the Engineer by the Contractor. One set such drawings, duly approved by the Engineer shall be returned to the contractor and be thereafter deemed to be the 'Contract Drawings.
- i) The drawings when so approved shall not be departed from in any way whatsoever except by the written permission of the Engineer as hereinafter provided. The drawings approved by the purchaser shall be at liberty to use these drawings / designs in any manner it likes for its future lines.
- j) During the execution of the works, one of the sets of drawings shall be available with the contractor for reference on the site.
- k) The Engineer or his duly authorised representative shall have the right, at all reasonable times to inspect the factory or works of the contractor.

# 23. MISTAKES IN DRAWINGS:-

The contractor shall be responsible for, and shall pay for, any alterations of the work due to any discrepancies, errors, or omissions in the drawings or other particulars supplied by him, even if such drawing or particulars have been approved by the Engineer(s). However, such discrepancies,

errors or omissions be not due to inaccurate information or particulars furnished to the contractor by the Engineer. The purchaser shall be responsible for drawings and information supplied by the Engineer, and the purchaser shall pay for any alterations of work necessitated by reason of inaccurate information supplied by the Engineer, and the purchaser shall pay for any alterations of work necessitated by reason of inaccurate information supplied by the Engineer to the Contractor.

# 24. PATENT RIGHTS:-

In event of any claim or demand being made or action being brought against the purchaser for infringement or alleged infringement of any patent in respect of any material, work, drawing/design or thing used or supplied by the contractor under this contract or in respect of any method using or working by the purchaser on such machine, work, material, drawing/design or thing, the contractor will indemnify the purchaser against all costs and expenses arising from or incurred by reason of any such claim. The purchaser shall notify the contractor immediately if, any claim is made and that the contractor shall be at liberty if he so desires with the assistance of the purchaser, if required, but at the contractors expense, to conduct all negotiations for the settlement of the same or any litigation that may arise there from.

# 25. SUBLETTING OF CONTRACT:-

- a) 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 than 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.
- b) 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 galvanising 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.

#### 26. QUALITY OF MATERIALS:-

The line shall be constructed in the best and the most substantial and the most workmen like manner and with materials of the best or of approved qualities for their respective uses.

#### 27. PACKING:-

The contractor shall include and provide for securely protecting and packing the material so as to avoid damage in transit under proper conditions, and he shall be responsible for all losses or damage caused or occasioned by the any defect in packing. All materials shall be packed in accordance with packing specifications prescribed by the carriers. Packing or transporting methods not following to these specifications must be got approved by the Engineer or his authorized representative before transportation is made.

All bright parts shall be thoroughly protected from rust during transit. The purchaser will take no responsibility for any damage done to the material en-route to the 'site of work' or 'place of delivery' whichever may be specified.

**Transportation** :- The successful bidder shall ensure that all the required material for project is dispatched to site through vehicles within their permissible load carrying capacity sanctioned by Transport Department of State where vehicle is registered

#### 28. DELIVERY:-

The contractor shall quote price for the supply and erection of the material, equipment, and machinery covered by the purchaser specification.

#### 29. FENCING, LIGHTING AND APPROACH ROAD:-

The contractor shall be responsible for the proper fencing, guarding, lighting and watching of all works comprised in the contract and for the proper provision of temporary roadways, foot-ways, guards and fences as far as the same may rendered necessary by reason of the work for the accommodation and protection of foot passengers or other traffic and of the owners and occupiers of adjacent property and of the public.

#### 30. POWER TO VARY OR OMIT WORKS:-

No alteration, amendments, omission, additions, suspensions, or variations of the work(hereinafter referred to as 'Variation') under the contract as shown by the contract drawings or the specification shall be made by the contractor except as directed in writing by the Engineer, but the Engineer shall have full power, subject to the provision, hereinafter contained, from time to time during the execution of the contract by notice in writing to instruct the contractor to make such variation without prejudice to the contract and the contractor shall carry out such variations and be bound by the same conditions, as far as applicable as though the said variations occurred in the specification. If any suggested variations would, in the opinion of the contractor, if carried out prevent him fulfilling any of his obligations or guarantees under the contract, he shall notify the Engineer thereof in writing, and the Engineer shall decide forthwith whether or not the same shall be carried out and if the Engineer confirms his instructions, the contractor's obligations and guarantees shall be modified to such an extent as may be justified. The difference of cost if any, occasioned by any such variation, shall be added to or deducted from the contract price as the case require. The amount of such difference, if any, shall be ascertained and determined in accordance with the rates specified in the schedule of prices, so far as the same may be applicable, and where the rates are not contained in the said schedules, or are not possible, the same may be settled by the Engineer and contractor jointly. But the purchaser shall not become liable for payment of any change in respect of any of the variations, unless the instructions for the performance of the same shall have been given in writing by the Engineer.

In the event of the Engineer requiring any variations, such reasonable and proper notice shall be given to the contractor as will enable him to make his arrangements accordingly and in case where goods or materials are already prepared, or any designs, drawings or patterns made or work done that required to be altered, a reasonable sum in respect thereof shall be allowed by the Engineer.

Provided however, that no variation which involves an increase or decrease of the total price payable hereunder be more than 15 percent shall be made without the previous consent in writing of the contractor. In case in which the contractor has received instructions from the Engineer as to carrying out the work which either then or later will, in the opinion of the contractor, involve a claim for additional payment, the contractor shall, as soon as reasonably possible after the receipt of the instructions aforesaid, advise the Engineer to that effect.

#### 31. NEGLIGENCE:-

If the contractor shall neglect to execute the work with due diligence 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 workman, 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 the contractor's hands and re-contract at a reasonable price with any other persons, or provide any other materials, 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 any balance which may be otherwise due on 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 of such difference and the 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 materials, tools, construction plant or other things remaining unsold shall be removed by the contractor.

#### 32. DEATH BANKRUPTCY ETC. :-

If the contractor shall die or commit any act of bankruptcy, or being corporation, commence to be wound up except for reconstruction 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 be 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.

#### 33. INSPECTION & TESTING:-

The Engineer and his duly authorized representative, shall have, at all reasonable times, access to the contractor's premises or works, and shall have the power at all reasonable times, to inspect and examine the materials and workmanship of the plant/Line during its manufacture, construction or erection thereof for which all the reasonable necessary assistance shall be rendered by the contractor without any extra commitment and if part of the material is being manufactured or erected on other premises or works, the contractor shall obtain permission for the Engineer and for his duly authorized representative to inspect as if the materials were manufactured or erected on the contractor's own premises or works.

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 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 us based have come to the knowledge of the Engineer. Unless specifically provided otherwise, all test as per relevant ISS shall be made at the contractor's works before transportation.

The contractor shall give the Engineer 15 (Fifteen) days clear notice of any material being ready for testing and the Engineer or his said representative shall, attend at the contractor's premises or works within a reasonable time. The contractor should ensure that the material is delivered at site stores within 21 days of clearance. In case material is not received within 21 days from date of issue of Dispatch instructions, the material is liable for re-inspection at the cost of contractor.

#### 34. TEST AT CONTRACTOR'S PREMISES:-

In all cases where the contract provides for tests, whether at the premises or works of the contractor or of any sub-contractor, the contractor except where otherwise specified shall provide, free of charge, such labour, materials, electricity, fuel, water, stores, apparatus and instruments as may reasonably be demanded necessary to carry out efficiently such tests of the material in accordance with the contract, and shall give facilities to the Engineer or his authorized representative to accomplish such testing.

If specific tests other than those specified in the relevant ISS/contract are required by the purchaser, the charges for such tests shall be borne by bidder.

When the tests have been satisfactorily completed at the contractor's or sub-contractor's premises or works, the Engineer or his authorized representative shall issue a test certificate to that effect. However, no material shall be transported before such test certificate has been approved and dispatch instructions issued by this office. The satisfactory completion of these tests or the issue of this certificate shall not bind the purchaser to accept the material so passed for transportation, if on further tests after erection it is found not to comply with the specification.

#### **34.1** Additional Tests

The CSPTCL reserves the right to conduct any other test(s) of reasonable nature at contractor's expenses at contractor/supplier premises, at site or in any other place in addition to the aforesaid type, acceptance and routine tests to satisfy himself that the materials comply with the Specifications.

The CSPTCL also reserves the right to conduct all the tests mentioned in this tender specification at contractor's expense on the samples drawn from the site at contractor/ Supplier's premises or at any other test centre. In case of evidence of non compliance, it shall be binding on the part of Supplier to prove the compliance of the items to the technical specifications by repeat tests, or correction of deficiencies, or replacement of defective items all without any extra cost to the CSPTCL

#### 35. DELIVERY OF MATERIALS AND DISPATCH INSTRUCTIONS:-

On receipt and verification of test certificates, purchaser will issue a clearance for dispatch of inspected material. No material shall be dispatched before receipt of such dispatch instruction in writing. Materials may be supplied based on the field requirement so as to avoid blocking of inventory.

# 36. 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 of tradesman and after 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.

#### **37.** ENGINEER'S SUPERVISION:-

All the works shall be carried out under the direction and to the reasonable satisfaction of the Engineer. 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.

#### **38. 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.

#### **39.** 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 line 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.

# 40. LIABILITY FOR ACCIDENTS AND DAMAGE:-

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

The contractor shall during the progress of the work, properly cover up and protect the line from injury by expose 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 materials 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 line shall be or be deemed to be taken over as aforesaid, the contractor shall also be liable to indemnify the purchaser in respect of all damage or injury to defective design, work, or material, but not otherwise.

Provided that the contractor shall not be liable under the contract for any loss or profit or loss of contract for 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 purchaser or of others, of (safe as to damage by fire as hereinafter provided) 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 purchaser against all actions suits, claims, demands, cost of expense 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 person employed by the contractor or his sub-contractor on the works whether under the General Law or under the Workman's Compensation Act, 1923, or any other statute in force at the statute of the 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 workman, 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 incharge the fact of such accident. The contractor shall indemnify the CSPTCL against all loss or damage sustained by the CSPTCL resulting against all loss or damage sustained by the CSPTCL resulting against all loss or damage sustained by the CSPTCL as a consequence of CSPTCL's failure to give notice to the provisions of said Act in regard to such accidents.

In the event any claims being made or action brought against the purchaser 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 require, of the purchaser, 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 purchaser shall, at the expense of the contractor, afford all available assistance for any such purpose.

#### 41. Clearance of dues of Sub-vendor and observance of Industrial / Labour Law:

- (i) The main contractor shall furnish list of various agencies/sub-vendors proposed to be engaged for execution of different type of works under scope of this work order to the ED (EHT:C&M) CSPTCL, Raipur or any office authorized by E.D.(P&P).
- (ii) Wages and fringe benefits according to the Labour Law / Industrial Law and fixed by concerned District Collectorate as in force during the execution of the work shall to be paid by contractor or his appointed sub-vendor. It shall be the sole responsibility of the main contractor for observing the prevailing laws

and contractor shall be abided for such statutory requirements absolving CSPTCL fully in case of any dispute, if so arises.

- (iii) The termination/completion of the sub-vendor's job shall be informed to CSPTCL promptly. The contractor shall furnish a certificate jointly signed by sub-vendor and himself having settled all the dues and liabilities accrued due to sub-vendor's engagement for the execution of tendered work. The B.G. shall be released only after submission of the aforesaid clearance certificate received from all such sub-vendors engaged on execution of tendered work under the scope of this order. The B.G./ final payment shall be released only after submission of aforesaid clearance certificate to the concerned field Division.
- (iv) The contractor shall observe Labour Law/Industrial Law and Wages Law strictly with regard to payment and fringe benefits to be delivered to the labourers/workers engaged by the Contractor or his sub-vendor. It shall be the sole responsibility of main contractor for arranging due insurance of personnel / materials to meet out any exigencies. It shall be the sole responsibility of main contractor for observing all the prevailing Laws and CSPTCL shall not be held responsible for any liability / disputes or claim in any way if arises due to non-observance of such Laws. However, the decision of Hon'ble District Court / appropriate court of law shall be final and binding on CSPTCL, Contractor and sub-vendor in case of any dispute.

#### 42. 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 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 intention 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 of deficiencies.

# 43. DEDUCTIONS FROM CONTRACT PRICE:-

- (i) All costs, damages or expenses which the purchaser may have paid, for which under the contract the Contractor is liable, may be deducted by the purchaser from any money due or become due by him to the Contractor under the contract or may be recovered by suit or otherwise from the Contractor as an arrear of land revenue.
- (ii) <u>Recoveries For Liabilities Against Other Contract/Order:</u> 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.

#### 44. CERTIFICATE:-

# (i) 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 material ready for dispatch on the date of claim, and the certificate that such material 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.

#### (ii) CERTIFICATE NOT TO AFFECT THE RIGHTS OF THE CSPTCL OR CONTRACTOR:-

No certificate of the Engineer on account nor any sum paid on account by the purchaser, 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 purchaser 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 purchaser 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.

#### 45. SUSPENSION OF WORKS:-

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

#### 46. 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. 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 CE (P&P) 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.

# 47. LIQUIDATED DAMAGE FOR DELAY IN COMPLETION OF CONTRACT:

specified in the work order or any extension granted thereto, in respect of commissioning of EHV Sub-station & its associated line, CSPTCL shall recover from the contractor as liquidated damages, a sum of (0.5%) of the total price of sub-station (Supply, Civil & ETC works) and price of associated transmission line (Supply & Construction charges) for each calendar week (or part thereof) for delay of the work covered under the package of this tender. For this purpose, the date of taking over by concerned EHT division shall be reckoned as the date of completion.

In any case, the amount of liquidated damages for the Contract shall be limited to a maximum of five percent (5%) of the price of transmission line (supply & erection) and contract price of substation (supply, civil works & ETC) of the package.

The payment or deduction of such damages shall not relieve the contractor from obligations to complete the work or from any of other obligations and liability under the contract.

**Pending rectification works:** The OIC of the work shall intimate the contractor all the defects/ short comings noticed in the sub-station/line within 15 days of the commissioning. The rectification work shall be completed by contractor within three months of issue of such letter. In case of noncompliance of the observations in this time frame by the contractor, the pending works shall be got completed/executed by CSPTCL from other agency(ies) and deduction shall be made from contractor's bill as decided by a committee of officers of CSPTCL.

# 48. **REJECTION OF DEFECTIVE WORK:-**

If the complete line, or any portion thereof, before it is taken over as per relevant clause of this specification, be defective, or fails to fulfill the requirements of the contract, the Engineer shall give the contractor notice setting forth particulars of such defects or failure, and the contractor shall forthwith make the defective material good, or alter the same to make it comply with the requirements of the contract. Should he fail to do so within a reasonable time, the purchaser may reject and replace at the cost of the contractor, the whole or any portion of the material, as the case may be which is defective or fails to fulfill the requirements of the contract. Such replacement shall be carried out by purchaser within a reasonable time and at a reasonable price and where reasonably possible, to the same specification and under competitive conditions. The contractor's full and extreme liability under this clause shall be satisfied by the payment to the purchaser of the extra cost, if any, of such replacement delivered and or erected as provided for in the original contract. Such extra cost being the ascertained difference between the price paid by the purchaser, under the provisions above mentioned, for such replacement and the contract price for the material so replaced

including the repayment of any sum paid by the purchaser to the contractor in respect of such defective material. Should the purchaser not so replace the rejected material within reasonable time, the contractor's full and extreme liability under this clause shall be satisfied by the repayment of all moneys paid by the purchaser to him in respect of such material, in the event of such rejection, the purchaser shall be entitled to the use, of the material in a reasonable and proper manner for a time reasonably sufficient to enable him to obtain other replacement material, during the period the rejected material is used commercially the contractor shall be entitled to a reasonable sum as payment for such use.

#### 49. TAKING OVER :-

When all performance tests called for by the specification have been successfully carried out before transportation, the material 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 material which do not materially affect the commercial use thereof provided that the contractor shall undertake to make good the same in due course.

#### 50. MAINTENANCE:-

- a) For a period of 24 (Twenty Four) calendar months commencing immediately upon the satisfactory completion of the final tests at site and taking over of the line, the contractor's liability shall be limited to the replacement (supply and re-erection) of any defective parts that may develop in transmission line of his own manufacture or those of his sub-contractors approved under **clause 6** under the conditions provided for by the contract under proper use and arising solely from faulty design, materials, or workmanship.
- b) If it becomes necessary for the contractor to replace or renew any defective portions of the material under this clause, the provisions of this clause shall apply to the portions of the material so replaced or renewed until the expiration of six months from the date of such replacement or renewal or until the end of the above mentioned period of twenty months which ever may be later. If any defects be not remedied within a reasonable time, the purchaser may proceed to do the work at the contractor's risk and expense, but without prejudice to any other rights which the purchaser may have against the contractor in respect of such defects.
- c) The contractor shall bear reasonable cost of minor repairs carried out on his behalf at site.
- d) At the end of the maintenance period, the contractor's liability cases. In respect of goods not covered by this clause, the purchaser shall be entitled to the benefit of any guarantee given to the contractor by the original supplier or manufacturer of such goods.

# 51. REGULATION OF LOCAL AUTHORITIES:-

The purchaser 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/permissions as per central/state/local statutory bodies at his cost.

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

# 52. CONSTRUCTION AS PER CONTRACT ACT:-

The contract shall be in all respects be construed and operate as a contract as defined in Indian Contracts Act, 1872, and all payments there under shall be made in Indian rupee unless otherwise specified.

#### 53. HEADINGS:-

The subject headings of any clause thereof shall not, in any manner whatsoever, affect the interpretation of such clause.

# 54. COMPLETION OF WORK:

(i) Time being deemed to be the essence of contract on the part of the contractor, the construction of the Sub-station & EHV lines shall be completed within the period specified i.e. 24 (Twenty four) months from the date of handing over of substation site of individual Project. The letter of handing over of the site for construction of Sub-station shall be issued by Engineer in-charge for civil works authorized by CSPTCL.

Please note that the work of Construction of 220/132/33 KV sub-station and EHV line in the Project shall commence as far as possible simultaneously and the work will go in tandem. The date of handing over of substation site shall be reckoned as commencement date of the Project. The completion period includes the period of rainy season and accordingly, no additional period due to rainy seasons will be allowed.

- (ii) Handing over of Sub-station site: The construction sites free from hindrance shall be separately handed over to the contractor. The date of letter conveying handing over of site issued by concerning civil division shall be the date of handing over of site. This letter shall be issued by OIC for civil works, after joint inspection by SE (EHT: C&M), SE (Civil-Trans), SE (T&C) in presence of contractor's representative.
- (iii) **Taking over of sub-station and EHV line**:- Upon receipt of intimation about completion of the substation & EHV line (if any) and after inspection, CSPTCL Engineer-in-charge of EHT works of that project shall issue a taking over certificate in which he shall certify the date on which the project has been so taken over.

It may be noted that particular project shall be taken over only after completion of all the works involved in it. In case the substation and line are completed on different dates, the date of taking over shall be the date of completion of substation or line whichever is later.

The necessary certificate of taken over of completed work shall be issued within 30 days of the notice/ intimation received from the contractor.

The issuance of taking over certificate shall in no way relieve the contractor of his responsibility for the satisfactory operation of the sub-station & line in terms of the specifications.

#### 55. MATERIAL TO BE SUPPLIED BY CONTRACTOR:

All the materials like G.I. Towers & its associated accessories; ACSR Conductor, Ground wire, stringing hard wares, Disc Insulators etc shall be supplied by the Contractor to site stores without any extra cost to the CSPTCL.

#### 56. TERMS OF PAYMENT:-

# After completion of the work, the contractor shall submit its bill within three months from its completion positively.

The payment on running bills will be allowed in the following manner to relieve the contractor from financial hardship if any so as to facilitate him for timely completion of the work :-

- a) **SUPPLY** :- The contractor shall present at the end of each calendar month a bill for the materials supplied duly certified by CSPTCL Engineer in charge, during the month at the charges/rates accepted. 90% value of the material supplied every month shall be paid within a period of one month from the date of receipt of bills in Dn. office. Balance 10% shall be retained by the CSPTCL and shall be released after six months on satisfactory completion and handing over of the completed Line by the contractor.
- b) **CONSTRUCTION:** 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 every month shall be paid within a period of one month from the date of receipt of bills in Dn. office. Balance 10% shall be retained by the CSPTCL and shall be released after six months on satisfactory completion and handing over of the completed Line in all respect by the contractor.
- **II. ADVANCE PAYMENT:** If requested by the contractor, CSPTCL may at its option grant an advance payment of maximum 10% of contract value after obtaining approval of competent authority. "The advance shall attract interest at the rate notified by PFC for capital projects of STU's in category under which CSPTCL falls plus a margin of 2%. The interest shall be charged monthly outstanding advance. Presently, CSPTCL is rated as 'A+' and rate notified by PFC for capital works of 'A+' category STU's is 11.25% p.a. which implies that applicable interest rate at

present would be 13.25% to be charged on monthly basis". Separate order shall be issued to this effect. The contractor will furnish an unconditional and irrevocable Bank Guarantee from a Nationalized/Scheduled Bank in favour of CSPTCL for an amount equal to the advance granted plus interest upto the completion period calculated on it. The bank guarantee shall be initially valid till six months (180 days) after expiry of completion period and shall be extended from time to time 180 days as required. This B.G. may be reduced on pro-rata on quarterly basis based on contractor's request. The advance, if granted, shall be recovered from the running bills along with accrued interest as per CSPTCL's terms and conditions which shall be brought in the order for advance payment. The Bank guarantee shall be released on recovery of entire amount of advance granted plus interest.

#### Procedure for reduction in the Advance Payment Security Guarantee :-

The BG furnished towards advance payment may be considered to be reduced in every three months in case the validity of bank guarantee is more than one year. It should be clearly under stood that reduction in value of advance Bank Guarantee shall not in any way dilute the contractor's responsibilities under the contract including in respect of the facilities for which reduction in the value of securities is allowed.

**III. DEDUCTION OF ADVANCE PAYMENT: -** The advance payment with interest accrued on the advance made to the contractor will be adjusted against their running bills. The adjustment of advance will be done from the running bills of the contract proportionately to the extent of 20% in supply of materials, 20% of civil works and 20% on ETC charges only till the total advance plus interest gets adjusted.

# 57. SOURCES OF MATERIALS / ASSOCIATION WITH OTHER FIRMS:

As the specification covers the arrangement of material for structures, fabrication, galvanising and delivery of tested towers including bolts and nuts, spring washers, danger board, number plate, phase plate, Galvanized Earthing rod with clamps and anti-climbing arrangement with barbed wire etc. and complete construction of the transmission line indicated in the relevant section of this specification including the supply of cement and reinforcement steel by the contractor, the source of procurement of various tower accessories, cement and reinforcement steel must be indicated by the bidder in the relevant schedule. In case if the CSPTCL wants any change in the source of supply of above material, then the contractor will change the source accordingly. Further if the contractor desires to change the source of procurement of any item, then he will have to take prior approval of the CSPTCL.

# 58. PROGRAMME CHART AND PROGRESS REPORT:

- (i) The time and date of completion of the work as stipulated in the relevant clause and accepted by the contractor shall be deemed to be essence of the contract. The contractor shall organise 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 detail order.
- (ii) The contractor shall submit a detailed Bar Chart calendar date and month-wise for completion of work consisting of adequate number of activities covering various key phases of the works such as procurement, manufacturing, transport and/or field erection activities like survey, soil investigation, excavation, stub setting, construction, stringing activities within 30 (thirty) days from the date of the order. This programme shall also indicate the programme of supply of towers by the contractor and anticipated inter-phase materials and facilities (to be provided by contractor). Contractor shall discuss the programme so submitted with the CSPTCL and the agreed programme which may be in the form as submitted or in revised form in line with outcome of discussion shall be deemed to be a part of the contract documents.
- (iii) The above programme shall be reviewed periodically and reports shall be submitted by the contractor as directed by the CSPTCL.

# **59. QUALITY ASSURANCE:**

Quality Assurance Programme: To ensure that the equipments and services under the scope of this contract whether manufactured or performed within the contractor's works or at his sub-contractor's works or at the CSPTCL's site or at any other place of work are in accordance with the specifications, the contractor shall adopt suitable Quality Assurance Programme (Q.A.P.) to control

such activities at all points, necessary. Such programme shall be outlined by the contractor and shall be finally accepted by the CSPTCL after discussions.

Immediately after the placement of order, the contractor shall submit to the CSPTCL the quality assurance plan covering the manufacture and erection activities of the transmission line. The quality assurance plan shall be approved by the CSPTCL.

The contractor shall follow the approved quality assurance plan in true spirit. If desired by the CSPTCL, he shall give access to all the documents and equipments to satisfy the CSPTCL that quality assurance plan (Q.A.P.) is being followed properly.

All materials including the complete structure shall be subjected to the tests before despatch, as specified in this tender specification.

#### 60. TEST AND TEST CERTIFICATES:

The tests to be conducted by the contractor on all supplied material as per relevant standard and technical specification free of cost, No payment shall be made in the account of testing. The test are divided in fallowing categories:-

a) **TYPE TEST:-** These tests should have been conducted on all supplied material as per relevant standard and technical specification as per tender. The reports of these tests shall be submitted by the contractor.

Type tests for the material supplied by the contractor shall not be required to be carried out if a valid test certificate is available for a similar design, i.e., tests conducted earlier should have been conducted in accredited laboratory (accredited based on ISO/IEC guide 25/17025 or EN 45001 by the National Accreditation body of the country where laboratory is located). The test reports submitted should be valid as per the validity period given in the clause 1.10 of vol-II of tender document.

In case the tests have been conducted earlier than the stipulated period or in the event of any discrepancy in the test report (i.e., any test report not applicable due to any design / manufacturing change including substitution of components or due to non compliance with the requirement stipulated in the Technical Specification) the tests shall be conducted by the Contractor at no extra cost to the CSPTCL.

- **b. ACCEPTANCE TESTS**:-These tests shall be conducted as per latest relevant standard. / Q.A.P. approved by the CSPTCL on each and every lot finished materials, which is ready for despatch. These tests shall be conducted in the presence of the CSPTCL's authorized representative. The tests shall be conducted by the Contractor at no extra cost to the CSPTCL.
- **c. ROUTINE TESTS:**-These tests shall be conducted on raw materials, in process material and finished material in accordance with approved Q.A.P. by the contractor himself. However, the details / documents relating to these tests shall be shown to the CSPTCL's representative during acceptance tests or as and when desired by the CSPTCL.
- **d.** Test During Manufacture shall mean those tests, which are to be carried out during the process of manufacture and end inspection by the Contractor to ensure the desired quality of the end product to be supplied by him.

# 61. COMMENCEMENT OF ACTIVITIES:-

Commencement of following activities is subject to prior and specific approval of the items mentioned against each:-

S.No.	Activity	Items for which prior approval is necessary from the CSPTCL.
1	Manufacturing of tower parts	Drawings of various towers and their accessories, bill of materials, quality assurance plan and permission to take up manufacturing of towers.
2	Dispatch of tower materials	Acceptance tests and issue of test certificate approval along with the dispatch instructions.
3	Foundation work	Stub setting template, classification of the foundation.

4	Erection of tower	Quality assurance plan for erection.
5	Stringing of wires	Location-wise Initial and final Stringing chart and stringing method as per relevant clause "Stringing of Conductor & Earthwire"

# 62. **PROJECT MONITORING:**

After the placement of order, the contractor in consultation with company (if necessary) shall prepare a detailed time schedule for each activity and relating various activities with each other in chronological sequence as detailed in tender.

Supply of tower material should be done in such a way that various activities including stringing of line are not delayed for want of tower material. Hence tower material should be fabricated and despatched in a sequential way, so that after some initial random lots, only those tower members are supplied, which are necessary to complete the requisite number of towers. It may also be noted that supply of towers should be restricted so as to commensurate with the tower erection work, in order to avoid storage of excess quantity of towers at contractor's site store. It may be noted that the CSPTCL reserves the right to stop payment, despatches or even inspection of balance tower materials, if it does not meet the above requirement.

The contractors are advised to supply all the materials in accordance with the chronological sequence of the work as per requirement in the field to avoid blocking of inventory.

During the currency of the contract, the contractor shall furnish the following reports to the Engineer:-

Fortnightly progress report (in prescribed formats for the duration from 1st to 15th and 16th to 30/31st i.e. last date of the month) of the various activities of erection of line as well as receipt of various materials at site, indicating scheduled and actual progress during the fortnight as well as cumulative. The progress of tower foundations should also indicate the respective tower footing resistances.

Monthly progress report in the prescribed formats for the supply of tower materials indicating quantity offered for inspection, quantity inspected, quantity cleared, quantity rejected and quantity despatched.

Any other progress report as desired by the CSPTCL.

The format of the above progress reports shall be intimated to the contractor after the placement of order.

Besides above, a periodical review meeting between contractor and CSPTCL shall be held quarterly to analyse 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.

# 63. SPECIAL WORKS:

The rates for special works not included in the schedules will be decided upon, when any such necessity arises during the execution of the work, by negotiations between the **CSPTCL** and the contractor. The contractor shall perform the work on the terms and conditions as mutually agreed upon.

#### 64. SCOPE (COMMERCIAL TERMS AND CONDITIONS):-

This section of the specification covers supply delivery ex-contractor's stores, unloading and stacking of all types of **220 KV tested towers**, extns., templates etc. The work shall be carried out as per the details laid down in the specification. The price for works and material covered under scope of this specification shall be furnished by the bidders in prescribed price schedule appended with this specification. The bidder shall quote for complete work of fabrication and galvanising, delivery etc. for 220 KV transmission line on turn key basis.

# 65. SUPPLY OF MATERIALS

The supply of fabrication towers to be made by the contractor, shall include structural members like angle sections, gusset plate, pack washers, taper washers, ladder, platform bolts and nuts, spring washers, Galvanised Earthing rod with clamps, danger board, number plates, phase plates, step bolts and anti climbing device including barbed wire and such other items which worked be required for

completing the towers in all respect. For manufacturing of these items steel and Zinc will be procured by the contractor.

The supply of hangers/ D shackles for attaching suspension strings and "U" bolts for attaching ground wore suspension assemblies are also included in the scope of supply of tower.

#### 66. PROCUREMENT OF STEEL BY THE CONTRACTOR.

The following provisions shall apply in connection with the procurement of steel by the contractor.

- a. The steel used for the fabrication of tower parts, extension templates etc. shall be mild/HT steel of tested quality as per IS : 2062- 2006 or latest revision thereof.
- b. The bidders should take into account the fabrication wastage while quoting the rates. The CSPTCL shall not accept any liability in connection with the actual wastage of steel during fabrication or otherwise.
- c. Substitutions, if any, of steel sections of the tower parts by higher size, due to their non-availability or otherwise shall be to the contractor's account. The CSPTCL shall not accept any liability on this account.
- d. The steel shall generally be procured from the Main Steel Producers. However, section not rolled / available from the main producers, the same could be procured form re-rollers as per quality indicated in (a) above, provided:
  - i. Re-rolling or structural steel sections are done from billets / ingots of tested quality.
  - ii. Re-rolled sections are duly tested as per relevant I.S. It may however be noted that no additional cost shall be payable towards procurement of steel section from re-rollers.
- e. Zinc used for galvanising of the fabricated material shall be electrolytic high grade zinc.
- f. Only tested steel section Grade E-250 and E-350 as per IS-2062 :2006 shall be used.

#### 67. RESPONSIBILITY FOR PROCUREMENT OF STEEL AND ZINC:

Procurement of steel required for fabrication of towers such as angles, plates, rods etc. and procurement of zinc for galvanising shall be done by the contractor. Necessary authorization or help from purchaser to obtain allocation of steel from the main producers will be given on receipt of written request from the contractor in this regard. Similarly for procurement of zinc from HZL if any authorisation is needed the same shall be given by the purchaser. However, responsibility for timely procurement of steel/zinc for supply of towers will be that of the contractor and no excuse in delivery will be accepted for delay in receipt of these items in spite of our authorization. The contractor will inform the CSPTCL the source of procurement of steel and zinc and their technical particulars before starting of fabrication.

#### 68. RATES:

The prices shall be quoted for supply of various towers, extensions and tower accessories etc. on MT basis.

F.O.R. Destination rates must be quoted as under clearly giving break-up of prices in following three elements, otherwise the offers may run the risk of rejection:

i) Ex-factory / Ex-go down prices inclusive of packing and forwarding.

#### ii) All the taxes shall be applicable as per provision of GST Act 2017 relevant for CSPTCL.

iii) Freight charges for any destination in Chhattishgarh State. The offered freight charges should be on "<u>FIRM</u>" basis only, and should be valid for either road transport or rail transport.

The supply of towers shall include supply of drawings, fabrication and delivery and the rates quoted for supply of towers shall include all charges including cost of steel, fabrication and galvanising etc.

The prices for fabricated material shall include all works relating to fabrication and delivery excontractors stores, unloading and staking member-wise in specified area. The quoted prices shall also include the cost of necessary quantity of steel and galvanising, transit, insurance, freight up to site stores and other indirect charges incurred in connection with supply of finished material. The bidders shall quote ex-works prices and freight including unloading and stacking at stores separately in the relevant schedule. Price shall be quoted on per MT basis in relevant schedule. Price shall be quoted on per MT which will form the basis of contract.

#### 69. PRICES / PRICE VARIATION:

The price quoted for all the materials of the associated line accessories, civil works and other works for turnkey completion of line should be <u>FIRM</u> except for tower parts (on account of variation in cost of steel, zinc & labour elements) and ACSR Conductor, till line work is completed and handed over to CSPTCL. The prices quoted in the Price Bid are to be unconditional which is to be noted carefully by the bidder. The conditional price bids shall not be evaluated by CSPTCL in any case. Bidders are requested to quote their prices in prescribed formats and excel sheets only. The prices for the fabricated tower parts & ACSR conductor shall be variable as per price variation formulae of IEEMA given in **Annexure-PV-8 & PV-9**.

For all other materials prices should be offered on **FIRM** basis. The payment shall initially be done on the basis of base rate offered by bidder subject to price adjustment to reflect changes in the cost. Price variation shall be applicable for ex-works component.

The price adjustment shall be invoked by either party subject to the following further conditions:-

- (a) For calculation of Price adjustment, date on which materials are notified as being ready for inspection at the works of the manufacturer shall be taken as the date of delivery subject to condition that material should be delivered to site store within 21 days from the date of issue of dispatch instruction. But, in case contractor fails to deliver the material within 21 days from the date of issue of dispatch instructions to the Site Stores, the price variation shall be applicable as on date on which materials are notified as being ready for inspection or actual date of receipt of material at site, whichever is advantageous to CSPTCL. However in case of delay of project beyond the scheduled date of completion of project, no price increase shall be allowed beyond scheduled date of completion. CSPTCL shall however be entitled to any decrease in the price which may be caused due to lower price adjustment amount in case of delivery beyond scheduled completion period, therefore, in case of delivery of equipments / materials beyond the scheduled completion period the liability of CSPTCL shall be limited to the lower of the price adjustment amount which may work out either on scheduled completion date or actual date of delivery.
- (b) If price adjustment works out to be positive the same is payable to the contractor by CSPTCL and if it works out to be negative, the same is to be recovered by CSPTCL from the contractor.

(c) The contractor shall submit price adjustment invoices for supplies positively within 6 (six) months from date of supply of equipment / materials whether positive or negative. Price adjustment bills for supply of equipment / materials submitted after 6 (six) month (from date of supply) shall not be entertained. However negative variation shall be recovered.

The invoices should be supported with calculation of price variation alongwith documentary evidence of different indices applicable for price adjustment. Payment of price adjustment invoices shall be made after due verification as follows :-

- 90% of the price adjustment for respective materials shall be paid after verification of invoices & receipt of material.
- (ii) Balance 10% amount shall be paid after successful commissioning and handing over of line.
- (d) The quoted prices should be clearly mentioning Ex-Works Price and GST making total unit price chargeable for the items quoted. Packing, forwarding & Freight charges (inclusive of insurance) should be quoted separately in the relevant columns. The freight shall be on FIRM basis irrespective of whether the ex-works prices are firm or variable. The total F.O.R. destination price should also be quoted in relevant column.

It may please be noted that statutory variations due to Govt. Regulation in the rate of GST shall be permitted by CSPTCL only within contractual completion period. In case supplies against the contract are affected late i.e. beyond contractual completion period and rate of GST undergoes upward revision, the payment will continue to be made only on the basis of rates prevailing during the contractual completion period. However, in case the rate of statutory levies undergoes downwards revision than the delayed supplies beyond contractual completion period will attract reduced rate of levies/GST.

(e) The prices of standard and reputed manufacturer items in accordance with vendor list shall be quoted so that quality assurance and performance of equipments are guaranteed in future.

# 70. EXTENSION OF TIME:

If the completion of line is delayed due to reason beyond the control of the contractor, he shall without delay give notice to the CSPTCL in writing of his claim for an extension of time. The CSPTCL on receipt of such notice may agree to extend the contract date of the Line as may be reasonable but without prejudice to other terms and conditions of the contract.

# 71. AGREEMENT:

The successful bidder shall have to enter into an agreement with the ED/C.E. (Planning & Project) in the approved contract agreement form latest within 15 days of the receipt of the work order for contruction of 220 KV S/s and Transmission line (hereby reffered as project).

#### 72. NATURE OF CONTRACT:-

Notwithstanding anything stated elsewhere in the bid document, the contract to be entered will be treated as divisible in Supply, Civil works and Erection, Testing & Commissioning for construction of EHV sub-station and supply of material & construction charges for EHV line. The contract award shall be placed on successful bidder as follows:-

- 1. Supply of Transformers, 220 KV, 132 KV & 33 KV substation equipments, C&R Panels, conductors, hardware etc., Supply of GI steel structures, Supply of T&P, test equipments and furniture, substation automation system & other accessories.
- 2. Civil Works.
- 3. Erection of equipments & structure, Testing & commissioning charges.
- 4. Supply of EHV line material i.e. GI tower, ACSR conductor, Earth wire, Disc Insulator, Hardware etc.
- 5. Construction of EHV line i.e. checks survey, stub setting, tower erection, stringing etc

All the 5 contracts will contain interlinking cross fall breach clause specifying that breach of one contract will constitute breach of other contracts also.

# 73. SECURITY DEPOSIT:-

- (a) The contractor shall furnish a bank guarantee from a nationalized/scheduled bank for an amount of 10% (ten percent) of the cost of the contract as a contract security. This bank guarantee shall be submitted within 30 days of receipt of individual Orders and shall be kept valid for a period exceeding the scheduled completion date by two months with claim period of six months.
- (b) In case of project is delayed (running beyond schedule) on any account the contractor will be required to extend the validity of BG well in advance at least for six months or period of expected delay plus six months claim period, whichever is more. This extension in validity will be on contractor's cost only. The validity of the bank guarantee shall be 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 and shall be from a Nationalized / Scheduled Bank in the prescribed form of CSPTCL. No interest shall be paid by CSPTCL on the security deposit. In case of non-fulfillment of contractual obligations by the contractor, the security deposit shall be forfeited.
- (c) The security deposit will be released only after completion of entire works, issue of No dues/liability certificate from the Executive Engineer in charge of work and after submission of performance B.G.

# 74. GUARANTEE PERIOD:

The work done and material supplied by the contractor as per the contract specification should be guaranteed for satisfactory operation and against any defect in material and workmanship for a period of **24** (twenty four) 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 supplier free of cost to CSPTCL upon written notice provided such defects are due to bad workmanship or bad materials used. 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 **220 KV** supply to Line within one month from the date of completion of package construction of lines. If Line is taken over un-energized condition due to non completion of

feeding source then guarantee will be for **30** (**Thirty**) months from the date of taking over or 24 (Twenty four) months from the date of energization of Line whichever is earlier.

# 75. PERFORMANCE GUARANTEE :-

- a) After completion of work in all respect (tree cutting, final commissioning etc.) and before issue of final taking over certificate by CSPTCL, the contractor shall provide CSPTCL a Performance Bank Guarantee from a Nationalized/Scheduled Bank for an amount of 5% (FIVE PERCENT) of the contract price in the approved BG Proforma of CSPTCL. This Bank guarantee shall be executed on stamp paper worth Rs.250/- or any other amount as per the 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.
- 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.

# 76. PAYMENT DUE FROM THE CONTRACTOR:

All costs of damages for which the contractor is liable to the CSPTCL will be deducted by the CSPTCL from any money due to the contractor under the contract.

#### 77. 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.

#### 78. CONTRACT AGREEMENT SECURITY DEPOSIT AND INDEMNITY BOND:-

A formal agreement, shall be entered into between the contractor and the purchaser for the due performance and observance of the terms and conditions of the contract.

On acceptance of offer the successful Bidder will have to deposit as security an amount of 10% of the total value of order in the form of cash/DD or Bank Guarantee.

The successful Bidder will also submit the Indemnity bond towards the safe custody of various line materials like conductors, ground-wires, hard-wares and accessories etc. equivalent to the cost of materials which will be supplied by the contractor for erection of the line. The cost of materials shall include the cost of the towers and accessories to be supplied by the contractor.

The proforma for Bank Guarantee for performance against any defect in material and workmanship is enclosed as Annexure A-19 and proforma for Guarantee for loss/damage to CSPTCL is enclosed in Annexure-A-20.

For the equipment/material to be provided by the Contractor, it will be the responsibility of the Contractor to take delivery, unload and store the materials at Site and execute an Indemnity Bond and obtain authorisation letter from Employer as per proforma enclosed (Sample Forms & Procedures), in favour of the Employer against loss, damage and any risks involved for the full value of the materials. This Indemnity Bond shall be furnished by the Contractor before commencement of the supplies and shall be valid till the scheduled date of Taking Over of the equipment by the Employer

The proforma for contract agreement, Bank Guarantee for security deposit & Bank Guarantee towards performance are enclosed as Annexure A-17, A-18 & A-19 and proforma for Indemnity Bond is enclosed in annexure A-21.

# 79. PROCEDURE OF SUPPLY OF TOWERS MATERIALS:

i. The payment will be made on certification by the Engineer that the respective consignment of tower parts has been duly received in the contractor stores and properly stacked. For this purpose the contractor shall provide office accommodation to our site staff In-charge of store accounting that will be available for verifying and certifying receipt of materials in the contractor's stores as and when the consignment is received.

- ii. The payment will be made only against supply of complete structure of various types of towers/extensions covered in this Specification.
- iii. After 20% (Twenty Percent) of the tower material is supplied by the contractor after due inspection, the contractor will furnish a detailed list of various structures which he wants to complete in lots so as to complete certain numbers of towers taking into consideration the material already despatched plus proposed to be despatched. The programme of delivery of completed towers in lots (i.e. batches) shall match with erection programme. The contractor shall fully establish to the satisfaction of the CSPTCL that the tonnage proposed to be supplied would result in completed towers on taking into consideration the supplies made earlier. The CSPTCL will verify same and permit the contractor for taking up additional supplies.
- iv. The delivery of tower accessories should be made in such a way that the erection work of towers is not held up for want of these items. It will be the contractor responsibility to supply these items in line with the completion schedule of the transmission line.
- v. The weight of tower shall mean the weight of tower calculated by using black sectional (i.e. ungalvanised) weight of steel members of the size indicated in approved fabrication drawings.

#### 80. INSPECTION:

#### (A) INSPECTION OF PROTO TYPES:-

- (i) Proto type of each type of structure/extns. shall be offered by the successful bidder for inspection within 2/3 months from the date of award of contract so that the tower parts are delivered timely and construction activities are not delayed for want of tower material. Proto assembly of River crossing tower or Gantry Structure shall be offered for inspection if necessity arises due to site conditions to use these structures.
- (ii) Notwithstanding any thing covered in the drawings and other details furnished by the purchaser, the Contractor shall make minor modifications, if any, in length, size, notching etc. according to the proto assembly, which are necessary for easy assembly of the structure. In any case the cost shall be payable on the basis of weight of structures as per approved Bill of materials of towers/extns.
- (iii) The contractor have to supply 2 sets of workshop drawings along with 10 sets of structural drawings and Bill of materials modified according to proto corrections of each type of tower/extns. to the Purchaser.

# (B) INSPECTION OF MATERIALS:-

- (i) Each consignment ready shall be offered to the purchaser for inspection before despatch giving a minimum time of not less than fifteen days. Only complete sets of towers/extns. shall be offered for inspection. Samples of fabricated tower materials and accessories shall be subjected to tests as per relevant Indian Standard. The purchaser shall be kept informed about the source of procurement of raw-steel, particularly through re-rollers. The purchaser reserves right to inspect and get the samples of raw-steel tested as per Indian Standard-2062 and relevant standards. The cost of testing shall be borne by the bidder.
- (ii) The bidder shall abide by all the statutory provisions, acts such as the Indian Electricity Act, Indian Factory Act, Indian Boiler Act etc., and corresponding rules and regulations as may be applicable and as amended from time to time.
- (iii) The purchaser's representative shall be entitled at all reasonable time during manufacture to inspect, examine and test at the bidder's premises the materials and workmanship of the material to be supplied.
- (iv) The material shall not be despatched unless waiver of inspection is obtained or inspected by the purchaser's authorized representative. When the material has passed the specified tests, the purchaser's representative shall furnish a certificate to this effect in writing to the bidder. In any case, while notifying the readiness of the material, the test certificate shall invariably be sent. The material shall not be despatched unless the test certificates are approved.
- (v) Test certificates shall be in accordance with latest version of the relevant Indian Standards.
- (vi) The supplier shall keep the purchaser informed in advance of the time of starting and of the progress of manufacture and fabrication of structures at various stages.

- (vii) In case, any member of the structure is not found to comply with the relevant drawing, it shall be liable for rejection even after receipt.
- (viii) Defects, which may appear during fabrication, shall be made good. Any member once rejected shall be cut into pieces in front of the Purchaser's representative so that it is not offered again by mistake.
- (ix) The turnkey contractor shall ensure that pre-dispatch inspection for materials are intimated only when the material is completely ready for inspection. On due date of inspection, if it is found that materials are not ready in required quantities or the inspection could not be carried out due to non-availability of requisite calibrated certificate of instrument with the manufacturer, closing of works on scheduled date of inspection, non-availability of sufficient testing material/ handling staff at manufacturer works, etc., all expenditures incurred on deployment of various inspecting official along with a fine of Rs. 50,000/- (Fifty thousand) shall be recovered from the bills of the contractor.

#### 81. GENERAL GUIDELINES FOR INSPECTION :-

#### (A) Fabricated Structure Members:

- (i) Visual examination and quantity verification of offered lot.
- (ii) Sample selection from the offered lot at a ratio of 40 MT (or part thereof) 1 no. each for all tests.
- (iii) Dimension, fabrication and trueness verification of structure member from fabrication sketch.
- (iv) Galvanizing test of each sample i.e. dip test, hammer test and mass of zinc test.
- (v) Random verification of Zinc coating of galvanized surface by Alko-meter.
- (vi) Tensile test and bend test of each sample.
- (vii) Chemical composition test of at least two samples per offered lot of 50 MT for inspection.
- (viii) Verification of manufacturer's test certificate for mild steel used in structure members.
- (B) Bolts-Nuts, Washer, Accessories, and Attachments etc.: (To be carried out at manufacturers works of these items)
- (i) Visual examination and quantity verification of offered lot.
- (ii) Sample selection from the offered lot as per relevant Indian Standard for each item.
- (iii) Dimension, fabrication and trueness verification from fabrication sketch.
- (iv) Galvanizing test of each sample.
- (v) Other acceptance tests for respective items as per relevant Indian standard.

Since at the time of inspection only fabricated tower members and accessories will be verified, acceptance of any lot shall in no way relieve the bidder of his responsibility to meet all technical requirements of this specification for fabricated towers. In case any shortcoming is noticed at the time of actual assembly and erection, the purchaser may reject any part or item or accessory and the contractor will have to assume the responsibility for free replacement/ rectification of such defects.

#### (C) PACKING AND MARKING ON PACKING:

The material shall be boxed or bundled for transport in the following manner:

- (i) Angle shall be packed in bundles securely wrapped four times around at each end and over 900 mm with No.9 SWG steel wire with ends twisted tightly. Gross weight of any bundle shall not be less than 450 Kg and more than 2000 Kg. The bundle shall be in complete Tower form only.
- (ii) Cleat angles, brackets, filler plates and similar small loose pieces shall be nested and bolted together through holes and wrapped around at least four times with No.9 SWG wire with ends twisted tightly or packed in wooden crates. Gross weight of each bundle shall not exceed 200 Kg.
- (iii) Correct number of bolts, nuts and washers required for structures shall be packed in heavy gunny bags accurately tagged in accordance with the contents and a number of bags packed in a solid box of 22 mm thick lumber with paneled ends to be accurately nailed and further reinforced with 22 mm x 75 mm Batons round the sides and at the ends with 25 mm x No.18 SWG iron band stretched

entirely around the batons with ends overlapping at least 150 mm. Gross weight of each box shall not exceed 200 Kg.

- (iv) Packing list incorporating all relevant details e.g. quantity of structures (complete sets), number and size of steel sections, quantity of nuts, bolts, washers etc shall be forwarded along with each consignment.
- (v) In the nutshell the packing arrangement should be such that all packages of one particular type of structure are identifiable at site for the purpose of allocation for a particular work. In case more than one structure of a particular type is delivered in area store/work site, combined packing arrangement by way of clubbing members of similar type (for more than one structure) in a combined package should not be done. Uniform packing procedure for each structure should be adopted.
- (vi) All above packing are subject to the approval of the Purchaser or his appointed representatives.
- (vii) Each bundle or packing shall have the following marks:
- (viii) The name of the consignee (as per dispatch instructions given by the Purchaser).
- (ix) Ultimate destination as required by the Purchaser.
- (x) The relevant marks and number of structure members or reference or bolts, nuts and small components like gusset plats, various attachment, etc. for easy identification.
- (xi) The marking shall be stenciled and indelibly inked on the top members in the bundles, on wooden boxes and also on gunny bags containing smaller components.

#### 82. INSURANCE:

- (A) i. The contractor will supply the tower to purchaser's / their site stores and therefore he will be responsible for the transit risks. It shall be contractor's responsibility to ensure proper packing and safe delivery of the material at the site stores. Any loss or damage caused to the materials during transit due to negligence on contractor's part shall be made good by the contractor free of all charges within one month from the date of consignee's notification, which will be issued within 30 (Thirty) days of receipt of materials at site. Transit insurance is not covered under the scope of this contract.
  - ii. The Contractor shall arrange, secure and maintain insurance as may be necessary for all such amounts to protect his interests and the interests of the Purchaser, against all risks as detailed herein. The Contractor's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations.
  - iii) Any loss or damage to the materials during handling, transporting, storage and erection, till such time the material/line is taken over by the Purchaser shall be to the account of the Contractor. The Contractor shall be responsible for preferring of all claims and make good 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 of the above responsibilities during the period of the contract. The Contractor shall provide the Purchaser 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 Purchaser immediately after such insurance coverage is obtained. The Contractor shall also inform the purchaser in writing at least sixty (60) days in advance, regarding the expiry, cancellation and/or change in any of such Specifications and ensure revalidation/renewal etc. as may be necessary, well in time.
  - iv. 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.
  - v. The contractor will indicate in questionnaire the cost element of such insurance cover, which he has assumed while quoting the rates. The estimated cost of line materials to be supplied by the contractor i.e. conductor, ground wire, insulators, hardware etc. are to be indicated. The above cost of material is exclusive of cost of stubs, tower extensions and tower accessories to be supplied by the contractor. The contractor shall take up proper insurance to cover all the materials including towers against storage, handling, transportation and erection risks.
  - vi. 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 due to any reason whatsoever, the contractor shall bear the charges of extension of insurance policy.

- vii. 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.
- (B)a) The contractor shall insure the line and shall keep it insured against loss by theft, destruction or damage by fire, flood, un due exposure to the weather or through riot, civil commotion, war or rebellion, for the full value of the line from 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 on site.
  - b) 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.
- c) 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.

#### 83. SCOPE: COMMERCIAL TERMS AND CONDITIONS OF LINE ERECTION

This specification provides for supply of towers and complete erection of the transmission. The work includes of all line materials to be supplied by bidder such as conductors, ground wire, insulators, accessories etc., their complete erection, setting to work, testing and commissioning of the transmission line on turnkey basis.

#### 84. 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 quantities of line length, towers and extension indicated in the price schedule are only provisional and are for comparison purpose. The final quantities will be known after completion of survey and tower spotting. Thus these are only provisional quantities and will vary during actual execution of work. It may be noted that if during the execution of works, at any point of time, it is noticed that there is wide variation in quantity of material / quantum of work viz a viz provision in the contract, the contractor shall intimate the same to the OIC of the work. The OIC of the work in turn shall submit the proposal to the order placing authority for obtaining competent approval. The supply of material/execution of works (in excess of provision in the contract) shall only be carried out after the approval by the order placing authority. The contractor must execute the work based on actual soil conditions encountered and as per final quantities of towers indicated to him by the Engineer, at the same rates and terms and conditions accepted by the CSPTCL.

In the event of revision of quantity on completion of project, total ordered value of supply of materials, civil works and erection charges of substation and associated line in the tender shall be worked out with the unit rates of L-2 bidders. In case the total value when calculated with unit rate of L-2 bidder 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.

# 85. COMPLIANCE WITH REGULATIONS

Unless otherwise specified, all works shall be carried out in accordance with the Indian Electricity Act, 1910; 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.

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 lay 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.

The contractor shall comply with all the rules and regulations of local authorities during the performance of his field activities. He shall also comply with the Minimum Wages Act, 1948 and the payment of Wages Act (both of the Government of India) and the rules made hereunder in respect of any employee or workman employed or engaged by him or his Sub-Contractor.

All registration and statutory inspection fees, if any, in respect of his work pursuant to this contract shall be to the account of the contractor.

#### 86. "A" CLASS ELECTRICAL CONTRACTOR LICENSE:-

The contractor will have to submit a certified copy of A" class electrical contractor's licence issued by C.G. Anugyapan Mandal/State Level Licensing CSPTCL, alongwith his offer and the licence should be valid as on the date of opening of tender or bidder shall submit an undertaking to deposit "A" Class Electrical Contractor's License within 30 days after issue of LOI.

# 87. **RESPONSIBILITY FOR OBTAINING INFORMATION AND TAKING ACTION IN TIME.** Whenever any information or clarification in respect of construction of line have 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.

#### 88. 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 / permission 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.

#### 89. WAY LEAVE:

The necessary way leave clearance shall be arranged by the contractor and also Compensation payment in respect of crop will be made by the Contractor. The accepted rates shall be deemed to include all such expenses and no extra payment on this account shall be made except described hereunder:

The bidders is requested to go through the following provisions of payment of way leave and the accepted prices quoted by them shall be deemed to include following expenses and no extra payment on this account shall be made by CSPTCL.

#### (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 and dtd. 07.05.2015 & No.F 7-7/Seven-1/2014 dtd. 01.06.2016 regarding payment of compensation towards utilization of the private land for erection of tower and laying of transmission line, the preparation of cases for payment of land compensation to the owner of land shall be prepared by the Contractor and the approval of the same shall be arranged by CSPTCL. The payment for above compensation shall also be borne & 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 during execution of work, shall be prepared by the contractor. The payment of above compensation shall be borne & made by contractor.

#### (c) Forest proposal:-

In case, the line is passing through the forest, the forest proposal, shall be prepared by the contractor in all respect and its approval shall be arranged by CSPTCL. All statutory charges for obtaining forest approval like registration fee, tree cutting charges, afore station charges etc. shall be borne by CSPTCL.

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

The preparation of proposal for tree cutting and approval thereof in Revenue/ Govt./Private land shall be arranged by the contractor. All Statutory charges & compensation for tree cutting on revenue / govt./ private land will be made by CSPTCL.

However, the tree cutting including related works in Revenue/Govt./ Private land shall be arranged by the Contractor at his own cost.

#### (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 paid by the CSPTCL directly to the Railway Department. The Railway Block charges if any will be paid 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 paid 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. land compensation, 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 these way leaves.

- (i) It is contractor's responsibility to take appropriate action well in advance for submission of revenue trees, Railway crossing, forest proposal and other miscellaneous ROW problems and no extension in completion period will be granted against delay on account for right of way leave problem.
- (j) Any delay on account of preparation of forest proposal and tree cutting proposal for Revenue/Govt/Private land shall not relieve the contractor from obligations to complete the works on time or from any of other obligations and liability under the contract.

#### 90. 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.

#### 91. MATERIALS TO BE ARRANGE BY THE CONTRACTOR:

Contractor shall arrange all the line materials for construction of the line on turnkey basis and as per latest relevant standard/tender specification as per actual.

#### 91.1 PERMITTED EXTRA CONSUMPTION:

(a) The quantity of conductor and earthwire to be incorporated in the line shall be worked as per the following norms:

Quantity of Conductor:

: Line length as per detailed survey x 3 phases x 1 No. of conductor (For Single Circuits line)

: Line length as per detailed survey x 3 phases x 1 No. of Conductor x 2 (For Double Circuit Line) Quantity of Earthwire : Line length as per detailed survey x 1

(b) The contractor shall make every effort to minimize breakage, losses and wastage of the line materials during erection. However, the Contractor shall be permitted extra consumption of following line materials up to the limits specified here in:-

S.No	Item		% of permitted
		220 KV	extra consumption
		Line	for jumpering and sag
1	Conductor	Yes	1

2	Earthwire	Yes	1
3	OPGW	N/A	1

All other materials required for completion of line shall be arranged by the contractor as per actual basis and no extra consumption shall be permitted.

- a) In case of conductor and earthwire, the permitted extra consumption limit of one percent is inclusive of sag, jumphering, damage, loss and wastage etc.
- b) However, for hilly terrain, where there is level difference between two locations, consumption shall be allowed equal to the increase in conductor length due to slope effect. Contractor shall prepared detailed consumption statement for such locations for the approval of Engineer-in-charge.
- c) The quantities of line materials to be supplied by the Contractor (i.e. towers and accessories, conductor, earthwire, insulator, hardware fittings & accessories) as indicated in the bill of quantities are tentative and the actual quantity shall depend upon detailed survey. Contractor shall be responsible for regulating the supplies of required line materials on the basis of actual requirements. The Owner shall have right not to take any surplus Contractor supplied line materials.

#### 91.2 EMPTY CONDUCTOR/EARTHWIRE WOODEN DRUM ETC:

Empty conductor/earthwire, wooden drums and empty wooden crates/cases and bags of insulator hardware / accessories are non-returnable. However steel drum of conductor / Earthwire / OPGW may be returnable and the cost of Drum should not be included in cost of conductor.

### 92. MATERIALS TO BE ARRANGE BY THE CONTRACTOR FOR CONSTRUCTION WORK:

The supply of cement for foundation work would be made by the contractor of quality as per I.S. 269 (latest revision). The cost of cement, metal & sand shall be deemed to be included in the quoted unit rates of 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 be arranged by the contractor. The transport, octroi, levy or duty on these materials shall be borne by the contractor himself and the CSPTCL will not accept any liability on this account.

The contractor will also arrange steel rods and binding wires for foundation reinforcement. The cost incurred will be borne by him. Materials for grounding of towers i.e. galvanized earthing pipe, connecting clamps and connecting GI flat/wires etc. would also be arranged by the contractor as already specified.

#### 93. TOOLS AND PLANTS TO BE ARRANGED BY THE CONTRACTOR:

The contractor shall be required to provide at his own expenses all necessary construction tools and plants for carrying out complete construction of the line i.e. survey, soil investigation, excavation, measurement of earth resistance, stub setting, erection of towers/structures, stringing of conductor & earthwire, fixing of tower accessories, welding of nuts etc. and testing & commissioning of the line. 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 boxed for stub setting, winches, ropes, tension stringing equipment and all others tools for stringing of conductor & earthwire 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.

#### 94. STUB SETTING TEMPLATES:

- a) Stub setting templates (ungalvanized) shall be arranged by the Contractor at his own cost for all heights of towers. Stub templates shall be of adjustable type and painted.
- b) The Contractor shall deploy sufficient number of templates for timely completion of the line without any extra cost to Owner.
- c) One set of each type of stub setting template shall be supplied to the Owner, on completion of the project at no extra cost to Owner.
- d) The following number of stub setting template shall be deployed by the contractor:-
  - (i) A-2 type tower with extension : 03 Nos.

(ii) A-30 type tower with extension	:	02 Nos.
(iii) A-60 type tower with extension	:	02 Nos.
(iv) +18M Extension for A-60 type tower	:	01 No.
(iv) For any special tower	:	01 No.

If the CSPTCL feels that more templates are required for timely completion of the line, the contactor shall have to deploy the same without any extra cost to the CSPTCL.

#### 95. SPECIAL CROSSING STRUCTURES (TOWERS/ GANTRIES):

In case if in the route of transmission lines special towers/Single circuit DELTA tower/Truncated tower / gantries may be required for crossing of E.H.T. lines/ river / railway, the same will be provided by the contractor. The design of special towers/Single circuit tower/Truncated tower / gantries structure and its foundation shall be provided by contractor free of cost and the design shall be confirming in accordance with IS:802 1995 and CBIP Manual publication No.290 and technical specification.

#### 96. FORTNIGHTLY PROGRESS :-

The contractor will also have to submit a copy of the fortnightly progress reports along with each erection bill in support of the work done. Thus the progress reports will be prepared by the contractor strictly for the duration from  $1^{st}$  to  $15^{th}$  of the month and  $16^{th}$  to  $30^{th}/31^{st}$  (last date) of the month throughout the construction period so that the quantum of work claimed in the bills matches with the completed activity of the works indicated in the progress report.

#### 97. STORES FOR SUPPLY OF TOWERS & LINE MATERIALS:-

- a. The Contractor shall be required to set up Store along the route of the transmission line.
- b. The contractor shall supply the tower parts and tower accessories at selected destinations, set up by him along the route of the transmission line, which shall not be more than two.
- c. The cement, reinforcement steel and other line materials (to be supplied by the contractor) shall also be arranged in above stores. The contractor will have to supply all the materials as per the sequence of work and receive them at these places only.
- d. The Contractor shall make arrangements to take delivery of all the materials and stock them properly.
- e. Yards and stores for stocking provided by the Contractor shall be opened for inspection by the Purchaser's representative as and when desired.
- f. The cost of handling and storage shall be deemed to be included in the quoted erection prices and no extra charges towards, loading, transportation, unloading, stacking and storage etc. shall be payable.
- g. In case of materials to be supplied by the Contractor shortage and/or damage the materials shall be made good within a reasonable time and without any extra charge to the Purchaser and without delaying the construction of transmission line.
- h. **CONSTRUCTION POWER AND WATER:-**Water supply and Electricity for construction work is to be arranged by the contractor at his own cost. Also, storage space for equipments and contractor's site office will be arranged by contractor.

#### 98. PAYMENT PROCEDURE FOR CONSTRUCTION WORK:

Payment will be made against monthly erection bills for works completed during the month as certified by Engineer. Each category of the work shall be completed for purpose of payment. Part payment will not be made even if breakup rates are available for particular category of work. Hence bill shall be preferred for completed portion of works as under: -

- (i) Survey (kilometre wise).
- (ii) The bill for foundation of tower shall be admitted only after completion of all activities related with foundation work i.e. excavation, stub setting, earthing, reinforcement, concreting and backfilling with excavated/borrowed earth and consolidation of earth, carriage of surplus earth to the suitable point of disposal as required by the Purchaser or any other activity/related to completion of foundation work (location wise).
- (iii) Tower erection complete with tightening & punching of bolts including tack welding of bolts & nuts. (location wise).
- (iv) Fixing of tower accessories i.e. providing danger, number, phase plates & anti-climbing device. (location wise).

- (v) Complete stringing (during the month) of conductors including providing of Accessories, jumpering etc. and Complete stringing of Ground-wire including providing of Accessories (including fixing of copper earth bond) (kilometer wise).
- (vi) Miscellaneous works as and when completed during the month such as:
  - a) Building of stone revetment with backfilling.
  - a) Counterpoise earthing etc.(location wise).

#### 99. 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. This may please be noted.

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# <u>SECTION – III</u>

# PRICE BID ANNEXURES

# FOR SUB-STATION & EHV

## <u>LINE</u>

#### **ANNEXURE - B**

#### **ABSTRACT OF PRICE BID ANNEXURES**

#### PACKAGE FOR CONSTRUCTION OF 220/132/33 KV SUB-STATIONS AT DALDALSEONI (RAIPUR) AND ASSOCIATED 220 KV DCDS RAITA-DALDALSEONI LINE ON TURNKEY BASIS

TR-20/05

	PARTICULARS	DETAILS	Annexure	Amount (Rs.)	Discount (%)	Amount after discount (Rs.)
	Cost of supply of Sub Station	A. 220 KV Side S/Yard & Control Room Equipments	B - 1			
	equipments & material.	B. 132 KV Side S/Yard & Control Room Equipments	B – 2			
		C. 33 KV Side S/Yard & Control Room Equipments	B – 3			
		D. Conductor, Disc insulators, Clamps, Connectors, Hardwares Earthing Material etc	B – 4			
For 220/132/		E. Cables & Battery & Battery Charger.	B – 5			
33 KV Sub-		F. Luminaire & Misc. Equipments	B – 6			
station	Cost of supply of G. I. Steel	Supply of G. I. Steel Structure	B - 7			
-	Cost of T&P etc	Fire fighting equipments, T & P, Instruments	B – 8			
	Cost of Furniture	Furniture	B – 9			
	Cost of Automatic data Logging System	Sub-station Automation System etc	B - 10			
	Cost of Civil Works	Civil Works	C - 1			
	Cost of Erection of equipments & Structures	Erection Charges	D - 1			
	Charges for Testing & Commissioning	Testing & Commissioning Charges	D - 2			
For 220 KV EHV	Cost of supply of materials	Supply of materials	AL - 1			
line	Cost of Construction charges	Construction charges	AL - 2			
	GRAND TOTAL	L (TOTAL OF ALL PRICE BID	ANNEXU	RES) (Rs.)	•	

Rupees in words \_\_\_\_\_\_

Date Place SIGNATURE OF BIDDER NAME DESIGNATION (SEAL)

\_ \_

TR-20/05

#### 220 KV SIDE SWITCHYARD EQUIPMENTS & CONTROL ROOM EQUIPMENTS FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

				Unit rate (Ex-	Package, Freight & insurance	Total Unit Rate	GST @ 18% on	Total Unit Rate	Total Amount =
SN	Particular	Unit	Qty	works Price)		= 5+6	Sl.No.7	(FORD) = 7+8	Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	160 MVA, 220/132/33 KV,	Nos.	2						
	Xmer with oil & accessories as								
	per technical specifications given								
	in section-II, VolII including								
	online DGA (5-Gases) monitoring device, NIFPS and								
	accessories, tools & spares with								
	terminal connectors and clamps.								
	(The prices should be offered								
	inclusive of type & special test								
2	<i>charges)</i>		-						
L	220 KV $SF_6$ circuit breaker with structure complete and terminal								
	connectors								
(a)	Normal duty (gang operated	Nos.	4						
	type)								
(b)	Single pole reclosing type	Nos.	2						
3	220 KV CVT having ratio	Nos.	6						
ļ	$220$ KV/ $\sqrt{3}/110$ V/ $\sqrt{3}$ with clamps								
4	Lightning Arrestor 198 KV with terminal connectors	Nos.	12						
5	Communication Equipment for								
5	220 KV								
i	EPAX (Exchange for 24 lines	Nee	2						
	24/12)	Nos.							
ii	Electronic Push Button telephone	Nos.	10						
iii	20 pair jellified armoured	Kms.	2						
ļ	telephone cable.								
iv	Single pair PVC armoured drop	Kms.	2						
6	wire. 220 KV Isolator (3-ph) with	Set	2						
0	earth switch & support insulators	500	2						
	2000 A including terminal								
	connectors								
7	220 KV Isolator (3-ph) without	Set	21						
	earth switch & with support								
	insulators 2000 A including								
8	terminal connectors 220 KV Control and relay panel	Set	2						
0	for 220 KV feeder bay	501	2						
9	220 KV Control & relay panel	Set	2						
-	for 220 KV, 160 MVA X-mer								
	bay	ļ							
10	220 KV Control & Relay panel	Set	1						
	for 220 KV Transfer breaker bay	~							
11	220 KV Control & Relay panel	Set	1						
l	for 220 KV Bus Tie bay	<u> </u>	1	l		l			

12	220 KV Bus bar protection panel	Set	1			
13	Solid core Post Insulators on 220	Nos.	56			
	KV side for conductor support.					
14	GPS based time synchronising	No.	1			
	clock with large display.					
ТО	TAL ANNEXURE B-1					

Note:- 1. Please indicate ex-works price, Package freight & insurance and GST in respective columns.

- 2. Cess under B&OCWA: Applicable cess @ 1% (except the cost of power transformer) shall be deducted from each bill.
- 3. Over Current relays shall be provided with trip value recorder and date & time stamping.
- 4. Bidders are requested to go through the tender specification before quoting the rate.
- 5. Bidders to note that 220 KV Communication Equipment shall be provided by CSPTCL.
- 6. Bidders to note that 220 KV Current Transformer & 220 KV Potential Transformer for individual 220 KV Bays bays alongwith connectors shall be provided by CSPTCL However, associated foundations, structures, erection, testing & commissioning of 220 KV Current Transformer & 220 KV Potential Transformer shall be in the scope of the contractor & prices shall be quoted in respective price bid Annexures.

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#### 132 KV SIDE SWITCHYARDEQUIPMENTS & CONTROL ROOM EQUIPMENTS FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

SN	Particular	Unit	Qty	Unit rate (Ex- works Price)	Package, Freight & insurance	Total Unit Rate = 5+6	GST @ 18% on Sl.No.7	Total Unit Rate (FORD) = 7+8	Total Amount = Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	63 MVA 132/33KV transformer, with oil & accessories as per technical specifications given in section-II, VolII including online DGA (5- Gases) monitoring device, NIFPS and accessories, tools & spares with terminal connectors and clamps. ( <i>The prices should be offered inclusive of type &amp; special test charges</i> )	Nos.	2						
2	SF <sub>6</sub> circuit breaker with structures and terminal connectors complete.	Nos.	7						
3	Lightning Arrestor 120 KV with terminal connectors	Nos.	18						
4	132 KV Communication equipment								
i	Coupling Capacitor including terminal connectors	Nos.	4						
ii	Wave trap including terminal connectors	Nos.	4						
iii	Carrier Cabinet (Twin Channel)	Set	2						
iv	LMU (phase to phase coupling)	Set	2						
v.	RTU Cabinet with interface panel	Set	1						
5	Isolator (3- $\phi$ ) with clamps & earth switch 800 A (with support insulator)	Set	2						
6	Isolator (3- $\phi$ ) with clamps & without earth switch 800 A (with support insulator)	Set	20						
7	132 KV control & relay panel for 160 MVA Xmer	No.	2						
8	132 KV control & relay panel for 63 MVA Xmer	No.	2						
9	132 KV control & relay panel for feeders	No.	2						
10	132 KV control &relay panel for Transfer breaker	No.	1						

	Bay					
11	132 KV Busbar Protection	Set	1			
	panel					
12	Solid core Post insulators	No.	50			
	for conductor support	190.	50			
	TOTAL ANNEXURE B-2					

Note:- 1. Please indicate ex-works price, Package freight & insurance and GST in respective columns.

2. Cess under B&OCWA: - Applicable cess @ 1% (except the cost of power transformer) shall be deducted from each bill.

3. Over Current relays shall be provided with trip value recorder and date & time stamping.

4. Bidders are requested to go through the tender specification before quoting the rate.

5. Bidders to note that 132 KV Current Transformer & 132 KV Potential Transformer for individual 132 KV Bays bays alongwith connectors shall be provided by CSPTCL. However, associated foundations, structures, erection, testing & commissioning of 132 KV Current Transformer & 132 KV Potential Transformer shall be in the scope of the contractor & prices shall be quoted in respective price bid Annexures.

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## 33 KV SIDE EQUIPMENTS & CONTROL ROOM EQUIPMENTS FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

SN	Particular	Unit	Qty	Unit rate (Ex- works Price)	Package, Freight & insurance	Total Unit Rate = 5+6	GST @ 18% on Sl.No.7	Total Unit Rate (FORD) = 7+8	Total Amount = Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	33 KV Vacuum Circuit Breaker	No.	13						
	with Structure & clamps complete	INO.	15						
2	33 KV Current Transformer with								
	clamps Complete								
i	1200/1-1-1-1 A for Transformer/	No.	9						
	Transfer bus bay	110.	2						
ii	800-400/1-1-1-1 A for	No.	30						
	feeder/capacitor bay	110.	50						
3	33 KV/110V Potential								
	Transformer with clamps	No.	6						
	complete.								
4	33 KV Lightning Arrester with	No.	36						
<u> </u>	clamps complete.						ļ		
5	Isolator with insulators & clamps								
<u> </u>	complete								
i	With single earth Switch 800	Set	8						
ii	Amp. Without conth Switch 200 Amp		1						
	Without earth Switch 800 Amp.	Set	21						
iii	Without earth Switch 1200 Amp	Set	8						
<u> </u>	for Transformer/Transfer bus	~~~~	Ť						
iv	33 KV Bus sectional isolator	Set	2						
	1600A								
6	33 KV Solid core Insulator	No.	50						
	33 /0.415 KV, 500 KVA Station								
7	X'mer (with Oil & Accessories)	No.	2						
	& clamps complete with								
	distribution box etc.								
8	36 KV, 12 MVAR Capacitor								
	Bank (72 units $+ 8$ spare),	Set	2						
	complete with structures, series reactor and 10-5/1-1 Amp NCT	Sel	Z						
	including clamps								
9	33 KV D.O. Fuse Set complete.	Set	2						
	* -	501	2				ļ		
10	Equipments for tertiary winding of 160 MVA Auto Transformer :-								
· ·		 	 	 			 	 	
i	33 KV PT (suitable for 66 KV	No.	c						
	insulation class) with terminal	INO.	6						
ii	clamps for NDR protection 33 KV Isolator (suitable for 66	<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u> 	
11	KV insulation class) with	No.	2						
	terminal clamps	110.	2						
iii	33 KV LA of rating 39 KV with	<b> </b>							
111	terminal clamps	No.	6						
11	33 KV C&R PANELS	1	1						
i	33 KV control & relay panel for	No.	2						
1	63 MVA X'mer	110.							
L		.L	I	<u>I</u>		L	<u>I</u>	I	l

ii	33 KV control & relay panel for	No.	8			
	33 KV feeders					
iii	33 KV control & relay panel for	No.	1			
	33 KV transfer bus.					
iv	33 KV control & relay panel for	No.	2			
	36 KV, 12 MVAR capacitor bank					
	TOTAL ANNEXURE B-3					

Note: 1. Please indicate ex-works price, Package freight & insurance and GST in respective columns.

2. Cess under B&OCWA: - Applicable cess @ 1% shall be deducted from each bill.

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#### CONDUCTOR, DISC INSULATORS, CLAMPS, CONNECTORS & HARDWARES, EARTHING MATERIAL ETC. FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

SN	Particular	Unit	Qty	Unit rate (Ex- works Price)	Packag e, Freight & insuran ce	Total Unit Rate = 5+6	GST @ 18% on Sl.No.7	Total Unit Rate (FORD) = 7+8	Total Amount = Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	Zebra ACSR Conductor	Km	12						
2	Galvanised Steel Ground Wire 7/3.66 m.m.	Km	3.5						
3	G.I. Flats for earthing 65x8 MM for 220 KV, 132 KV & 33 KV yard	MT	75						
5	GI Flats for riser 50X6 MM	MT	20						
6	Cable trays GI perforated/ Ladder type (In running meter as per your design )								
i	100 mm wide	Mtr	250						
ii	300 mm wide	Mtr	600						
iii	450 mm wide	Mtr	900						
iv	600 mm wide	Mtr	2200						
6	Steel support for cable trays size 50x50x6mm	MT	10				Ī		
7	Material for complete earth pit with 100 mm Outer Dia. x 3 m long (class B) G.I. pipe including nut bolts etc for transformer neutrals, PTs & LAs etc.								
i	For transformer earthing (4 pipe )	No.	8						
ii	For other equipments (2 pipe )	No.	60						
8	G.I. Earth Spikes-25 mm Dia./ 2500 mm length	No.	250						
9	G.I. Nuts & Bolts of assorted sizes	MT	15						
10	Clamps & spacers etc.								
i.	'T' Clamp twin zebra to Single Zebra	No.	81						
ii.	'T' Clamp single Zebra to single Zebra	No.	325						
iii.	Spacers for Twin Zebra	No.	400						
iv.	PI Clamp for Single Zebra Conductor	No.	80						
V.	PI Clamp for double Zebra Conductor	No.	55						
vi.	PG clamp for Zebra	No.	85						

vii.	Earth wire bond	No.	70			
viii.	Clamps to support earth wire on structure	No.	140			
ix.	Heavy duty compression type Lugs for earth wire	No.	58			
х.	Cleat type clamp for earth wire	No.	450			
xi.	PAD type clamp	No.	58			
11.	Disc Insulators &					
	hardwares:					
i.	Tension Disc Insulator 160 KN (Anti fog type )	No.	3500			
ii.	Tension Disc Insulator 90 KN (Anti fog type )	No.	1800			
iii.	Suspension Disc Insulator 90 KN (Anti fog type)	No.	960			
iv.	Single Suspension Hardware for Zebra	Nos.	90			
v.	Double Suspension Hardware for twin Zebra	Nos.	15			
vi.	Single Suspension Hardware for Zebra suitable for WT	Nos.	8			
vii.	Single tension hardware for Zebra bolted Type.	Nos.	150			
viii.	Double Tension Hardware for Zebra Bolted Type.	Nos.	90			
ix.	Double tension hardware set for twin ACSR zebra	Nos.	96			
х.	Tension Hardware for E/W	Nos.	150			
	TOTAL ANNEXURE B-4	1				

Note:

1. Please indicate ex-works price, Package freight & insurance and GST in respective columns.

2. Cess under B&OCWA: - Applicable cess @ 1% shall be deducted from each bill.

3. Bidders are requested to go through the tender specification before quoting the rates.

#### CONTROL CABLES, BATTERY & BATTERY CHARGER FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

SN	Particular	Unit	Qty	Unit rate (Ex- works Price)	Package , Freight & insuranc e	Total Unit Rate = 5+6	GST @ 18% on Sl.No.7	Total Unit Rate (FORD) = 7+8	Total Amount = Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	Un-Armoured stranded								
	copper cable with								
i	numbered core	**							
	4 C, 4 sq. mm	Km	17						
ii	4 C, 2.5 sq. mm	Km			-				
iii	2 C, 2.5 sq. mm	Km							
iv	8 C, 2.5 sq. mm	Km	20						
v	12 C, 2.5 sq. mm	Km	10						
vi	19 C, 2.5sq. mm	Km	10						
2	Power Cables Copper/								
	Aluminium Armoured								
i	3.5 core 240 sq mm	KM	1						
	aluminium	IXIVI	1						
ii	3.5 core 120 sq mm	KM	2						
	aluminium								
iii	4 core 10 sq mm copper	KM	4						
iv	Flexible/multistrand copper cable for inter-connection between 220V & 48V Battery set to respective Battery Chargers (with copper lugs) size 50 sq mm	KM	0.3						
3	PLCC-Cables:-			<u>.</u>					
i.	20 pair jellified armoured telephone cables	KM	2						
ii.	H F (Co-axial) cable	KM	1						
5	Tubular Battery 220 V, 600 AH	set	2						
6	Tubular Battery: 48 V, 600 AH	set	1						
7	Battery Charger: 220 V, 600 AH	Nos.	2						
8	Battery Charger: 48 V, 600 AH	Nos	1						
	TOTAL ANNEXURE B-	5							

Note: 1. Please indicate ex-works price, Package freight & insurance and GST in respective columns.

2. Cess under B&OCWA: - Applicable cess @ 1% shall be deducted from each bill.

3. Bidders are requested to go through the tender specification before quoting the rates.

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#### LUMINAIRE, HIGH MAST, ACDB/DCDB BOARD & OTHER MISCELLANEOUS EQUIPMENTS FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

SN	Particular	Unit	Qty	Unit rate (Ex- works Price)	Packa ge, Freigh t & insura nce	Total Unit Rate = 5+6	GST @ 18% on Sl.No.7	Total Unit Rate (FORD) = 7+8	Total Amount = Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	LED Flood Light	No.							
	Luminaries, 100W		15						
	complete set with fixtures								
2	LED general area lighting (1x30W) complete set	No.	12						
3	Indoor, Decorative LED	No.							
	Luminaries 1x16 Watts, complete set		32						
4	Indoor, LED Industrial	No.							
	Luminaries, 1x16 Watts, complete set		35						
5	LED Decorative Outdoor lamp (25 W) each for gate	No.	4						
6	High Mast along with LED flood light luminaries (height of tower shall be 25 Mtr. and number of luminaries should be 8 Nos. 240 W on each mast & meet illumination as per tender specifications. (Complete with structure & Luminaries)	No.	4						
7	Octogonal pole (with str complete) assembled with 1 meter arm with lighting fixture of 50W LED	No.	10						
8	56" size 230 V AC		-						
	Ceiling fans for Control Room building	No.	30						
9	18" Exhaust fans 230 V- AC, Single phase for control room, battery Room, Store room	No.	6						
10	12" Exhaust fans 230 V- AC, Single phase for toilet	No.	3						
11	Miscellaneous equipments		-						
i	AC distribution Board,								
	415V:								
	(a) For control room as per tender specification	No.	1						
	(b) For ourdoor type for switchyard as per tender specification	No.	2						

ii	DC distribution Board, 220 V with 24 compartment HRC fuses, metal clad switches space for 2 incomer & 20% spare provision for out going CKTs (duly wired)	No.	2			
iii	DC Board, 48V with 24 compartment HRC fuses, space for 2 incomer &30% spare provision for out going CKTs (duly wired)	No.	1			
iv	415V Bay Marshalling Kiosk	No.	17			
V	CT Junction Box with 36 Nos. disconnecting type connectors with 20 % extra connector	No.	26			
vi	PT Junction Box with 24 Nos. disconnecting type connectors with 20 % extra connector	No.	6			
vii	Main Switches for Extension of AC Supply (100 Amp weather proof outdoor 3 phase 4 pole supply for					
	(a) For X-mer filteration	No.	2			
	(b) For Welding machine	No.	2			
	(c) LDB (out door lighting) with 4 pole MCB and suitable no. out going MCBs	No.	2			
	(d) LDB (in door lighting) with 4 pole MCB and suitable no. out going MCBs	No.	2			
viii	Rechargeable Emergency light	No.	2			
ix	Marshalling box/ Junction Boxes other purposes.	No.	10			
Х	First Aid Box with Chart	No.	1			 
xi	Illuminated Single Line Diagram Board	No.	1		 	
	<b>TOTAL ANNEXURE B-6</b>					

Note:

1. Please indicate ex-works price, Package freight & insurance and GST in respective columns.

2. Cess under B&OCWA: - Applicable cess @ 1% shall be deducted from each bill.

3. Bidders are requested to go through the tender specification before quoting the rates.

4. The quantity of luminaires for control room building and switchyard lightning of substation shall meet the recommended lux level as per CBIP manual 3.5.1 and IS standarad.

#### PRICE BID ANNEXURE - B-7 G. I. STEEL STRUCTURE FOR SWITCH YARD FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

TR-20/05

SN	Particular	Weight per unit in MT (Incl.FB)	Qty (in Nos.)	Total weight in MT (Incl.FB) = Col.3*Col.4	Unit rate (Ex- works Price)/ MT	Packag e, Freight & insuran ce	Total Unit Rate/ MT = 6+7	GST @ 18% on Sl.No.8	Total Unit Rate (FORD)/MT = 8+9	Total Amount = Sl. No.5 x Sl.No.10
1	2	3	4	5	6	7	8	9	10	11
1	G.I. STRUCTURE FO	JR	1							
1	220 KV Gantry Column									
(i)	AAGT	5.277	12	63.324		<u>.</u>		L		
(ii)	AGT	3.657	21	76.797						
2	220 KV Gantry Beam	1.222	28	34.216						
3	220 KV LA	0.127	15	1.905						
4	220 KV CT	0.266	21	5.586						
5	220 KV CVT	0.266	6	1.596						
6	220 KV PT	0.266	6	1.596						
7	220 KV PI	0.283	36	10.188						
8	220 KV Isolators	2.122	27	57.294						
9	220 KV Bus Bar Main	2.467	10	24.67						
10	220 KV Bus Bar Transfer	2.412	5	12.06						
11	132 KV Gantry Column	1.242	24	29.808						
12	132 KV Gantry Beam	0.570	15	8.550						
13	132 KV LA	0.172	24	4.128						
14	132 KV CT	0.142	27	3.834						
15	132 KV CC	0.164	6	0.984						
16	132 KV PT	0.128	6	0.768						
17	132 KV PI	0.175	25	4.375						
18	132 KV Isolators	0.556	31	17.236						
19	132 KV Bus Bar Main	1.590	6	9.540						
20	132 KV Bus Bar Transfer	1.590	6	9.540						
25	33 KV Gantry Column	0.853	26	22.178						
27	33 KV Gantry Beam	0.352	21	7.392						
28	33 KV LA on capacitor bank, LV side & tertiary side of Power Transformer (T type structure for 3 phase)	0.262	8	2.096						
29	33 KV CT (T type structure for 3 phase)	0.218	15	3.270						
30	33 KV PT (T type	0.233	5	1.165				L		

31	33 KV PI	0.166					
		0.166	10	1.660			
32	33 KV Isolator						
(i)	With single earth Switch 800 Amp.	0.380	9	3.420			
(ii)	Without earth Switch 800 Amp.	0.365	24	8.760			
(iii)	Without earth Switch 1200 Amp. For Transformer/ Transfer bus	0.365	11	4.015			
(iv)	33 KV Isolator (suitable for 66 KV insulation class)	0.365	3	1.095			
33	33 KV Bus Bar Main	0.823	6	4.938			
34	33 KV Bus Bar Transfer	0.823	6	4.938			
35	Structure for Loading/ Unloading gantry suitable for 4 Ton load	2.500	1	2.5			
36	structure for D.O. set for Station Xmer	0.356	2	0.712			
TOTA	AL ANNEXURE B-7						

Note: 1. Please indicate ex-works price, Package freight & insurance and GST in respective columns.

Cess under B&OCWA: - Applicable cess @ 1% shall be deducted from each bill. Bidders are requested to go through the tender specification before quoting the rates. 2.

3.

#### PRICE BID ANNEXURE - B-8 FIRE FIGHTING EQUIPMENT, T &P's INSTRUMENTS ETC. FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

TR-20/05

SN	Particular	Unit	Qty	Unit rate (Ex- works Price)	Package, Freight & insurance	Total Unit Rate = 5+6	GST @ 18% on Sl.No.7	Total Unit Rate (FORD) = 7+8	Total Amount = Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	Fire fighting Equipments:								
i)	Fire Bucket	No.	12						
ii)	Bucket Stand	No.	2						
	(a) Carbon-di-oxide (CO2) type fire extinguisher- capacity-22.5 Kg, average discharge time- 20-60 sec., filled weight – 66-69 Kg, empty weight-43.5 – 46.5 Kg, test pressure-250 Kg/cm2 trolley mounted complete with 05 mtr discharge hose & nozzle, confirming to IS:2878:2004. Make Bharat/ New Bharat / Kanadia/ Ceasefire	No.	4						
iii)	<ul> <li>b) Dry chemical powder</li> <li>(DCP) type fire</li> <li>extinguisher trolley</li> <li>mounted, capacity- 50 Kg</li> <li>with 2Kg CO2 capsule,</li> <li>average discharge time 40-</li> <li>60 sec., filled weight - 107-</li> <li>110 Kg, empty weight - 57</li> <li>- 60 kg, test pressure-30</li> <li>Kg/cm2 with hose pipe and</li> <li>nozzle, confirming to</li> <li>IS:10658:1999.</li> <li>Make Bharat/New Bharat /</li> <li>Kanadia/ Ceasefire</li> </ul>	No.	2						
	<ul> <li>c) Mechanical foam type trolley mounted fire extinguisher capacity-50 Ltr confirming to IS:13386:1992.</li> <li>Make Bharat/New Bharat / Kanadia/ Ceasefire</li> </ul>	No.	2						

iv)	Water mist and CAF fire Extinguisher Capacity 50 Ltr., trolley mounted (design: High Pressure) make: Aska Equipment Ltd., model No. 02/050 using Spl.AFFF compound with Fire Rating 55A, 2338, 1000V (i) One Spare compressed air cylinder 6 ltr x 300 bar (steel) (ii) 10 No. O-rings for the pressure vessel (iii) One Can 5 ltr. Special AFFF compound (iv) Tool kit - 1 No.	Set	1				
v)	Water mist and CAF fire Extinguisher Back Pack Capacity 10 Ltr., make: Aska Equipment Ltd., model No. 02/010 using Spl. AFFF compound with Fire Rating 55A, 2338, 1000V (i) One Spare compressed air cylinder 2 ltr x 200 bar (steel) (ii) 10 No. O-rings for the pressure vessel (iii) One Can 5 ltr. Special AFFF compound (iv) Tool kit - 1 No.	Set	1				
vi)	DCP Gun type fire extinguisher 25 Kg capacity trolley mounted, Make: VPS Aqua Mist	No.	2				
2	Neoprene Rubber sheet size 10mm , 5'x3' make Gujrat Cork& Rubber Pvt. Ltd.	No.	20				
3	220 KV Discharge rods with leads as approved by CSPTCL	No.	6				
4	Operating rod	No.	2				
5	DE-Spanner Set of 25 Make: Tapariya	Set	2	 			
6	Ring spanner Set of 25 Make: Tapariya	Set	2				
7	Tubular spanner Set of 25 Make: Tapariya	Set	2	 		I	
8	Aluminium Ladder: Extensible self supported (20 ft long after extension)	No.	1				
9	Aluminium pedestal type Ladder: Extensible 20 ft long	No.	1				
<b>.</b>		i	L	 L	 <b>.</b>	<b>4</b>	i

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10	Torch 25 Watt						
	(Rechargable) make	No.	3				
	Eveready/Bajaj/ Havells/	110.	5				
	other reputed make						
11	Motorised automatic Oil						
	Testing Kit - 0-100 KV						
	make – MEGGER model-						
	OTS-100 AF/ Baur model-	No.	1				
	DTA100C/ Motwane	INO.	1				
	model OTS 100						
	A/Deltatronic Model						
	Portatest						
12	Digital capacitance meter				 	 	
	make Motwane/Kusam/	No.	1				
	Meco						
13	Multimeter (A-V-O) for					 	
_	AC/DC Measurement						
	Make Motwani DM 4750	No.	2				
	cat4 /Rishabh rish multi						
	20/Fluke model -187						
14	Digital Tong Testers –(One					 	
11	No. 0-1000 A) make						
	Motwane DCM30A/	No.	2				
	Rishabh rish clamp 1000A						
15	Digital Milli-Ampere Meter					 	
15	(Tong tester) 0- 200 mA						
	make Motwane DCM –	No.	2				
	10A/ Kyoritsu model 2010.						
16	Digital Insulation Tester, 1						
10	KV – make Megger /						
	Motwane / Rishabh rish	No.	1				
	insu20						
17	Digital Insulation Tester, 5						
17	KV ( in steps of 1KV, 2KV						
	& 5 KV) Range 0-100 000						
	Mega Ohms - Make	No.	1				
	Megger MIT525/Vanguard	INO.	1				
	IRM 5000 / Motwane						
	5KPI						
10					 	 	
18	Digital Earth Tester (4 –						
	Terminals) complete make – Motwane model DET-20 /	No.	1				
	- Motwane model DE1-207 Rishabh MI2124						
19	Vice-8"	No.	2				
		INU.	۷				
20	Drill Machine – Stand Model up to 1" Drill bits						
	make Bosch/ Ralli	No.	1				
	Wolf/Wolf						
01							
21	Bench grinder (0.5 HP)	No.	1				
	make Bosch/Wolf				 	 	
22	Chain Pulley block 5 tones	No.	1				
	capacity	110.	1		 	 	
23	Vacuum cleaner (500 W)	No.	1				
	Philips/GE/Eureca Forbes	INO.	1				
24	33 KV Hand Gloves				 	 	
	seemless type confirming to	No.	4				
	relevant IS (in pairs), Make						

	– Crystal					 	
25	Oil Filter Plant Complete (6000 LPH) with required accessories with inlet/ outlet pipes as per tender specifications	No.	1				
26	Oil storage tank (MS) capacity 10 KL	No.	1				
27	Air Conditioners 2 tonne capacity, five star (Split type), Make- Hitachi, Daikin	No.	20				
28	<ul> <li>(i) Fire detection &amp; alarm system based on smoke detectors alongwith accessories complete as per technical specifications</li> <li>(ii) Smoke Detector</li> </ul>	Set	1 30				
29	SF6 gas leakage detector for Circuit Breaker (3g) / year sensitivity, on-board diagnostics indicating charging status and warning of low battery or infrared cell failure, shall include hard plastic case, NiMH power stick adapter/recharger, tip filters and infrared cell.	No	1				
30	Remote temperature detector Make FlukeTix 560/FLIR T460 (with three years performance gurantee)	No.	1				
31	Circuit breaker timer kit make Scope Model-SCOT M3K or latest	No.	1				
32	Primary Injection kit Make- Megger Model-SPI225 or latest	No.	1				
	TOTAL ANNEXURE B-8			<u> </u>			

NOTE :-

Please indicate ex-works price, Package freight & insurance and GST in respective columns. Cess under B&OCWA: - Applicable cess @ 1% shall be deducted from each bill. All the T &P should be as per latest amended I.S.S. 01.

02.

03.

04. Wherever make is not specified, the approval of same from CSPTCL will be required.

#### PRICE BID ANNEXURE - B-9 FURNITURE FOR CONTROL ROOM FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

TR-20/05

SN	Particular	Unit	Qty	Unit rate (Ex- works Price)	Package, Freight & insuranc e	Total Unit Rate = 5+6	GST @ 18% on Sl.No.7	Total Unit Rate (FORD) = 7+8	Total Amount = Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	Officer's Table 66" x 33" size	No.	1						
2	Table for Control Room Operator 4 $\frac{1}{2}$ x 2 $\frac{1}{2}$	No.	4						
3	Computer table - size 1200 (W) x 600 (D) x 750 (H) mm	No.	1						
4	Chairs - Half Arm Rest Type	No.	10						
5	Stools	No.	2						
6	Steel Almirah (Big –78" with locker)	No.	1						
7	Steel Almirah (Big –78" without locker)	No.	1						
	TOTAL ANNEXURE I	3-9							

Note : 1. All furniture shall be of Godrej make.

2. Please indicate ex-works price, Package freight & insurance and GST in respective columns.

3. Cess under B&OCWA: - Applicable cess @ 1% shall be deducted from each bill.

4. Bidders are requested to go through the tender specification before quoting the rates.

#### ANNEXURE –B-10 SUB-STATION AUTOMATION SYSTEM FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

TR-20/05

SN	Particular	Unit	Qty	Unit rate (Ex- works Price)	Packag e, Freight & insuran ce	Total Unit Rate = 5+6	GST @ 18% on Sl.No.7	Total Unit Rate (FORD) = 7+8	Total Amount = Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	PC, printer and furniture alonwith software for Automatic data logging of various APEX Energy meters; meter readings like voltage, current, frequency, MVAR & MWH of feeders and transformer (other than SAS) & load survey data	Set	1						
2 a	Complete substation automation system based on IEC61850 protocol for 220KV S/s (including hardware & software with licences for local control station, remote control station & communication with SLDC) alongwith associated equipments, OFC/any other cable required to connect the SAS/PC with BCU, relays, energy meter alongwith conduit for routing of such cables, Table for installing SAS system, Cabinet for housing SAS Servers as per tender specification for following bays : 6 Nos. 220 KV bays (X'mer bay, feeder bays, Bus Transfer bay, Bus Coupler bay)	Set	1						
b	07 Nos.132 KV bays (X'mer bay, feeder bays, Bus Transfer bay)								
с	13 Nos. 33 KV bays								
3	a) Work station computer DELL/HP/HCL/ Lenovo make with UPS (APC/Wipro/Intex make 600 VA), RAM 4GB, Hard Disk 500GB	No.	1						
	b) Laser jet Printer Size A4, Make- Samsung 2850D/ Canon-LP2900B, Memory 256MB expendable up to 1GB	No.	1						
	Visual Monitoring System								
4	a) Visual camera	Nos.	15						
	b) Server/PC with 29' LED monitor	No.	1						
	TOTAL ANNEXURE B-10			1					

Note - Bidders are requested to go through the tender specification before quoting the rates.

1. Please indicate ex-works price, Package freight & insurance and GST in respective columns.

2. Cess under B&OCWA :- Applicable cess @ 1% shall be deducted from each bill.

#### PRICE BID ANNEXURE - C-1 CIVIL WORKS FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

TR-20/05

Sl. No.	Particulars	Unit	Qty.	Unit rate	GST @18% (col. 5x18%)	Unit rate (incl. GST) (col. 5+6)	Total amount (col. 7 x col. 4)
1	2	3	4	5	6	7	8
1	FOUNDATION of Structures & equipments with required foundation bolts as per design.						
a	Foundation of 160 MVA Transformer alongwith construction of RCC sump tank below Transformer with G.I. mesh grating for collecting X'mer oil as per specifications, provided drawing and direction of engineer in charge of CSPTCL.	No.	3				
b	220 KV Gantry Column						
(i)	AAGT	No.	12				
(ii)	AGT	No.	21				
с	220 KV Main Bus bar	No.	10				
d	220 KV Transfer Bus bar	No.	5				
e	220 KV Isolator	No.	27				
g	220 KV CT	No.	21				
g	220 KV LA	No.	15				
h ·	220 KV CVT	No.	6				
1	220 KV PI	No.	36				
j	220 KV PT	No.	6				
k	i. 220 KV SF6 breaker (Gang operated)	No.	4				
	ii. 220 KV SF6 breaker (SPR)	No.	2				
1	Foundation of 63 MVA Xmer alongwith construction of RCC sump tank below Transformer with G.I. mesh grating for collecting X'mer oil as per specifications, provided drawing and direction of engineer in charge of CSPTCL.	No.	3				
m	132 KV Gantry column	No.	24				
n	132 KV Main Bus Bar	No.	6				_
0	132 KV Transfer Bus Bar	No.	6				
р	132 KV SF <sub>6</sub> Breaker	No.	7	İ			
q	132 KV Isolator	No.	31				
r	132 KV CT	No.	27				
s	132 KV LA	No.	24				
t	132 KV CC	No.	6				
u	132 KV PI	No.	25				
		No.		<u> </u>			
V	132 KV PT		6				
W	33 KV Gantry column	No.	28				
X	33 KV Main Bus Bar	No.	6				
У	33 KV Transfer Bus Bar	No.	6				
Z	33 KV VCB	No.	13				
aa	33 KV Isolator	No.	47				
ab	33 KV CT	No.	13				

ac	33 KV LA	No.	8			
ad	33 KV PI	No.	10			
ae	33 KV PT	No.	5			
af	33/0.415 KV, 500 KVA Station					
ui	Transformer	No.	2			
ag	DO fuse Set	No.	2			
ah	33KV, 12 MVAR capacitor bank and	No				
	associated equipments (Capacitor +	No.	2			
	Reactors +NCT etc.)	~ ~				
a1	Foundation of loading / unloading Gantry	No.	1			
2	Air conditioned Bay Marshalling room					
	(with RCC roof) as per approved drawing & specification	No.	6			
	Area- 30 SqM approx.					
3	Control Room Building type –					
	II(modified) with associated facilities					
	including internal and external					
	electrification with concealed copper					
	wiring, main switch & LDB with MCBs, telephone, LAN points ,ISI approved					
	fittings, T-5 tube lights, fans, exhaust					
	fans, CFLs, fixtures, internal water supply					
	, internal and external sanitation including					
	septic tank, soak pit, man holes etc., anti					
	termite treatment ,mineral fibre false					
	ceiling in control room hall/Carrier	job	1			
	room/officer's chambers' reflective glass in front & back side control room with	-				
	openings, internal cable trenches covered					
	with 6mm thick MS chequered plate,					
	specified floor & wall finishes					
	aluminium/ wooden/pvc doors, windows,					
	plinth protection etc. Complete in all					
	respects as per Sprovided drawings,					
	specifications and direction of Engineer- in-charge of CSPTCL.(Approx. area					
	excluding porch-470sq.m + Porch - 30					
	Sq.m.)					
4	External Cable Trenches					
i.	Y-1 Type. Width x Depth=200 mm.x					
	500mm					
	Direct buried cable trench as per tender					
	specification and provided drawings, direction and approval of Engineer-In-					
	Charge of CSPTCL constructed in					
	following manner:-					
	Layer I : 100 mm brick.	RM	1250			
	Layer II : 200 mm sand.					
	Layer III : 100 mm brick.					
	Layer IV : 100 mm. soil.					
	The cable shall be kept at the centre of					
	sand layer and top of the soil layer shall be FGL. No cable tray shall be provided					
	in this trench.					
ii.	Y-2 Type RCC Cable trench.	RM	330			
	WidthxDepth=325mm.x 305mm	IVIVI	330			
L			L	I	I	

ſ	CLC-11, (mark C200 111					1
	GI Cable trays of 300mm width					
	supported on HDG angles at height of					
	150 mm from bottom of trench shall be					
	provided. Cable trench covers shall be					
	doubly reinforced R.C.C. covers as per					
	provided drawings, specifications,					
	direction & approval of Engineer-In-					
	Charge of CSPTCL.					
· · · ·	<u> </u>					
iii.	<b><u>Y-3 Type RCC Cable trench.</u></b> Width x					
	Depth=850 mm.x 650 mm					
	2 layers of 450 mm width cable trays					
	supported on HDG angles at height of	DM	450			
	150 mm and 450mm from bottom of	RM	450			
	trench shall be provided. Cable trench					
	covers shall be doubly reinforced R.C.C.					
	covers as per provided drawings,					
	specifications, direction and approval of					
	Engineer-In-Charge of CSPTCL.					
iv.	<u>Y-4 Type RCC Cable trench.</u> Width x					
	Depth=1200 mm.x 1150 mm					
	3 layers of 600mm width GI cable trays					
	supported on HDG angles at height of 200 mm 450 mm and 700 mm from					
	bottom of trench shall be provided . Cable trench shall be covered with RCC cast in					
		DM	800			
	situ slab. At every 2.0 m distance 700mm	RM	800			
	wide opening covered with 6.0 mm thick					
	steel chequered plate cover shall be					
	provided. Chequered plate cover shall be duly stiffened and fixed to the frame					
	grouted in cable trench wall and RCC top					
	slab, as per provided drawings,					
	specifications, direction and approval of					
	Engineer-In-Charge of CSPTCL.					
5	Construction of RCC Box culvert for					<u> </u>
(A)	Cable trench- Road crossing as per					
(A)	aproved drawings, specification and					
	direction of Engineer Incharge of					
	C.S.P.T.C.L.					
	(I) For 5.0 m wide road.	No	4			
<b> </b>						
	(II) For 3.0 m wide road.	No.	1			
(B)	Construction of RCC culvert road					
	crossing as per provided drawing,	No.	1			
	specifications & direction of engineer-in-					
	charge of CSPTCL.					<u> </u>
6	Complete External water supply					
	arrangement with two numbers					
	minimum150 mm diameter tube well					
	bores, each with minimum 5000 litre per					
	hour water output with separate pump	<b>.</b> .	_			
	houses ,3-phase water cooled submersible	Job	1			
	pumps of KSB/Kirlosker make of min. 2					
	H.P. or more as per approval of					
	CSPTCL's engineer in charge, Crompton					
	Greaves /Havells make control panels,					
	Finolex/ Havells make cables ,two			1	1	1
	interconnected overhead tanks (ISI					

7	marked) of 1,000 litres capacity each ,above Control Room Building with complete water supply arrangements from both the bores to all the water tanks, from tank to control room building and from both the bores as well as from tank to all the earth pits with ISI marked medium grade pipe lines, fittings, fixtures etc. Of approved make as per specifications, in standard manner and as per direction of engineer in charge of CSPTCL. (A) Construction of RCC road with side drains, laid over CC 1:3:6 base, WBM				
	sub base and over size metal soling complete as per specifications,provided drawing and direction of engineer in charge of CSPTCL				
	(i) 5.0 m wide from main gate within switchyard.	RM	650		
	(ii ) 3.0 m wide towards filter room & porch.	RM	30		
	(B) Construction of RCC approach road from main road to yard with side drains, embankment, 220 mm thick grouted stone pitching on slopes in the embankment portion. RCC wearing coat shall be laid over CC 1:3:6 base, WBM sub base and over size metal soling complete as per specifications, provided drawing and direction of engineer in charge of CSPTCL				
	5.0 m wide from main road to switchyard.	RM	25		
8	<b>YARD LEVELLING</b> <b>a.</b> )Yard levelling up to required level through cutting in soil & disposal of excavated material in filling area or as directed by Engineer- in- charge with all leads and lifts, with all labour, material, T&P, transportation, stacking, spreading, compacting by vibrating plate compactor, dressing etc. complete in all respect including applying approved herbicides in entire area, providing required drains etc. as per site condition specifications, direction & approval of engineer in charge of CSPTCL.	CuM	100		
	<ul> <li>b) Yard levelling up to required level through filling with suitable non expansive soil, including, spreading, compacting by vibratory plate compactor, dressing etc. complete with all labour, material, T&amp;P, transportation etc.</li> <li>complete in all respect including applying approved herbicides in entire area providing required drains etc. as per site condition, specifications, direction &amp; approval of engineer in charge of</li> </ul>	CUM	81550		

	CSPTCL. Note: Borrow pit to be arranged by the Contractor at his own cost.				
	c) Yard levelling up to required level through cutting in disintegrated / soft / hard rock & disposal of excavated material in filling area or as directed by Engineer-in-charge with all leads, lifts , dressing and compaction by mechanical means with all labour, material, T&P, transportation etc. complete in all respect including applying approved herbicides in entire area, providing required drains etc. as per site condition specifications, direction & approval of engineer in charge of CSPTCL.	CUM	10		
9	Providing, stacking, spreading and compacting crusher stone dust of 200 mm compacted thickness, in the yard areaincluding all material, labour, T&P, royalty, taxes, etc. complete as per specifications, direction and approval of engineer in charge of CSPTCL.	CUM	10000		
10	Yard Metalling complete with 40 mm nominal single size ungraded crusher broken hard metal 100 mm thick including providing, stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty ,taxes etc. complete as per specifications , direction and approval of engineer-in-charge of CSPTCL.	CUM	5000		
11	Steel Main gate 2.4 mtr high, 6 mtr wide (min. weight 300 Kg.) with wicket gate 1.5 mtr. Wide, fixed on 400x400mm RCC pillers complete with guide rails as per provided drawing, specifications, direction and approval of engineer-in- charge of CSPTCL	No.	3		
12	Sub station glow sign board (1800x1200 mm) size with GI support structures and illumination arrangement in front of sub station as per specifications & direction of engineer-in-charge of CSPTCL.	No.	1		
13	Sub station sign board (1800x1200 mm) size with GI support structures arrangement in front of sub station as per specifications & direction of engineer-in- charge of CSPTCL.	No.	1		

14	Foundations for Octogonal lighting pole structures to be installed as per approved drawings, specifications & direction of engineer-in-charge of CSPTCL.	No.	10		
15	Foundations for LIGHTING MAST structures as per approved drawings, specifications & direction of engineer-in- charge of CSPTCL.	No.	4		
16	Construction of rainwater harvesting tank including connecting the same to cable trenches with RCC drain as per specifications, provided drawing and direction of engineer in charge of CSPTCL.	No.	1		
17	a) Construction of separate/combined RCC sump tank for collecting burnt Xmer oil for 160 MVA Xmers (Size min 133% of Xmer oil capacity or as per ISS) including submercible pump of 3 HP capacity for dewatering/draining of oil and pipe line from Xmer to sump tank ,as per provided drawing and direction of engineer in charge of CSPTCL.	No.	1		
	b) Construction of separate/combined RCC sump tank for collecting burnt Xmer oil for 63 MVA Xmers (Size min 133% of Xmer oil capacity or as per ISS) including submercible pump of 3 HP capacity for dewatering/draining of oil and pipe line from Xmer to sump tank ,as per provided drawing and direction of engineer in charge of CSPTCL.	No.	1		
18	(A) Construction of 2400mm high un- climbable chain link mesh yard fencing with hot dip galvanised chainlink mesh of 75mmx75mmx8 gauge with 450 mm vertical height V shaped extension having six rows of barbed wire, brick masonry wall, RCC beam at bottom with PCC foundation etc., complete as per provided drawing, specifications and direction of engineer-in-charge of CSPTCL.	RM	200		
19	Construction of 2400mm high un- climbable chain link mesh yard fencing <b>CUM RCC retaining wall</b> with hot dip galvanised chainlink mesh of 75mmx75mmx8 gauge with 450 mm vertical height V shaped extension having six rows of barbed wire etc. complete as per provided drawing, specifications and				

	direction of engineer-in-charge of CSPTCL.				
	(I) With soil retaining height above NGL up to 1.00 m height.	RM	190		
	(II) With soil retaining height above NGL up to 2.00 m height.	RM	680		
	(III) With soil retaining height above NGL up to 3.00 m height.	RM	160		
	(IV) With soil retaining height above NGL up to 4.00 m height.	RM	10		
	(V) With soil retaining height above NGL up to 5.00 m height.	RM	10		
20	Providing 22 cm thick grouted stone pitching (without quarry-spalls) with individual stones of 22 cm depth and min. size 0.014 cu.m in cement mortar 1:6	CUM	100		
21	Construction of 22 cm. thick grouted stone pitching drain of internal size 0.3 m at bottom, 1.10 m top with depth 0.7 m, 100 mm thick CC 1:2:4 coping at top, along periphery of switchyard to arrest rain water as per specification and direction of Engineer-in-charge of CSPTCL.	RM	100		
22	Providing and laying concrete path way if required with 100mm thick RCC 1:1.5:3 laid over 150 mm thick PCC 1:5:8,over 200 mm thick compacted hard moorum complete in all respects as per drawing & directions of engineer in charge of CSPTCL.	RM	500		
	TOTAL ANNEXURE C-1				

#### <u>NOTE:-</u>

- 1) Rates are required to be quoted for each and every item, even if the item has NIL quantity.
- 2) For BC / expansive soils, the fill materials and other protections etc. to be used under the foundation is to be got approved by CSPTCL. The cost of backfill around foundation shall be deemed to be included in rates quoted for civil foundation work and no payment on this account shall be admissible.
- 3) Please indicate Unit rate and GST in respective columns
- 4) Cess under B&OCWA: Applicable cess @1% shall be deducted from each bill.
- 5) **The bidder is requested to visit the site before quoting the rates.** The rates should be offered considering all the requirements as per site conditions. Please note that no extra claim for any other work not explicitly covered in bill of quantity but required to complete the substation in all respects shall be given by CSPTCL in addition to the rates quoted in the Price Bid.
- 6) Rates should be quoted for each foundation separately. **Rates should not be quoted in LOT**.
- 7) The Quantity shown above may vary as per site conditions. The payment shall be done on actual measurement basis.
- 8) The entire cost of oil collection pit to be provided below transformer is deemed to be included in

cost of foundation for transformer and shall not be paid separately. Accordingly rates for transformer foundations are to be quoted.

- 9) The quantity shown above includes foundation for equipments for future X'mer bays & feeder bays at proposed 220/132/33 KV Sub station at Daldal Seoni, Raipur.
- 10) Safe bearing capacity of soil & probable FGL of substation site is indicated below, which may be referred for civil foundation drawing/designs attached with the tender document and levelling of switchyard :-
- 11) i) Safe Bearing Capacity range : 12.50 T/m2 to 17 T/m2
  - ii) Drawings to be adopted for black cotton soil.
  - iii) Finished Ground Level (F.G.L.) 100.45 M
  - iv) Finished metal dust top level 100.65 M (200 mm thick metal dust)
  - v) Finished yard level (metal top) 100.75 M
  - vi) Finished foundation top level 100.95 M
  - v) Finished road top level 100.95 M
  - vi) Finished floor level 101.45 M
- 13) Land contour plan of the area and land utilization plan are enclosed in Volume-III of this tender document.
- 14) Standard Civil foundation drawings of 220 KV, 132KV & 33 KV structures / equipment are enclosed in Volume-III of this tender document.

### ERECTION CHARGES FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

S.N 0.	Particulars	Unit	Qty.	Unit rate	GST @18% (col. 5x18%)	Total unit rate including GST (col. 5+6)	Total amount (col. 4 x col.7)
1	2	3	4	5	6	7	8
1	STRUCTURE: Erection of S/S structure including fixing and alignment of templets for grouted/bolted type structure, foundation tightening of nut bolts, washers etc.	MT	450				
2	Stringing of ACSR conductor along with insulator string, spacers, clamps, jumpering, droppers etc for -						
(i)	Twin Zebra ACSR	RM	1600				
(ii)	Single Zebra ACSR	RM	8800				
(iii)	Stringing of overhead shield wires with stranded galvanised steel complete with fixing of strain clamps at the structures.	RM	3500				
3	Unit rate for installation of :						
i)	160 MVA 220/132/33 KV X'mer complete with marshalling box, control cabinet with associated control, RTCC panel, NIFPS and other accessories.	No.	2				
ii)	63 MVA, 132/33 KV, X'mer complete with marshalling box, control cabinet with associated control, RTCC – panel, NIFPS & other accessories.	No.	2				
iii)	Erection of 33/0.415 KV 500 KVA station transformer	No.	2				
Í	Erection of 33 KV DO set	No.	2				
iv)	Erection of 36 KV, 12 MVAR capacitor bank, its structure and associated equipments complete. (Capacitor + Reactors +NCT etc.)	No.	2				
4	Unit rate for erection of circuit breakers:-		<u></u>				
i	220 KV CBs	No.	6				
ii	132 KV CBs	No.	7				
iii	33 KV CBs	No.	13				
5	Unit rate for erection of isolators With & Without earth switch, piping, alignment of contacts & checking of operation etc.						
i	220 KV Isolators	No.	23				
ii	132 KV Isolators	No.	22				
iii	33 KV Isolators	No.	39				
6	Erection of Current Xmer &						

	fixing of junction box including					
	all accessories & making all					
	connections etc.	<b>N</b> T	10		 	
1	220 KV CTs	No.	18			
11	132 KV CTs	No.	21		 	
iii	33 KV CTs	No.	39		 1	
	Erection of CC/PT/CVT & fixing					
7	of junction box including all accessories & making all					
	connections etc.					
i	220 KV CVT	No.	6			
ii	220 KV PTs	No.	6			
iii	132 KV PTs	No.	6			
iv	33 KV PTs	No.	6			
	33 KV PTs (Insulation 66 KV					
v	class)	No.	6			
	Erection of L.A. & fixing of					
0	Leakage Counter including all					
8	accessories & making all					
	connections etc.					
i	220 KV LAs	No.	12			
ii	132 KV LAs	No.	18			
iii	30 KV LAs	No.	36			
iv	39 KV LAs	No.	6		 	
1 V	Erection of PI including all	110.	<u> </u>			
9	accessories & making all					
	connections etc.					
i	220 KV Post / Polycon Insulators	No.	56			
	132 KV Post Insulators/ Polycon	110.	50			
ii	Insulators	No.	50			
	33 KV Post Insulators/ Polycon				 	
iii	Insulators	No.	50			
10	Carrier Cabinet (Double Chanel)		~		 	
10	for 132 KV side	set	2			
	Wave trap with overhead					
11	suspension and other accessories	No.	4			
	for 132 KV				 	
12	132 KV LMU (Phase to phase	No.	2			
	coupling)				 	
13	132 KV CC	No.	4		 	
	Erection of DB, junction box, all					
14	accessories & making all					
	connections etc.		~		 	
i	AC Distribution Board 415 V	No.	3		 	
ii	Main 220 V DC Distribution	No.	2			
	Board			<u>                                     </u>	 	
iii	Main 48 V DC Distribution Board	No.	1			
iv	CT Junction Box	No.	26			
v	PT Junction Box	No.	6			
	Marshalling box/ Junction Boxes		10		 	
vi	other purposes.	No.	10			
vii		No.	17			
, 11	415 V Bay marshalling Kiosk Main Switches for extension of	110.	± /			
viii	AC Supply					
l	AC Suppry		L	I	 J	J

[	(a) Eag margin filter set is a	NT -		Γ	 I	1
	a) For xmer filteration	No.	2			
	b) For welding machine	No.	2			
	c) LDB (outdoor lighting)	No.	2			
	d) LDB (indoor lighting)	No.	2			
	Control & Relay panel for 220					
15	KV X'mer/feeder/Bus-	No.	7			
	coupler/Bus bar/TBC					
1.0	Control & Relay Panel for 132	N	0			
16	KV Xmer/ Feeder/TBC/Busbar	No.	8			
	Control & Relay Panel for 33 KV			İİ		
17	Xmer/ Feeder/TBC/Cap.Bank	No.	13			
18	Battery: 220 V, 600 AH	No.	2		 	
			+			
19	Battery: 48 V, 600 AH	No.	1			
20	Battery Charger: 220V, 600AH	No.	2			
21	Battery Charger: 48 V, 600 AH	No.	1			
			-			
	Installation & fitting of perforated					
	type GI cable Trays over the steel					
	support of min. size 50x50x6 @					
22	500 mm c/c suitably embedded in	job	1			
	cable trench walls to support					
	cable trays, accessories on cable					
	racks in cable trenches.					
	Cable Installations: - Laying of					
	cables on racks/ cable trays/ angle					
	support, dressing of cables & all					
	accessories for armoured control					
23	cables and termination of	job	1			
	including fixing of cable double					
	compression type glands, lugs for					
	control/power cables					
				-		
	Earthing Installations: Rates for					
	installations including jointing					
24	equipment termination, fixing &					
	clamping & hardware's such as					
	saddle, clamps, cleats, plugs, nut-					
	bolts washers & welding etc.				 	
	25mm X 2500mm G.S. rods,					
i	earth electrodes directly driven in	No.	250			
1	to earth including excavations as	110.	250			
<b></b>	required & welding etc.				 	
1	Providing Steel risers including					
1	welding to the earth mat at one					
ii	end bolting to the structures at the	RM	8000			
1	other end for 50 X 6 mm					
	G.S.flats.					
	Providing earth mat 65x8 mmGI			<u> </u>	 	
	Flate duly buried in earth min 600	_				
iii	mm depth with welding complete	RM	18000			
1	as per tender specification.					
	Earthing pits as per tender		1	<u> </u>	 l	
iv						
	specification	NT -				
а	4 pipe	No.	8	ļ		
b	2 pipe	No.	60			
[	Yard Lighting :-Installations of		1			
25	light fixtures on gantry columns,	Job	1			
_	supply connections to the light					
i			L	L	 	

	fitting from nearest supply board in the yard etc complete.				
26	Erection charges of High Mast.(Complete with Str. & Luminaries)	No.	4		
27	Automatic data logging system for energy meters	set	1		
28	Substation Automation System complete	set	1		
29	Erection of Octogonal lighting poles.(Complete with Str. & Luminaries)	No.	10		
30	Visual monitoring system complete	No.	1		
31	Installation of Fire detection & alarm system based on smoke detectors along with accessories complete as per technical specifications.	Set	1		
	TOTAL ANNEXURE D-1				

Note: 01. Please indicate Unit rate and GST in respective columns. 02. Cess under B&OCWA :- Applicable cess @ 1% shall be deducted from each bill.

Signature of the Bidder

#### PRICE BID ANNEXURE – D-2

#### TESTING & COMMISSIONING CHARGES FOR 220/132/33 KV SUB-STATION AT DALDALSEONI

r	DALDALSEON								
S. No.	Particular	Unit	Qty.	Unit rate	GST @18% (col. 5x18%)	Total unit rate including GST (col. 5+6)	Total amount (col. 4 x col.7)		
1	2	3	4	5	6	7	8		
(A)	SWITCH YARD EQUIPMENTS								
1	160 MVA 220/132/33 KV X'mer complete with marshalling box, control cabinet with associated control, RTCC panel, NIFPS and other accessories.	No.	2						
2	63 MVA, 132/33KV, x'mer complete with marshalling box, control cabinet with associated control, RTCC – panel, NIFPS & other accessories.	No.	2						
3	220 KV SF6 breaker complete	No.	6						
4	220 KV CT	No.	18						
5	220 KV PT	No.	6						
6	220 KV CVT	No.	6						
7	220 KV LA	No.	12						
8	220 KV Isolators	No.	23						
9	132 KV SF6 Breaker complete	No.	-e 7						
10	132 KV CT	No.	21						
11	132 KV LA	No.	18						
12	132 KV CC	No.	4						
13	132 KV Wave Trap	No.	4						
14	132 KV PT	No.	6						
15	132 KV Isolators	No.	22						
16	132 KV LMU	No.	2						
17	33 KV CBs	No.	13						
18	33 KV Isolators	No.	39						
10	33 KV CTs	No.	39						
20	33 KV PTs	No.	6						
20	30 KV LAs	·	36						
21	39 KV LAS	No.	- 50 - 6						
ļ		No.							
23 24	33 KV PTs (66 KV class insulation) 66 KV Class Isolator	No.	6 2						
		No.	ļ						
25	33/0.415 KV 500 KVA Station transformer	No.	2						
26	36 KV, 12 MVAR capacitor bank, its structure and associated equipments complete. (Capacitor + Reactors + NCT etc.) CONTROL ROOM	No.	2						
<b>(B)</b>	EQUIPMENTS:								
1	Control & Relay panel for 220 KV X'mer/feeder/Bus-	No.	7						

[	coupler/Busbar/TBC				
2	Control & Relay Panel for 132 KV Xmer/ Feeder/TBC/Busbar	No.	8		
3	Control & Relay Panel for 33 KV Xmer/ Feeder/ TBC/ Cap. Bank	No.	13		
4	Carrier Cabinet (Double Channel) for 132 KV side	set	2		
5	EPAX (Exchange for 24 lines)	No.	2		
6	Electronic Push Button telephone with Priority Key	No.	10		
7	Battery: 220 V, 600 AH	No.	2		
8	Battery: 48 V, 600 AH	No.	1		
9	Battery Charger: 220 V, 600AH	No.	2		
10	Battery Charger: 48 V, 600 AH	No.	1		
11	Automatic data logging system for energy meters	set	1		
12	Substation Automation System complete	set	1		
13	Lighting High Mast	No.	4		
14	Visual monitoring system complete	No.	1		
15	Fire detection & alarm system based on smoke detectors along with accessories complete as per technical specifications.	set	1		
	TOTAL ANNEXURE D-2				

Note01. Please indicate Unit rate and GST in respective columns02. Cess under B&OCWA :- Applicable cess @ 1% shall be deducted from each bill.

Signature of the Bidder

#### PRICE BID ANNEXURE - AL-1 SUPPLY OF MATERIALS FOR 220 KV DCDS RAITA-DALDALSEONI LINE

SN	PARTICULARS	Unit	Qty.	Unit rate (Ex-works Price)	Package, Freight & insurance	= 5+6	Sl.No.7	Total Unit Rate (FORD) = 7+8	Total Amount = Sl. No.4 x Sl.No.9
1	2 S	3 МТ	4	5	6	7	8	9	10
1	Supply of Towers:	MT	740						
	Supply of G.I. Towers and								
	their extensions including Stub, super structure,								
	Gantry structure, Hangers,								
	U-Bolts, D-shackle &								
	packing washer as per								
	requirement (All G.I. Steel								
	Structures)								
2	G.I. nuts & Bolts	MT	26						
3	G.I. Spring Washers	MT	1.6	<b>•</b>					
4	ACSR Zebra Conductor	KM	182	•					
5	OPGW fibre optic cable	KM	31	•					
	(OPGW, 24 F Fibre								
ļ	DWSM)								
6	Single Suspension H/W	Nos	324						
	with AGS Assembly for								
_	ACSR Zebra conductor	) Y							
7	Double Suspension H/W	Nos	72						
	with AGS Assembly for ACSR Zebra conductor								
8	Single Tension H/W	Nos	384						
0	Assembly for ACSR	1105	504						
	Zebra conductor								
9	Double Tension H/W for	Nos	120						
	ACSR Zebra conductor								
10	Pilot String hardware for	Nos	18						
	ACSR Zebra conductor								
11	Vibration Dampers for	Nos	1164						
10	ACSR Zebra conductor	N	105						
12	Mid-Span Joints for	Nos	125						
13	ACSR Zebra conductor Repair Sleeve for ACSR	Nos	25						
13	Zebra conductor	INUS	23						
14	Suspension Assembly for	Nos	60						
- '	OPGW fittings	1,00	00						
15	Tension Assembly for	Nos	70						
	OPGW fittings								
16	Inline splice enclosure for	Nos	15						
	OPGW fittings		100						
17	Vibration Dampers for	Nos	190						
18	OPGW fittings	Nos	190						
10	Copper earth bond for OPGW fittings	INUS	190						
19	Terminal equipments for	Nos	2						
	OPGW fittings at S/s end								
ļ	including installation					ļ			
20	70 KN Disc Insulator	Nos	5538						
21	160 KN Disc Insulator	Nos	7224	ļ					
22	220 KV Solid core /	Nos	6	<b>I</b>	[	<u> </u>			

	Polycone insulator with clamps					
23	Enamelled Danger Board 400 KV/ 220 KV	Nos	101			
24	Enamelled Number Plate	Nos	101			
25	Phase Plate ('R', 'Y' & 'B') for both circuits Per loc	Nos	95			
26	Circuit plate (Set of two) for both circuits	Nos	190			
27	Anti-Climbing Device complete set including barbed wire on towers Per loc	Nos	95			
28	Earthing Set (Earthing Rod with clamps and G.I. Wire – (2 Nos. in each tower) pipe type	Nos	101			
29	Counterpoise earthing Per loc	Nos	14			
30	7/8 SWG Galvanized ground wire	MT	2			
31	Reinforcement steel etc (Cost of material)	MT	115			
	TOTAL ANNEXUR	RE AL-	1			

NOTE:-

- 1. The above quantities are provisional & estimated for comparison of bid. The quantities may vary during actual execution of the work as per profile approved.
- 2. The rate will be FIRM except galvanised Tower Parts and ACSR zebra Conductor during entire contractual period and no any other charges/duties other than mentioned above will be payable by CSPTCL. The rates of galvanized tower parts & ACSR zebra Conductor should be quoted on variable price basis as per PV-8 & PV-9. Please indicate basic unit rate/Freight charges/GST in respect of supply of galvanised tower parts & ACSR Conductor so as to enable payment of PV on Ex work rates.
- 3. The rate should be quoted considering the taxes and duties as per tender. For tower parts & ACSR Conductor may be bought out or self manufactured items:-Bidders are requested to furnish break-up of prices of tower parts & ACSR Conductor GST and other levies, if any, separately wherever applicable in respective column.
- 4. 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 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.
- 5. The cess under "**Building and other Construction Workers Act, 1996** @ 1% of the cost of supply of materials shall be borne by the contractor which shall be deducted from each bill. <u>Any variation in this</u> respect within scheduled completion period shall be to the account of CSPTCL.
- 6. **Any other new tax:** 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.

#### Signature of the Bidder

#### PRICE BID ANNEXURE-AL-2 CONSTRUCTION CHARGES FOR 220 KV DCDS RAITA-DALDALSEONI LINE

TR-20/05

SN	PARTICULARS	Unit	Qty.	Unit rate	GST @18% (col. 5x18%)	Total unit rate including GST (col. 5+6)	4 x col.7)
1 1(a)	2 Preliminary Survey, Measurement of SR,	3 KM	4 30	5	6	7	8
1(a)	Detailed Survey including site clearance and profiling, tower spotting						
<b>1(b)</b>	Check Survey including site clearance etc.	KM	30				
2	Soil investigation	Loc	15				
3	Excavation in :-						
А	Dry Soil (Normal +BC+ Sandy)	CuM	8250				
В	Wet Soil (Wet+PS+FS)	CuM	4540	•			
С	Soft Rock (DFR+SFR)	CuM	2825				
D	Hard Rock	CuM	20				
4	Setting of Template :- Both for Normal & Extension towers						
Α	BN-2 (0-2° tower)	Nos	60				
В	BN-30 (30° tower)	Nos	15				
С	BN-60 (60° tower)	Nos	20				
D	SPECIAL TOWER (220 kv)	Nos.	0				
Е	220 KV Gantry (3 columns + 2 beams)	Sets/ Nos.	4				
5	Stub Setting						
(A)	Lean concrete 1:3:6 ratio Mix M-10 Including cost of Cement, Metal & Sand, Back Filling, Muffing, Coping & Curing etc.	CuM	225				
(B)	Concreting 1:1.5:3 ratio Mix M-20 Including Cost of Cement, Metal & Sand, Back Filling, Muffing, Coping & Curing etc.	CuM	1750				
(C)	Concreting 1:2:4 ratio Mix M-15 Including Cost of Cement, Metal & Sand, Back Filling, Muffing, Coping & Curing etc.	CuM	20				
6	Labour charges for reinforcement including cost of binding wire	MT	115				
7	Protection of tower footings						
(i)	Benching	CuM	200				
(ii)	Revetment work						
a	Cost of building revetment with stones with 1:5 cement mortar per Cum of stone masonry including all material including cement.	CuM	150				
b	Cost of top seal cover of revetment wall with 1:2:4 mix concrete including all material including cement.	CuM	40				
С	Back filling and levelling of the volume enclosed by revetment walls in Cum.	CuM	200				

d	Cost of concrete 1:3:6 mix required for base padding including all material including cement.	CuM	30		
8	Installation of Earthing as per drawing including all materials complete				
	(a) Pipe type (02 No. In each tower/ location)	Loc.	190		
	(b) Counter poise earthing	Loc.	14		
9	<b>Erection of Tower / Gantry structure</b> (Excluding the weight of Nut, bolts, stub & Template etc.)	MT	650		
10 (a)	Installing & Stringing of (D.C.D.S.) 6 Nos. ACSR Zebra conductor including insulator hoisting and clipping etc. complete in all respects	KM	30		
10 (b)	Installing, testing & commissioning of 24/48 Fibre OPGW installation complete in all respects	KM	31		
11	Fixing of ACD, DB, Number Plates & Phase Plate etc. per tower	Nos	99		
12	Cost of peripheral welding of G.I. nuts & bolts above Ground Level per tower / gantry set	Nos	99		
	TOTAL ANNEXURE AL-2				

NOTE:-

i) Please be noted, it is obligatory to quote rates in above prescribed format. In case break-up of exworks & taxes (GST) etc are not given, the tender bid may be rejected.

- ii) The cess under "Building and other Construction Workers Act, 1996@ 1% of the cost of construction work shall be borne by the contractor which shall be deducted from each bill. Any variation in this respect within contractual completion period shall be to the account of CSPTCL.
- iii) The above quantities are provisional & estimated for comparison of bid. The quantities may vary during actual execution of the work as per approved profile.
- iv) The rate will be FIRM during entire contractual period and no any other charges/duties other than mentioned above will be payable by CSPTCL.
- v) 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. If there is no specific mention of any 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.
- vi) Any other new tax: 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.

Signature of the Bidder

# SECTION- IV Annexures, Schedules &

TR-20/05

# Forms

#### GENERAL INFORMATIONS TO BE FURNISHED BY BIDDERS

The bidders shall furnish General information of their firm in the following format:-

- 1. Name of the Firm :
- 2. Head Office address :
- 3. GST Registration No. :
- 4. Contact Person :
- 5. Mobile No. of contact person :
- 6. Telephone No. Office :
- 7. Telephone No. Residence :
- 8. Fax No. :
- 9. E-mail :
- 10. Place of incorporation / Region :
- 11. Year of incorporation / Region :

Date

Place

#### ANNEXURE – A-2 DECLARATION FORM

Tender specification No. TR-20/05

To,

Sir,

- 1. Having examined the above specification together with tender conditions referred to therein. I/We the undersigned hereby offer to execute the work contract covered therein complete in all respect as per the specification and general conditions, at the rates entered in the attached contract Annexure of prices in the tender. Our offer is valid upto <u>180 days</u> from the date of tender opening and the prices, which are on firm basis, will remain valid till the completion of the work.
- 2. I/We hereby undertake to have the works completed within the time specified in the tender.
- 3. I/We certify to have purchased a copy of the Specification by remitting cash demand draft and this has been acknowledged by you in your letter no. \_\_\_\_\_\_ dtd. \_\_\_\_\_.
- 4. In the event of work order being decided in my/our favour, I/We agree to furnish the Bank Guarantee in the manner acceptable to CSPTCL and for the sum as applicable to me/us as provided in the General conditions of contract (Section-II) of this specification within 30 days of issue of work order, failing which I/We clearly understand that the said work order will be liable to be withdrawn by CSPTCL.

Signed this \_\_\_\_\_ day of \_\_\_\_\_2021.

Yours faithfully,

Date

Place

SIGNATURE OF BIDDER NAME DESIGNATION (SEAL)

(This form should be duly filled up by the bidder & submitted along with the original copy of tender.)

#### QUESTIONNAIRE

TR-20/05

#### TENDER SPECIFICATION TR-20/05 FOR CONSTRUCTION OF <u>PACKAGE FOR CONSTRUCTION OF 220/132/33 KV SUB-STATION AT</u> <u>DALDALSEONI (RAIPUR) AND ASSOCIATED 220 KV DCDS RAITA-DALDALSEONI LINE</u> ON TURNKEY BASIS.

<u>Note</u>: The bidders may please note that submission of this questionnaire duly and properly filled in all respect is essential. While 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 <u>none of the column should be left blank</u> and clear reply against all columns should be furnished. **In case this is not done the offers will be liable for rejection.** 

<u>"Bidders to note this to avoid rejection of their bid"</u>: It will be the responsibility of the sole bidder/ partners of joint venture (JV)/ consortium to make sure that all the documents required as per tender are submtitted along with bid on or before due date of tender. The bid submission date is cut-off date of submission of all the documents required as per tender and every bidder must adhere to this dead line.

However, if any short coming is observed during scrutiny of TC bid, CSPTCL reserves the right to seek required clarifications/documents from bidder by giving them only one chance to submit required documents/ clarifications/confirmations within specified time limit.

If a bidder has quoted 'NIL' deviations in Annexure A-9 (Deviation from technical specification / condition) and Annexure A-10 (Deviation from Commercial conditions of contract), this will have an overriding effect on any other conditions noted as deviations elsewhere in the bid.

1		
1.	Name and address of tenderer.	
	Telephone & fax No.	
2.	Mention GST registration number	
3.	Whether quoted as a <b>sole bidder or JV / consortium</b>	
4.	If JV/ consortium, name of	
	Lead partner	
	Other partner	
5.	<ul> <li>i. Whether you are State or Central Govt. Undertaking/unit with 100% Govt. share.</li> <li>ii. If yes, whether documentary evidence in support of the above has been enclosed. (In absence of documentary evidence your claim to be State/ Central Govt. under-taking shall be ignored.)</li> </ul>	Yes / No
6.	Mention Earnest Money furnished	
	1. Amount & Bank Draft No.	
	2. Proof of support of EPM Region/ DGS&D/ NSIC	
7.	Mention Tender cost (amount & DD Number)	
8.	Whether dully filled in check list (Annex. A-28) is enclosed.	Yes/No
9.	Whether the offer is valid for 180 days from the date of opening of commercial/technical bid	Yes / No
10	For all equipments & accessories, the price shall be FIRM (except for equipments/structures specified in clause 36 (section-IIA) & clause 69 (section IIB) of GCC of Vol-I	Yes / No
11	a) Confirm that the Ex works price for all supply items for S/s & line are exclusive of GST	Yes /No
	b) Confirm that the unit rate for all Civil works are exclusive of GST	Yes / No
	c) Confirm that the unit rate for ET &C and construction works for S/s & line are exclusive of GST	Yes / No
	d) All Testing charges for all equipments as per specification are included in the price of equipment.	Yes / No
12	<b>Terms of payment</b> – Whether agreeable to CSPTCL's terms or not?	Yes / No

13	Please confirm that you have noted the responsibility for payment of taxes as stipulated in	Yes / No
	Section-I, Vol-I.	
14	Schedule date of completion of work (24 months) - Whether agreeable to CSPTCL's	Yes / No
	terms	
15	Transformer Guarantee Period – Whether agreeable to CSPTCL's terms	Yes / No
16	Equipment/materials Guarantee Period – Whether agreeable to CSPTCL's terms	Yes / No
17	Liquidated damages- Whether agreeable to CSPTCL's terms	Yes / No
18	Whether agreed to guarantee/extended guarantee period clause	Yes / No
19	Whether agreeable to submit 10% BG against SD as per clause-15 (section-IIA) & clause-	Yes / No
	73 (section IIB) of GCC of Vol-I	
20	Whether agreeable to submit BG against Performance guarantee for 5% of the contract	Yes / No
	price (excluding cost of transformer) & 10% BG against performance guarantee for Power	
	transformer as per clause-12.1 of section-II & additional 10% BG in case of second time	
	failure of power Xmer within the guarantee period as per clause-11.2 of GCC	
21	Whether agree to Technical Specifications & drawings as mentioned in Vol-II.	Yes / No
22	Self attested detailed order copy along with annexures containing BoQ/ scope of work in	Enclosed
	support of technical experience criteria of PQR as specified in clause-3.2 of Section-I of	or not. If
	VolI of tender document:	Yes mention
	a) Name of 220 KV substation commissioned & name of order placing utility	Page No.
	b) Name of 220 KV EHV line commissioned & name of order placing utility	0
23	Performance certificate for successful commissioning & satisfactory operation of above	Enclosed
	mentioned Sub-station & EHV line for a period of atleast one year (from the date of	or not. If
	commissioning) indicating date of commencement of work and its commissioning	Yes
	(constructed by sole bidder / any of the partners) as on date of NIT of the instant tender.	mention Page No.
	a) Name of performance certificate(s) issuing utility.	1 ugo 110.
24	In support of their 'Financial Position', the Bidder (Sole bidder or the JV partners in case	
	of JV bidder) must provide the relevant information, alongwith documentary evidence for	
	the following :-	
А	Turn over Details (Annexure A-6) (with Self attested copies of profit and loss account	Yes/No
	statement of the balance sheet by authorised signatory of the balance sheets for last 5 FY	
	i.e 2015-16 to 2019-20)	
В	Net worth details (Annexure A-6) (with Self attested copies by authorised signatory of the	Yes/No
	balance sheets for last 3 yrs)	
C	Liquid Assets (self attested copy duly certified by CA)	
С	Or Details of evidence of liquid assets(LA) (Annexure A-6)	Yes/No
	Or Details of evidence of access to or availability of credit facilities (Bank Certificate)	Yes/No
-	(Annexure A-7) for Sole bidder/Lead Partner as well as other Partner of JV in original	
D	Cash flow requirement (Annexure A-13)	Yes/No
E	Whether certificate of CA (Annexure A-29) for Sole bidder/Lead Partner as well as other	Yes/No
25	Partner of JV <b>in original</b> have been furnished.	V /NT
25	Whether the declaration (Annexure A-30) by Sole bidder/Lead Partner as well as other Dertage of IV Separately have been furnished	Yes/No
26	Partner of JV <b>Separately</b> have been furnished.	Vac/NI
26	Whether a copy of Valid 'A' class Electrical Contractor License issued by CG anugyapan Mandal/ CG state licensing board on an undertaking as encoified in aloung 4 of Section Lof	Yes/No
	Mandal/ CG state licensing board <u>or</u> an undertaking as specified in clause-4 of Section-I of VolI of tender document have been furnished.	
27		Vac/Na
27	Copy of EPF code number allotted by EPF Commissioner	Yes/No

28	GUARANTEED LOSSES OF OFFERED POWER TRANSFORMER: or else the bid shall be considered as non-responsive and liable for rejecti	•	•				
	transformer should be within the prescribed range for respective losses.						
	160 MVA, 220/132/33 KV Power transformer	Range (KW)	Offered				
	i. No Load Loss at 75°C & Normal Tap 31.5 to 35						
	ii. Load loss at rated voltage and rated frequency at 75°C & Normal Tap	184.5 to 205					
	iii. Auxiliary Loss at 75°C & Normal Tap	4.5 to 5					
	63 MVA, 132/33 KV Power transformer	Range (KW)	Offered				
	i. No Load Loss at 75°C & Normal Tap	22.5 to 25					
	ii. Load loss at rated voltage and rated frequency at 75°C & Normal Tap	133 to 147.5					
	iii. Auxiliary Loss at 75°C & Normal Tap	2.3 to 2.5					
29	Please mention losses of 10 MVAR Capacitor bank in watts /KVAR	0.18 w/KVAR to 0.2 w/KVAR					
30	Please confirm that you have noted and agree to the conditions stipulated	d in clause 5 of	Yes/No				
	section-I, volume-I & sub-clause 5.2.1 of Section-I of volume II that if t	he losses of					
	offered power transformers exceeds the permissible limit of respective le	osses then your bid					
	shall be rejected.						
31	Please also confirm that you have noted & agreed to our requirement of	•	Yes/No				
	Excess Guaranteed Losses for supply of Power Transformers as stipulate						
	of Section-I, Vol-II, that if during final testing of power Xmer, the meas						
	(individually) exceeds the values guaranteed by the bidder then the resp	ective transformer					
	will not be accepted.						
32							
	the testing charges for all tests as per IS to be conducted on samples, dra representative.	wn by <b>CSPTCL</b> 's					
33	Please confirm that you have noted & agree to submit price adjustment i	nvoices for	Yes/No				
	supplies, positively within 6 (Six) months from date of supply of equipm whether positive or negative, as stipulated in clause 37 (section-IIA) & o IIB) of GCC of Vol-I						
34	Whether testing facilities for carrying out the type, acceptance and routin	ne tests as ner	Yes/No				
54	relevant is specification, on the materials offered are available with the r		103/110				
	please furnish the list of testing machines and relevant details.	nanuracturer. II 50,					
35	Have you taken into account the element of 'modvat benefit' on cost of	raw material while	Yes/No				
	offering ex-works prices. Will you pass on such benefit on this account		100,110				
36	Whether details of departures/ deviation from specification have been fu		Yes/No				
	respective schedule.						
37	Whether details of technical manpower of head office and field organisa	tion furnished in	Yes/No				
	respective schedule.						
38	Whether agreeable to arrange for storage cum erection insurance of subs	station & line	Yes/No				
	equipments/materials as per relevant clause of the specification.						
39	Whether agreeable to bear the cost of any octroi, duty of levy on materia	als provided by the	Yes/No				
	contractor such as metal, sand etc.	-					
40	Please indicate if use of private/forest/canal service of roads for transport	t of materials and	Yes/No				
	constructional personnel if required, then the charges, if any, levied by t						
	authorities will be borne by you, without any extra cost to the CSPTCL						
41	Have you furnished the power of attorney in respect of the person signing	ig the tender on	Yes/No				
	behalf of the bidder?						

42	Whether submitted Pre – contract Integrity pact with confirmation that no addition/	Yes/ No
	deletion has been made and if, at later stage any discrepancy is found as compared to the	
	text of integrity pact attached with the tender document, you will be bound to correct the	
	same.	
43	Whether agree to supply all the equipments and materials as per our tender specification	Yes/ No
	and as per "List of vendors" indicated in Section-V, Vol.I of tender document & displayed	
	in CSPTCL's official website as on the date of issue of NIT and you will not seek any	
	deviation from vendor list in the event of award of contract.	
44	Please confirm that the angle sections, plates etc. used in manufacture of towers/ structures	Yes/ No
	quoted in this specification shall conform to the relevant latest ISS	
45	i) Whether tower type test certificates is enclosed.	Yes/ No
	ii) If type test certificates not enclosed, whether undertaking is enclosed? (To complete the	
	type testing of tower following placement of contract without any extra cost to the	
	CSPTCL) without effecting completion period.	
46	Certification (Annexure-A-32) by the Bidder as per order no. F.No.6/18/2019-PPD dated	Yes/ No
	23/07/2020 issued by Public Procurement Division, Department of Expenditure, Ministry of	
	Finance, Government of India (DoE Order)	

Note : Bidder shall use above questionnaire sheets in original for furnishing reply alongwith this 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.

Date

Place

#### UNDERTAKING FOR PERSONNEL CAPABILITIES

(To be furnished for Sole bidder/Lead Partner as well as other Partner of JV)

I/WE ...... (Designation) of ...... (Name of bidder) hereby undertake that we have adequate experienced personnel with necessary license/workman permit issued by the Electrical Licensing to execute the project and the details are hereunder:-

#### 1) PERSONNEL IN MANAGERIAL POSITION

Sl. No.	Name of person with designation	Educational/Tech. Qualifications	Year of experience	Details of Licence

#### 2) PERSONNEL IN SUPERVISORY POSITION

Sl. No.	Name of person with designation	Educational/Tech. Qualifications	Year of experience	Details of Licence

#### 3) PERSONNEL IN WORKMEN CATEGORY

SL. No.	Name of person with designation	Educational/Tech. Qualifications	Year of experience	Details of Licence

Date

Place

#### UNDERTAKING FOR EQUIPMENT CAPABILITIES

(To be furnished for Sole bidder/Lead Partner as well as other Partner of JV)

I/WE ...... (Designation) of ...... (Name of bidder) hereby undertake that we have adequate tools & plants required for execution of various ativities involved in construction of EHV Substation & line :-

Date

Place

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#### FINANCIAL CAPABILITIES

#### "Certificate issued by Chartered Accountant"

# (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV) (Issued not earlier than the date of NIT)

#### Name & address of the bidder : M/s \_

(The bidder is requested to complete the information in this Annexure. The information supplied should be the annual turnover duly audited by the Chartered Accountant for preceding three years of work in progress or completed.)

#### ANNUAL TURNOVER & NET WORTH FOR LAST FIVE FINANCIAL YEARS :

	FY	TURN OVER (in Rs.)	NET WORTH (in Rs.)
1.	2015-16		
2	2016-17		
3	2017-18		
4	2018-19		
5	2019-20		

BREAKUP OF LIQUID ASSETS (As on ....2021 (This date should not be older than the date of NIT)):

	BREAKUP OF LIQUID ASSETS (in Rs.)			
1.	Cash (and equivalents)			
2.	Bank deposits			
3.	Securities that can be freely traded			
4.	Receivables which has general certainity of getting received			
5.	Others			
	Total			

#### ASSESSMENT BY CA:

Financial information	Actual previo	ous three year	s
in Rupees	1	2	3
1. Total assets			
2. Current assets			
3. Total liabilities			
4. Current liabilities			
5. Profit before taxes			

#### Attach audited financial statements for the last five years.

Date

SIGNATURE OF CHARTERED ACCOUNTANT

Place

(SEAL)

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#### FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT/FACILITIES

(To be furnished in original for Sole bidder/Lead Partner as well as other Partner of JV) (Issued not earlier than three months prior to date of bid opening)

#### **BANK CERTIFICATE**

Their financial transaction with our Bank have been satisfactory. They enjoy the following fund based and non fund based limits including for guarantees, L/C and other credit facilities with us against which the extent of utilization as on date is also indicated below:

Sl. No.	Type of Facility	Sanctioned Limit as on Date	Utilisation as on Date	Unutilized limit / Balance as on Date

This letter is issued at the request of M/s. \_\_\_\_\_.

Signature	
Name of Bank	
Name of Authorised Signatory	
Designation	
Phone No	
Address Email ID: Telex/ Fax:	

#### DATE & SEAL OF THE BANK

#### ANNEXURE – A-8 EXPERIENCE RECORD

The bidder shall furnish details of work orders for similar nature for construction of sub-station & line received during the last three years & already completed or under execution.

SL. No.	Work order/ No. & date	Name & address of CSPTCL	Value of contract	Scheduled date of delivery/ completion of work	slippage with	Remarks

Date

Place

#### DEVIATION FROM TECHNICAL SPECIFICATION/CONDITIONS

Tender shall enter below particulars of his alternative proposals for deviation from the specification, if any. If a bidder has quoted 'NIL' deviations in the bid, this will have an overriding effect on any other conditions noted as deviations elsewhere in the bid and no correspondence will be made to withdraw such specific contradictory conditions

SL. No.	Clause No. of Specification	Particulars of deviation	Remarks

Date Place

#### **ANNEXURE – A-10** DEVIATION FROM THE COMMERCIAL CONDITION OF CONTRACT

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The bidder shall enter below, departure if any, from the conditions of contract as herein. If a bidder has quoted 'NIL' deviations in the bid, this will have an overriding effect on any other conditions noted as deviations elsewhere in the bid and no correspondence will be made to withdraw such specific contradictory conditions.

SL. No.	Clause No. of Specification	Particulars of deviation	Remarks

Date Place

#### ANNEXURE – A-11 COMPLETION SCHEDULE FOR SUB-STATION & ASSOCIATED EHV LINE

We hereby declare that following work completion schedule shall be followed by us in execution of the subject project for the period commencing from the date of handing over of site to us:

TR-20/05

S.No.	DESCRIPTION OF WORK	Period in	months from	Dates	calendar
		date of har	nding over of	monthwise	
		site			
		Commenc	Completion	From	То
		ement	-		
FOR	EHV TRANSMISSION LINE		L	L	
1.	Establishment of site office & stores.				T
2.	Supply of stubs, form Boxes Etc.				
3.	Supply of Tower Parts & GI Nut Bolts.				
4.	Supply of Disc Insulators, conductor,				
	groundwire, Strinsging Hardware etc.				
5.	Survey				
6.	Foundation Work				
7.	Tower Erection.				
8	Stringing				
9	Testing & Commissioning of line				1
FOR	EHV SUB-STATION		L	L	1
1.	Submission of PERT char, sub-station				
	layout & elevation drawings, detailed				
	engineering equipment drawings, earthing of				
	S/S etc.				
2.	Constn. of Civil foundation work of				
3.	equipments & structure, etc. Constn.of Control room building & other				
5.	switch yard civil works etc				
4.	Supply of structure & switch yard equipment				
	including stringing material etc.				
5.	Supply of control room equipments, control				
	cables etc.				
6.	Supply of T&P, furniture, ADLS, etc.				-
7.	Erection of structures/equipments in switch yard				
8.	Erection of control room equipments etc.				
9.	Testing & Commissioning of equipments etc.				
2.	resung & Commissioning of equipments etc.			[	<u> </u>

NOTE:- <u>Bar chart showing the commencement and completion of various activities indicated above for</u> completion of substation & line shall be furnished alongwith this schedule with the bid.

Place

#### ANNEXURE – A -12 LITIGATION HISTORY OF THE BIDDER

(To be furnished for Sole bidder/Lead Partner as well as other Partner of JV)

Name of the bidder:

The bidder should provide detailed information on any litigation or arbitration arising out of contracts completed or under execution by it over the last five years. A consistent history of awards involving litigation against the bidder or any partner of JV may result in rejection.

Year	Name of client, cause of litigation/ arbritration and matter in dispute	Details of contract and date	Award for or against bidder	Disputed amount (current value in Rs.)
1				
2				
3				
4				
5				

Date

Place

SIGNATURE OF BIDDER NAME DESIGNATION (SEAL)

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#### CASH FLOW REQUIREMENT

#### A. FINANCIAL RESOURCES

Proposed sources of financing: Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of crfeit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specificed in section-I, clause-(3) (Prequalifying requirements).

	Source of financing	Amount (Rs.)
1.		
2.		
3.		
	Total	

#### B. CURRENT CONTRACT COMMITMENTS/ WORKS IN PROGRESS

Bidders and each member of JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

	Current Contract Commitments					
S.	Name of	Employer's	Value of	Estimated	Average Monthly	
No.	Contract	Contact Address,	outstanding	Completion	Invoicing Over Last	
		Tel, Fax	Work	Date	Six Months	
			[Rs.]		[Rs.]	
1.						
2.						
3.						
4.						
5.						
	Total					

Note: The net availability should not be less than Rs. 8.78 Cr.

Date:

Signature	:		
Name	:		
Status	:		
~			

Seal of the Tendering Co. :

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#### EXPERIENCE IN FABRICATION AND SUPPLY OF TOWERS. (INFORMATION SHALL BE GIVEN IN RESPECT OF 220 KV DCDS & ABOVE TOWERS IN LAST THREE FINAICIAL YEARS)

S.No.	Particulars	Name of the Utility
1.	Name Of The Line And Its Voltage Class.	
2.	Address Of Order Placing Authority.	
3.	Order No. & Date	
4.	Value Of The Order	
5.	No. & Type Of Towers Fabricated And Supplied.	
6.	Tonnage Of Towers Supplied During last three years :- i. ii. iii.	
7.	Remark.	

Date:

Signature

Name :

Status :

Seal of the bidder Co. :

#### EXPERIENCE IN ERECTION OF 220 KV/132KV/110KV & ABOVE TRANSMISSION LINES ON TURN KEY WITH SUPPLY OF ALL MATERIAL (COMPLETED WORKS, WHICH ARE IN SUCCESSFUL OPERATION FOR A PERIOD OF NOT LESS THAN 01 YEAR).

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S.No	Particulars	Name of the Utility
1.	Name Of The Line And Its Voltage Class.	
2.	Double Circuit Or Single Circuit.	
3.	Address Of The Order Placing Authority.	
4.	Order No. & Date	
5.	Scheduled date of completion as per order	
6.	Whether time extn. has been granted	
7.	Value Of The Order.	
8.	Length Of The Line.	
9.	Please Indicate Work-Wise Details.	
10.	Scope Of The Work And Activity Completed.i.Survey (Full/Part)ii.Soil Investigation (Full/Part)iii.Foundation (Full/Part)iv.Tower Erection (Full/Part)v.Stringing (Full/Part)vi.Supply of tower and line materialsvii.Supply of ACSR Conductorviii.Supply of Disc Insulatorsix.Supply of Stringing Hardware	
11.	Month And Year of commencement and Completion of Erection Work.	
12.	Remark.	

Date:

Signature :

Place :

Name :

Designation :

#### Seal of the bidder

# Proforma for Joint Deed of Undertaking by the Tower Manufacturer alongwith the Bidder/Contractor

(To be executed on non-judicial stamp paper worth Rs.300/- with a revenue stamp worth Rs.1/- affixed thereon).

AND WHEREAS Clause No...... Qualifying requirements as on the date of tender opening, Sub Section (III) technical Experience, Section (ii) (Manufacturing facilities), forming part of the Bidding Documents inter-alia stipulates that the Bidder and/or Manufacturer must fulfil the Qualifying Requirements and be jointly and severally bound and responsible for the quality and timely supply of tower parts in the event the Bid submitted by the Bidder is accepted by the Employer resulting in a Contract.

AND WHEREAS the Bidder has submitted its Bid to the Employer vide Proposal No..... dtd..... based on tie-up with the Tower Manufacturer for supply of tower parts.

#### NOW THEREFORE THIS UNDERTAKING WITNESSED as under :-

1.0 In consideration of the award of Contract by the Employer to the Bidder (hereinafter referred to as the "Contract") we, the Tower Manufacturer and the Bidder/Contractor do hereby declare that we shall be jointly and severally bound unto the Chhattisgarh State Power Transmission Co. Ltd., for the manufacturer, testing, supply of tower parts on FOR destination delivery at site basis in accordance with the Contract Specification.

2.0 Without in any way affecting the generality and total responsibility in terms of this Deed of Undertaking, the Tower Manufacturer hereby agrees to depute their representatives from time to time to the Employer's Project site as mutually considered necessary by the Employer, Bidder/Contractor and the Tower Manufacturer to ensure proper quality, manufacturer, testing and supply on FOR destination delivery at site basis and successful performance of the material in accordance with Contract Specifications. Further, if the Employer suffers any loss or damage on account of non-performance of the material (tower parts) fully meeting the performance guaranteed as per Bid Specification in terms of the contract. We the Tower Manufacturer and the Contractor

jointly and severally undertake to pay such loss or damages to the Employer on its demand without any demur.

3.0 This deed of Undertaking shall be construed and interpreted in accordance with the laws of India and Courts in Raipur shall have exclusive jurisdiction in all matters arising under the Undertaking.

4.0 We, the Tower Manufacturer/bidder/Contractor agree that this Undertaking shall be irrevocable and shall form an integral part of the Contract and further agree that this Undertaking shall continue to the enforceable till the Employer discharges it. It shall become operative from the effective date of Contract.

IN WITNESS WHEREOF, the 'Tower Manufacturer and/or the Bidder/Contractor have through their Authorized Representatives executed these presents and affixed Common seals of their respective Companies, on the day, month and year first above mentioned.

(For Tower Manufacturer)

M/s.\_\_\_\_\_

#### WITNESS

1.	1.	Signature	Signature
	2.	Name	Name
	3.	Address	Designation

(Common Seal of Company)

(For Bidder)

2. 1. Signature .....

M/s

- 2. Name .....
- 3. Address .....

Signature
Name
Designation

(Common Seal of Company)

TR-20/05

#### **PROFORMA FOR AGREEMENT**

#### (To be executed on non judicial stamp paper worth Rs.300/- only with a revenue stamp of Rs. 1/affixed on it)

This Agreement is made this \_\_\_\_\_ day of \_\_\_\_\_\_ between Shri \_\_\_\_\_\_ on behalf of the Contractor \_\_\_\_\_\_ (hereinafter called the Contractor which expression shall where the context so admits, be deemed to include his heirs, executors, administrators and representatives) of the one part, and the Chhattisgarh State Power Transmission Company Limited, Raipur being the Company constituted under Companies Act, 1956, (hereinafter called the CSPTCL which expression shall, where the context so admits, be deemed to include its successors in office and permitted assigns) of the other part.

WHEREAS in accordance with a Tender no. \_\_\_\_\_ dtd. \_\_\_\_\_ issued by Chief Engineer (P&P) of the CSPTCL, the Contractor submitted his tender dated \_\_\_\_\_ for

# Package for construction of 220/132/33 KV sub-station at Daldalseoni (Raipur) and associated 220 KV DCDS Raita-Daldalseoni line

All these works on turnkey basis more particularly described, mentioned, enumerated or referred to in the general conditions, specifications, schedules, drawings etc. forming part of tender, covering letters, schedule of prices and further correspondence, a copy of which is hereto annexed and is for purposes of identification signed by the contractor \_\_\_\_\_\_ on behalf of the contractor and Chief Engineer (P&P) of CSPTCL and all of which shall be deemed to form part of this agreement as though separately set out herein and are included in the expression "Contract" herein used (herein after referred to as the said works).

AND WHEREAS the CSPTCL has accepted the tender of the Contractor vide following separate work Orders which have been placed by CSPTCL for construction of aforesaid works on turnkey basis for the total net price of \_\_\_\_\_\_ upon the terms and subject to the condition hereinafter mentioned.

NOW THEREFORE THIS AGREEMENT WITNESSES AND IT IS hereby agreed as follows:

- 1. The contractor shall undertake following works :
  - (i) Supply for design, supply of galvanising steel structure for equipments, gantry, bus and lighting towers etc. for supply of Transformer, all switchyard & control room equipments with recommended spares, and supply of testing equipments, T&P and furniture etc. for new ...... S/S at ......
  - (ii) The contractor shall perform civil works like construction of control room building, construction of earth pits, construction of concrete works, RCC works, Cable trenches, Sanitation and water supply arrangement, excavation, back filling, yard levelling /metalling, peripheral fencing with iron gates of the switch yard, foundations of all equipment/structures and all other works detailed in the respective work order.
  - (iii) Erection, testing & commissioning of all the equipment of all the substations as detailed in the respective orders.
  - (iv) Supply of tower parts and all associated line accessories and complete erection of transmission line.

within the time specified in and in accordance with the terms and conditions specified in the CSPTCL aforesaid Work Orders.

2. The contractor shall commence the works described in the Notice Inviting Tender No. 02-04/NIT/TR-....., dated ....., namely, the construction of 220/132/33 KV Sub-station ..... & EHV lines [collectively, the "Works"], simultaneously and thereafter execute the works in parallel in accordance with the completion schedule submitted in the format set out in Annexure A-11 of Section IV (Annexures, Schedules & forms), Volume I of the Tender Specifications No. TR-20/05, read with the PERT Network / Bar Chart submitted in accordance with clause 3.2 of the General Conditions of Contract for Sub-station Work and clauses 58 of the General Conditions of Contract for EHV Line [collectively, the "Schedule"]. The Works shall be completed by the contractor on turnkey basis not later than **...... calender months** from the date the contractor is handed over the site for construction of the Sub-station. In the event the contractor fails to undertake the Works in accordance with the Schedule, the contractor may be liable for penalty at the discretion of CSPTCL in terms of clause 7 of the General Conditions of Contract for Sub-station work and clause 6 of the General Conditions of Contract for EHV Line.

- 3. In the event of a conflict or contradiction between: (a) any provision(s) in this agreement and any provision(s) in the Tender Specifications No. TR-20/05, i.e. the tender document, the provision(s) of this agreement shall prevail to the extent of such conflict, and (b) two or more provisions in the tender document, the provision(s) laying down more stringent obligations on the contractor shall prevail."
- 4. For the work done under the scope of the CSPTCL Work Orders referred above, the CSPTCL shall pay to the Contractor a total sum of Rs. \_\_\_\_\_ (In words Rupees \_\_\_\_\_ \_\_\_\_

\_) or such other sum as may become payable in accordance with the said work order.

- 5. If at any time, any question, dispute or difference whatsoever arises between CSPTCL and the contractor upon, in relation with or in connection with this contract either party may forthwith give the other party a notice in writing of the existence of such question, dispute or difference and same shall be referred to the adjudication of three Arbitrators one to be nominated by CSPTCL, the other by the Contractor and third to be appointed by the two Arbitrators nominated by the parties at the commencement of arbitration proceedings and failing agreement between them, in accordance with the Arbitrator. The award so passed shall be binding on both the parties. The place of arbitration shall strictly be RAIPUR CG.
- 6. In all matters arising under out of or in relation with this agreement, the terms and conditions contained in the aforesaid Work Orders shall apply and all such matters shall be determined accordingly.
- 7. This agreement shall be deemed to be entered into at Raipur and all disputes and claims, if any, out of or in respect of this Agreement are to be settled at Raipur or be subject to jurisdiction of competent court situated in Chhattisgarh State.

IN WITNESS whereof the parties hereto have signed this agreement on the dates and year mentioned against their respective signature.

Signature of Witness :	Name & Signature for Contractor
1. Signature :	Signature
Address :	(On behalf of the Contractor)
	Name :
Signature :	Designation :
Address :	Seal
Signature of Witnesses :	
1	Signature
	(On behalf of CSPTCL)
2	Name
	Designation

#### ANNEXURE – A- 18 PROFORMA FOR BANK GUARANTEE TOWARDS SECURITY DEPOSIT

#### (To be executed on non-judicial stamp paper of Rs. 250/- and Revenue stamp may be affixed on Bank Guarantee)

TR-20/05

Bank Guarantee No..... Dated.....

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

This agreement should be valid and binding on this bank up to and including \_\_\_\_\_\_ 20\_\_ or for such further period as may here under be mutually fixed from time to time in writing by the Chhattisgarh State Transmission Company Ltd. And the contractor shall not be terminable by notice or any change in the constitution of the aforesaid bank or the firm of Contractors or by any others reasons whatsoever and the Banker's liability hereunder shall not be impaired or discharged by any extension of time or variations or alteration made, given conceded or agreed to with or without the Bank knowledge or consent by or between the Chhattisgarh State Transmission Company Ltd. and contractor in the existing and / or further tenders and / or contracts.

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

Authorized Signatories of Bank

WITNESSES:-

SIGNATURES

2	IOr	Вапк
<b>n</b>	£	Bank
1	Signed	
	Authorized S	ignatories of Balik

#### ANNEXURE – A- 19 PROFORMA FOR BANK GUARANTEE TOWARDS PERFORMANCE

(To be executed on non-judicial stamp paper of Rs. 250/- and Revenue stamp

may be affixed on Bank Guarantee)

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

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

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

This agreement should be valid and binding on this bank upto and including \_\_\_\_\_\_ 20\_\_\_\_ of for such further period as may hereunder be mutually fixed from time to time in writing by the Chhattisgarh State Transmission Company Ltd. And the contractor and shall not be terminable by notice or any change in the constitution of the aforesaid bank or the firm of Contractors or by any others reasons whatsoever and the Banker's liability hereunder shall not be impaired or discharged by any extension of time or variations or alteration made, given conceded or agreed to with or without the Bank knowledge or consent by or between the Chhattisgarh State Transmission Company Ltd. and contractor in the existing and / or further tenders and / or contracts.

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

under. WITNESSES:-

SIGNATURES Authorized Signatories of Bank

2.	 for	Bank
~	· · · · · · · · · · · · · · · · · · ·	D 1
Ι.	 Signed.	

#### ANNEXURE – A- 20 PROFORMA FOR BANK GUARANTEE FOR LOSS/DAMAGE TO CSPTCL

TR-20/05

NOTE FOR BIDDERS: (Not to be typed in the Bank Guarantee) To be furnished in non-judicial stamp paper of Rs. 250 applicable as per MP/ Chhattisgarh Duty Act from any Nationalised /Scheduled Bank with a revenue stamp worth Rs.1/- affixed thereon).

- 1. We \_\_\_\_\_ Bank (herein after referred to as "the Bank") at the request of \_\_\_\_\_\_ contractor(s) do hereby undertake unequivocally and unconditionally to pay to CSPTCL, an amount not exceeding Rs. \_\_\_\_\_\_ (Rs. \_\_\_\_\_\_ Only) against any loss or damage caused to or suffered or would be caused to or suffered or would be caused to or suffered by CSPTCL by reason of any breach by the said Contractors(s) of any of the terms or conditions contained in the said agreement.
- 2. We\_\_\_\_\_\_ (indicate the name of the bank) Bank do hereby undertake to pay the amounts due and payable under this guarantee without any lemur, merely on a demand from CSPTCL stating that the amount claimed is due by way of loss or damage caused to or would cause to or suffered by CSPTCL by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said agreement or by reasons of the Contractor(s).
- 3. We, the \_\_\_\_\_\_\_ (indicate the name of the bank) do hereby further undertake unequivocally and unconditionally pay the amount due and payable under this Guarantee without demure, merely on demand from CSPTCL stating that the amount claimed is due by was of loss or damage caused to or would be caused to or suffered by CSPTCL by reason of each breach by the said Contractor(s) of any of the terms or conditions and failure to perform said Bid. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.\_\_\_\_\_.
- 4. We, the \_\_\_\_\_\_ (indicate the name of the bank) further agree that the guarantee herein contained shall remain in full force and effect during the aforesaid period of \_\_\_\_\_\_ days \_\_\_\_\_ and it shall continue to be so enforceable till all the dues of the CSPTCL under or by virtue of the said Bid have been fully paid and its claims satisfied or discharged or till Chief Engineer (P&P), CSPTCL certifies that the terms and conditions of the said Bid have been fully and properly carried out by the said Contractor(s) and accordingly discharge this guarantee. Unless a demand or claim under this discharges from all liability under this guarantee thereafter.
- 5. We, the \_\_\_\_\_\_\_ (indicate the name of the bank)further agree with the CSPTCL that CSPTCL shall have be fullest liberty without our consent and without affecting in any manner our obligations here under to vary any of the terms and conditions of the said Bid or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time only of the powers exercisable by CSPTCL against the said Contractor(s) and to forebear or enforce any of the terms and conditions relating to the said Bid and we shall not be relieved from our liability by reason of any such variation postpone or extension being granted to the said Contractor or for any forbearance, act or omission on the part of CSPTCL or any indulgence by CSPTCL to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

- 6. The beneficiary of this Bank Guarantee shall be Chhattisgarh State Power Transmission Company Limited, Raipur (A Successor Company of erstwhile CSEB Raipur). The proceeds / encashment of this Bank Guarantee would go in the name of Chhattisgarh State Power Transmission Company Limited, Raipur (A Successor company of erstwhile CSEB Raipur).
- 7. It is agreed to by the Bank with the CSPTCL that if for any reason a dispute arises concerning the Bank Liability to pay the requisite amount to the CSPTCL under the terms of this guarantee the competent court at Raipur alone shall have the jurisdiction to determine the said dispute and that this shall be without prejudice to the liability of the Bank under the terms of this guarantee being unequivocal and unconditional. The beneficiary of this Bank Guarantee shall be Chhattisgarh State Power Transmission Company Limited, Raipur (A Successor Company of erstwhile CSEB Raipur).
- 8. We, the \_\_\_\_\_\_ (indicate the name of the bank) lastly undertake not to revoke this Guarantee during its currency except with the previous consent of CSPTCL in writing.

Dated, the \_\_\_\_\_ days of \_\_\_\_\_\_.

WITNESS (SIGNATURE WITH NAME & ADDRESS)

1.

2.

For \_\_\_\_\_

(Indicate name of Bank)

#### PROFORMA FOR INDEMNITY BOND

### (To be executed on non-judicial stamp paper worth Rs.250/- with a revenue stamp worth Rs.1/- affixed thereon).

#### THIS INDEMNITY BOND is made this .....day of .....20.

And WHEREAS by virtue of Clause No...... of tender specification No....., the 'Contractor' is required to execute an Indemnity Bond in favour of Employer for the Material handed over to it by Employer for the purpose of performance of the Contract/Erection portion of the Contract (hereinafter called the 'Materials').

Now THEREFORE, This Indemnity Bond witnessed as follows:

- 2. That the 'Contractor' is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the Material at Employer project Site against all risks whatsoever till the Material are duly used/erected in accordance with the terms of the Contract and the Plant/Package duly erected and commissioned in accordance with the terms of the Contract, is taken over the Employer. The 'Contractor' undertakes to keep Employer harmless against any loss or damage that may be caused to the Material.
- 3. The 'Contractor' undertakes that the Material shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the Material shall be utilized for any other work or purpose whatsoever. It is clearly understood by the 'Contractor' that non-observance of the obligations under this Indemnity Bond by the 'Contractor' shall interalia constitute a criminal breach of trust on the part of the 'Contractor' for all intents and purpose including legal/penal consequences.
- 4. That Employer is and shall remain the exclusive Purchaser of the Material free from all encumbrances, charges or liens of any kind, whatsoever. The Material shall at all times be open to inspection and checking by the Purchaser's Representative or other employees/Agents authorized in this regard. Further, Employer shall always be free at all times to take possession of the Materials in whatever form the Materials may be, if in its opinion, the Materials are likely to be endangered, mis-utilized or converted to uses other than those specified in the contract by any acts of omission or commission on the part of the 'Contractor' or any other

person or on account of any reason whatsoever and the 'Contractor' binds himself and undertakes to comply with the directions of demand of EMPLOYER to return the Material without any demur or reservation.

- 5. That this Indemnity Bond is irrevocable. If at any time any loss or damage occurs to the Material or the same or any part thereof is mis-utilized in any manner whatsoever, then the 'Contractor' hereby agrees that the decision of the Purchaser's Representative as to assessment of loss or damage to the Material shall be final and binding on the 'Contractor'. The 'Contractor' binds itself and undertakes to replace the lost and/or damaged Material at its own cost and/or shall pay the amount of loss to Employer without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to Employer against the 'Contractor' under the Contract and under this Indemnity Bond.
- 6. NOW THE CONDITION of this Bond is that if the 'Contractor' shall duly and punctually comply with the terms and conditions of this Bond to the satisfaction of Employer, THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

IN WITNESS WHEREOF, the 'Contractor' has hereunto set its hand through its authorized representative under the common seal of the Company, the day, month and year first above mentioned.

For and on behalf of

		M/s
WITNESS		
1. 1. Signatu	ire	Signature
2. Name		Name
3. Address .		Designation
		Authorized representative
	ire	
2. Name		
		(Common Seal)
3. Address .		
		(In case of Company)
1)	Indemnity Bonds and	re to be executed by the authorized person having the Power of Attorney issued
	under common seal	of the company with authority to execute Indemnity Bonds. The Original Power
	of Attorney if it is s	specifically for this Contract or a Photostat copy of the Power of Attorney if it is
	General Power of A	ttorney and such documents should be attached to Indemnity Bond.

#### ANNEXURE - A-22

#### PROFORMA FOR DEED OF EXTENSION OF BANK GUARANTEE

(To be executed on N.J. Stamp Rs. 250/-+One Revenue Stamp worth Rs. 1/-)

Extension Deed No	
Date	

B.G. No. \_\_\_\_\_Date\_\_\_\_ C.S. Power Trasmission Company Ltd.

 Sub: The Extension of Bank Guarantee No. \_\_\_\_\_Dated \_\_\_\_\_for the Rs\_\_\_\_\_Favouring yourself expiring on \_\_\_\_\_.

i. At the request of our client M/s \_\_\_\_\_\_we hereby extend our Guarantee No.\_\_\_\_\_dtd.\_\_\_\_given on their behalf for the further period from\_\_\_\_\_to \_\_\_\_\_.

- The beneficiary of this Bank Guarantee shall be Chhattisgarh State Power Transmission Company Ltd (A Successor Company of CSEB).
- iii. Our liability under this guarantee is restricted to Rs\_\_\_\_\_ (Rupees ). This guarantee shall remain in force up to \_\_\_\_\_. Unless a demand to enforce a claim is made under this Bank Guarantee by the CSPTCL to the Bank within six months from the date i.e. up to the rights of the CSPTCL under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liability hereunder.

Witness:-

Signed for Bank

1)

2)

#### ANNEXURE -A-23

#### **PROFORMA FOR UNDERTAKING BY THE JOINT VENTURE PARTNERS**

(To be executed on Non-Judicial Stamp Paper worth Rs. 100.00 & Rs. 1.00 revenue stamps)

AND WHEREAS CSPTCL invited bids as per the above mentioned Specification for construction of .....stipulated in the bidding documents under Specification No **TR**-\_\_\_\_(*insert name of the project*)

AND WHEREAS Qualification Criteria of the specification stipulates that an Undertaking of not more than two firms as partners, meeting the requirements of Qualification Criteria, as applicable may bid, provided, the Joint Venture fulfills all other requirements of Qualification Criteria and in such a case, the Bid Forms shall be signed by both the partners so as to legally bind the Partners of the Joint Venture, who will be jointly and severally liable to perform the Contract and all obligations hereunder.

# The above clause further states that this Undertaking shall be attached to the bid and the Contract performance guarantee will be as per the format enclosed with the bidding document without any restrictions or liability for either party.

NOW THIS UNDERTAKING WITNESSETH AS UNDER:

In consideration of the above premises and agreements the parties of this Deed of Undertaking do hereby declare and undertake:

- 1. In requirement of the award of the Contract by the CSPTCL to the Joint Venture Partners, we, the Parties do hereby undertake that M/s..... shall act as "Lead Partner" and further declare and confirm that we the parties to the Joint Venture shall jointly and severally be bound unto the CSPTCL for the successful performance of the Contract and shall be fully responsible for the design, supply, erection, testing, commissioning and successful performance of the project in accordance with the Contract.
- 2. In case of any breach or default of the said Contract by the Lead Partner of the Joint Venture, the other partner do hereby undertake to be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.
- **3.** Further, if the CSPTCL suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the equipment/ material in meeting the performances guaranteed as per the specification in terms of the Contract, the Party(s) of these presents undertake to promptly make good such loss or damages caused to the CSPTCL, on its demand without any demur. It shall not be necessary or obligatory for the CSPTCL to proceed against Lead Partner to these presents before proceeding against or dealing with the other Party(s), CSPTCL can proceed against other partner who shall be jointly and severally liable for the performance and all other liabilities/obligations under the Contract to the CSPTCL.
- 4. The financial liability of the Parties of this Deed of Undertaking to the CSPTCL, with respect to any of the claims arising out of the performance or non-performance of the obligations set forth in this Deed of Undertaking, read in conjunction with the relevant conditions of the Contract shall, however not be limited in any way so as to restrict or limit the liabilities or obligations of any of the Partners of this Deed of Undertaking.
- 5. It is also understood that this Undertaking is provided for the purposes of undertaking joint and several liabilities of the partners to the Joint Venture for submission of the bid and performance of the Contract and that this Undertaking shall not be deemed to give rise to any additional liabilities or obligations, in any manner or any law, on any of the Parties to this Undertaking or on the Joint Venture, other than the express provisions of the Contract.

- 6. This Undertaking shall be construed and interpreted in accordance with the provisions of the Contract.
- 7. In case of an award of a Contract, we the parties to this Deed of Undertaking do hereby agree that we shall be jointly and severally responsible for furnishing a Contract performance security from a bank in favour of the CSPTCL in the currency/currencies of the Contract.
- 8. It is further agreed that this Deed of Undertaking shall be irrevocable and shall form an integral part of the bid and shall continue to be enforceable till the CSPTCL discharges the same or upon the completion of the Contract in accordance with its provisions, whichever is earlier. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF, the Parties to this Deed of Undertaking have through their authorized representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above.

Seal of	For "Lead Partner"
has been affixed in my/ our	For and on behalf of M/s
presence pursuant to Board of	
Director's Resolution dated	
Name	(Signature of the authorized
Designation	Representative)
Signature	
WITNESS :	
I	
II	
Seal of	For "other Partner"
has been affixed in my/ our	For and on behalf of
presence pursuant to Board of	M/s
Director's Resolution dated	
Name	(Signature of the authorized
Designation	representative)
Signature	
WITNESS :	
I	

Note :

II. .....

- 1. The non-judicial stamp papers of appropriate value shall be purchased in the name of Joint Venture and the date of purchase should not be later than six months of date of execution of the Undertaking.
- 2. The Undertaking shall be signed on all the pages by the authorized representatives of each of the partners and should invariably be witnessed.

#### ANNEXURE -A-24

#### **PROFORMA FOR POWER OF ATTORNEY FOR JOINT VENTURE**

(To be executed on Non-Judicial Stamp Paper worth Rs. 100.00 & Rs.1.00 revenue stamps)

- i) To submit proposal and participate in the aforesaid Bid Specification of the CSPTCL on behalf of the "Joint Venture".
- ii) To negotiate with the CSPTCL the terms and conditions for award of the Contract pursuant to the aforesaid Bid and to sign the Contract with the CSPTCL for and on behalf of the "Joint Venture".
- iii) To do any other act or submit any document related to the above.
- iv) To receive, accept and execute the Contract for and on behalf of the "Joint Venture".

It is clearly understood that the Lead Partner shall ensure timely execution of the Contract. In case of any breach of contract by any of the joint venture/consortium partners during execution of the contract, it will be the sole discretion of CSPTCL to allow the other partner to complete the work or to terminate the total contract.

It is expressly understood that this Power of Attorney shall remain valid binding and irrevocable till completion of the Maintenance Period in terms of the Contract.

The Joint Venture hereby agrees and undertakes to ratify and confirm all the whatsoever the said Attorney/Authorized Representatives/Partner in-charge/Lead Partner quotes in the bid, negotiates and signs the Contract with the CSPTCL and/or proposes to act on behalf of the Joint Venture by virtue of this Power of Attorney and the same shall bind the Joint Venture as if done by itself.

For and on behalf of the Partners of Joint Venture

.....

.....

The Common Seal of the above Partners of the Joint Venture:

 The Common Seal has been affixed there unto in the presence of:

 WITNESS

 1. Signature.

 Name

 Designation

 Occupation

 Occupation

#### Note:

- 1. The non-judicial stamp papers of appropriate value shall be purchased in the name of Joint Venture and the date of purchase should not be later than six months of date of execution of the Agreement.
- 2. The Agreement shall be signed on all the pages by the authorized representatives of each of the partners and should invariably be witnessed.

#### ANNEXURE-A-25 PRE-CONTRACT INTEGRITY PACT

TR-20/05

#### (To be executed on non judicial stamp paper worth Rs 300/-)

#### 1. <u>GENERAL</u>

- 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 power company an undertaking of Govt. of CG, performing its function on behalf of the Government of Chhattisgarh.

#### 2. <u>OBJECTIVES</u>

- 2.1 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:-
- 2.2 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
- 2.3 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. <u>COMMITMENTS OF THE BUYER</u>

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 of 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. <u>COMMITMENTS OF BIDDERS</u>

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 biding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
- 4.2. The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage, or inducement to any official of the BUYER or otherwise in procuring the Contract of forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the CSPTCL for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the CSPTCL.
- 4.3. The BIDDER further confirms and declares to the BUYER that the BIDDER in the original Manufacture/Integrator/Authorized government sponsored export entity of the stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the BUYER or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 4.4. The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payment he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 4.5. The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 4.6. The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 4.7. The BIDDER shall not use improperly, for purpose of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposal and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 4.8. The BIDDER commits to refrain from giving any compliant directly or through any other manner without supporting it with full and verifiable facts.
- 4.9. The BIDDER shall not instigate or cause to instigate any third person to commit any of the acts mentioned above.

#### 5. <u>PREVIOUS TRANSGRESSION</u>

- 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. <u>EARNEST MONEY (SECURITY DEPOSIT)</u>

- 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 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 complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and BUYER, including warranty period, whichever is later.
- 6.3. In the case of successful BIDDER a clause would also be incorporated in the Article pertaining to Performance Bond in the Purchase Contract that the provisions of Sanctions for violation shall be applicable for forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 6.4. No interest shall be payable by the BUYER to the BIDDER on Earnest Money/Security Deposit for the period of its currency.

#### 7. <u>SANCTIONS FOR VIOLATIONS</u>

- 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 sum 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 at 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 sum paid in violation of this Pact by BIDDER(s) to any middlemen or agent or broken with a view to securing the contract.
  - (ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.
  - (x) If the BIDDER or any employee of the BIDDER or any person action on behalf of the BIDDER, either directly or indirectly, is closely related to any of the officers of the BUYER, or alternatively, if any close relative of an officer of the BUYER has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the

time of filling of tender. Any failure to disclose the interest involved shall entitle the BUYER to rescind the contract without payment of any compensation to the BIDDER.

The term 'close relative' for this purpose would mean spouse whether residing with the Government servant or not, but not include a spouse separated from the Government servant by a decree or order of a competent court; son or daughter or step son or step daughter and wholly dependent upon Government servant, but does not include a child or step child who is no longer in any way dependent upon the Government servant or of whose custody the Government servant has been deprived of by or under any law; any other person related, whether by blood or marriage, to the Government servant or to the Government servant's wife or husband and wholly dependent upon Government servant.

- (xi) The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the BUYER, and if he does so, the BUYER shall be entitled forthwith to rescind the contract and all other contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
- 7.2.1. 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. <u>INDEPENDENT MONITORS</u>

- 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 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 situations.

#### 9. FACILITATION OF INVESTIGATION

In case of any allegation of violation of any provision of this fact or payment of commission, the BUYER or its agencies 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 follow in accordance with the provisions of any other law in force relating to any civil are criminal proceeding.

#### 12. <u>VALIDITY</u>

- 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 BIDDER	
Name of Officer	CHIEF EXECUTIVE OFFICER
Destination Department/PSU	
Witness	Witness
1)	1)
2)	2)
۷)	<i>2)</i>

#### ANNEXURE- A- 26 <u>INSPECTION PLAN FOR S U B-S T A T I O N</u> <u>EQUIPMENTS</u>

TR-20/05

No.	Particular	CSPTCL Inspection	Contractor Inspection
1.	160 MVA, 220/132/33 KV, Xmer with Oil &	Yes	
	Accessories		
2.	63 MVA, 132/33 KV, Xmer with Oil & Accessories	Yes	
3.	220 KV SF <sub>6</sub> circuit breaker with structure complete	Yes	
4.	Lightning Arrestor 198 KV	Yes	
	220 KV COMMUNICATION EQUIPMENT		
5.	Capacitance voltage transformer	Yes	
6.	FOTE & other related materials/ equipments	Yes	
7.	Wave trap	Yes	
8.	Carrier Cabinet (double Channel) with protection coupler	Yes	
9.	LMU (phase to phase coupling)	Yes	
10.	EPAX (Exchange for 24 lines)	Yes	
11.	Electronic Push Button telephone with Priority Key	105	
12.	220 KV Isolator (3- $\phi$ ) with earth switch	Yes	
13.	220 KV Isolator (3- $\phi$ ) without earth switch	Yes	
14.	220 KV Control and relay panel for 220 KV feeders, 160 MVA Transformer, Bus Tie, Transfer breaker & busbar	Yes	
15.	Solid core Insulators & Post insulators for bus bars & isolators etc. on 220 KV side		Yes
16.	132 KV SF <sub>6</sub> circuit breaker with structure complete	Yes	
17.	Lightning Arrestor 120 KV	Yes	
17.	132KV COMMUNICATION EQUIPMENT	105	
18.	Coupling Capacitor	Yes	
19.	Wave trap	Yes	
20.	Carrier Cabinet (double Channel) without protection		
20.	coupler	Yes	
21.	LMU (phase to phase coupling)	Yes	
21.	Isolator (3- $\phi$ ) with earth switch, 800 Amp	Yes	
22.			
<u>23.</u> 24.	Isolator (3-φ) without earth switch, 1200 Amp132 KV side C & R panel for 160 MVA, 63 MVA	Yes Yes	
	MVA, feeder, Transfer breaker, Busbar	105	
25.	132 KV Solid core Insulators & Post insulators for Isolators & Bus bars supports etc.		Yes
26.	33KV Vacuum Circuit Breaker with Structure	Yes	
20.	33 KV Current Transformers	Yes	
27.	33 KV Potential X'mer	Yes	
<u>28.</u> 29.	33 KV Lightning Arrestor	Yes	
<u> </u>	33 KV Isolator with insulators	Yes	
30.		168	Yes
	33 KV Solid core Insulator		1 68
32.	33 /0.415 KV, 500KVA/ 200 KVA Stn. Xmer (with Oil & Accessories)	Yes	
33.	36 KV, 12 MVAR Capacitor Bank (72 units + 8 spare),	Yes	
	complete		
34.	33 KV control & relay panel 63 MVA/ 40 MVA,	Yes	
	feeder, Transfer breaker, capacitor bank		
	CONDUCTOR, CLAMPS & CONNECTORS		1
35.	Zebra ACSR Conductor	Yes	
36.	Galvanised Steel Ground Wire 7/3.66 m.m.	Yes	

No.	Particular	CSPTCL Inspection	Contractor Inspection
37.	G.I. Flats for earthing		Yes
38.	Nuts & Bolts of Assorted Sizes		Yes
39.	Clamps Spacers etc. as per requirement	Yes	
40.	Disc Insulators & Hardwares	Yes	
41.	Armoured copper cable	Yes	
42.	Cable trays of various size		Yes
43.	Power Cables of various size	Yes	
44.	P LCC- Cables:-		Yes
	I. 10 pair jellified armoured telephone cables		Tes
45.	P LCC- Cables:-		Yes
	H F (Co-axial cable) cable $(125\Omega(Ohms))$		105
46.	Battery set: 220 V, 600 AH	Yes	
47.	Battery set: 48 V, 600 AH	Yes	
48.	Battery Charger: 220V, 600 AH	Yes	
49.	Battery Charger: 48 V, 600 AH	Yes	
50.	Illumination fittings & Accessories		Yes
51.	AC /DC boards & Junction Boxes		Yes
52.	G.I. Structure	Yes	
53.	Tools & Plant		Yes
54.	Furniture		Yes

#### ANNEXURE -A-27

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<b>ILLUSTRATIVE EXAMPLE FOR CAPITALISTION OF LOSSES</b>								
Particulars	Range Prescrided (KW)		Quoted by bidders					
		M/s A	M/s B	M/s C	M/s D	M/s E	M/s F	
A. For 160 MVA Transformer								
No Load loss (KW) offered	31.5-35	32.5	33.5	31	36	32	33	
Load loss (KW) offered	184.5-205	185.5	184.5	191.5	185	206	186	
Aux loss (KW) offered	4.5-5	4.4	4.7	4.6	4.6	4.6	5.1	
Diff No Load loss		1	2	0				
Diff Load loss		1	0	7	-			
Diff Aux loss		0	0.2	0.1		Bid non		
Captalistion for no load loss (Diff lossx4,01,840)		4,01,840	8,03,680	0 responsive	Bid non responsive due to excessive No	responsive due to	Bid non responsive due to excessive	
Captalistion for load loss (Diff lossx2,13,780)		2,13,780	0	14,96,460	load loss	excessive load loss	auxiliary loss	
Captalistion for Aux. loss (Diff lossx1,60,700)		0	32,140	16,070				
B. For 63 MVA Transform	er	1	1	1			L	
No Load loss (KW) offered	22.5-25	23.5	24.5	21.5	26	23	23.5	
Load loss (KW) offered	133-147.5	134	132	140	136	148.5	145.5	
Aux loss (KW) offered	2.3-2.5	2	2.1	2.4	2.3	2.5	2.7	
Diff No Load loss		1	2	0				
Diff Load loss		1	0	7				
Diff Aux loss		0	0.2	0.1		Bid non		
Captalistion for no load loss (Diff loss x Rs.4,01,840)		4,01,840	8,03,680	0	Bid non responsive due to excessive No	responsive due to	Bid non responsive due to excessive	
Captalistion for load loss (Diff loss x Rs.2,13,780)		2,13,780	0	14,96,460	excessive		auxiliary loss	
Captalistion for Aux. loss (Diff loss x Rs.1,60,700)		0	32,140	16,070				

#### ANNEXURE A-28 CHECK LIST (To be kept in Envelope-II)

S. No.	Items	Reference	Declaration (Strike-out whichever is not applicable)	Page No.
1.	Duly & properly filled Questionnaire	Annexure-A-3	Yes/No	
2.	Upload scanned copy of only price bid schedules duly filled in and signed with seal of firm in the specified folder along with the duly filled excel sheets of price schedules		Yes/No	
3.	Self-attested copies of audited balance sheets and profit & loss account statement of sole bidder/each partner of JV for last 5 financial years (i.e., FY 2015- 16 to FY 2019-20).		Yes/No	
4.	A certificate issued by chartered accountant showing 'Annual Turnover' for the last five financial years (FY 2015-16, 2016-17, 2017-18, 2018-19 & 2019-20) & 'Net worth' including assets and liability of the sole bidder/each partner of JV for the last three financial years (FY 2017-18, 2018-19 & 2019-20).	Annexure-A-6	Yes/No	
5.	A certificate issued by Chartered Accountant indicating details (break-up) of available 'Liquid assets' (LA) for sole bidder/each partner of JV.	Annexure-A-6	Yes/No	
6.	Cash flow requirement (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV)	Annexure A-13	Yes/No	
7.	Evidence of access to or availability of credit/facilities (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV in original)	Annexure-A-7	Yes/No	
8.	Certificate issued by Chartered Accountant (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV)	Annexure A-29	Yes/No	
9.	Declaration by the bidder (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV (Separately).	Annexure A-30	Yes/No	
10.	Self attested detailed order copy along with annexures containing BoQ/ scope of work in support of technical experience criteria of PQR as specified in clause-3.2 of Section-I of VolI of tender document: a) Name of 220 KV substation commissioned & name of order placing utility b) Name of 220 KV EHV line commissioned & name of order placing utility		Yes/No	
11.	Performance certificate for successful commissioning & satisfactory operation of above mentioned Sub- station & EHV line for a period of atleast one year (from the date of commissioning) indicating date of commencement of work and its commissioning (constructed by sole bidder / any of the partners) as on date of NIT of the instant tender. a) Name of performance certificate issuing utility.		Yes/No	
12.	Joint Deed of undertaking by the Tower Manufacturer alongwith the Bidder/ Contractor	Annexure A-16	Yes/No	
13.	Undertaking to be submitted by bidder regarding	Annexure A-31	Yes/No	

	tower manufacturer		
14.	Copy of Valid 'A' class Electrical Contractor License issued by CG anugyapanMandal/ CG state licensing board in the name of sole bidder / <b>lead partner</b> of the joint venture/ consortium <u>or</u> an undertaking to submit 'A' class electrical contractor license issued by C.G. AnugyapanMandal / CG State licensing Board within 30 days after issue of LOA, by the sole bidder or lead partner of the JV/consortium.		Yes/No
15.	Copy of EPF code number/ EPF registration No. allotted by EPF Commissioner in the name of the sole bidder / <b>Lead partner</b> of the JV		Yes/No
16.	Pre-contract Integrity pact in prescribed format	Annexure A-25	Yes/No
17.	Deviation from technical specification/ conditions	Annexure A-9	Yes/No
18.	Deviation from the commercial condition of contract	Annexure A-10	Yes/No
19.	Undertaking by the Joint Venture Partners	Annexure A-23	Yes/No
20.	Power of Attorney for Joint Venture	Annexure A-24	Yes/No
21.	Undertaking for Personnel Capabilities (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV) (Separately)	Annexure A-4	Yes/No
22.	Undertaking for Equipment Capabilities (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV (Separately)	Annexure A-5	Yes/No
23.	Power of attorney issued to legally authorised signatory		Yes/No
24.	Litigation History of the Bidder (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV (Separately)	Annexure A-12	Yes/No
25.	Certification by the Bidder as per order no. F.No.6/18/2019-PPD dated 23/07/2020 issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India (DoE Order) (In case of a Joint Venture bid, the declaration/ certification shall be given by all partners of the Joint Venture)	Annexure A-32	Yes/No

Date

Place

SIGNATURE OF BIDDER NAME DESIGNATION (SEAL)

# ANNEXURE – A-29

#### CERTIFICATE ISSUED BY CHARTERED ACCOUNTANT

(To be furnished for Sole bidder/Lead Partner as well as other Partner of JV in original) (Please ensure the language of the formate is maintained to avoid bid rejection)

Name of the bidder (Sole bidder/JV parteners) :

- a) All payment obligations (principal / Interest) on outstanding debentures (i.e. debentures which have not yet been redeemed) have been discharged and no such payment as on **31.12.2020** is outstanding / overdue.
- b) The bidding company is presently not in default in payment of any bank loan or interest thereon for more than three months or any loan account of the bidder has not been classified as NPA (Non performing assets) by the creditor/ lending bank as on date of issue of NIT.
- c) The bidding company is not going through the process of insolvency or liquidation as on the date of issue of NIT. Even, if at a later date up to placement of order against the instant tender, it comes to the notice of CSPTCL that the sole bidder/ any partner of JV has been going through the process of insolvency or liquidation, their bid will be rejected.

SIGNATURE OF CHARTERED ACCOUNTANT NAME (SEAL)

Date

Place

#### ANNEXURE – A-30 DECLARATION BY THE BIDDER

(To be furnished by Sole bidder/Lead Partner as well as other Partner of JV Separately) (Please ensure the language of the formate is maintained to avoid bid rejection)

Name of the bidder (Sole bidder/JV parteners) :

- 1) (Name of the bidder) M/s ..... is not debarred/ blacklisted by Bank/State Govt/Central Govt/State PSU/CPSU/SEB/ public utility as on date of issue of NIT.
- 2) All the documents/ statements/ attachments/ information submitted by (Name of the bidder) M/s..... in proof of the qualifying requirements are authentic / genuine /correct and in case, any of the said documents / statements / attachments / information is found to be false / fake / misleading, the bid will be disqualified and action will be taken as per relavent provisions of the tender.

Date Place SIGNATURE OF BIDDER NAME DESIGNATION (SEAL)

#### Annexure-31

#### UNDERTAKING TO BE SUBMITTED BY BIDDER REGARDING TOWER MANUFACTURER

---

We, M/s (bidder)...... do hereby undertake to fabricate, galvanize or outsource & to supply .......MT of ......KV Transmission line towers as per drawing and design of CSPTCL for the construction of Transmission line (name of line) of Chhattisgarh State Power Transmission Company Limited.

M/s.(Manufacturer)are	the	manufacturer	of	galvanized	transmission	line
towers, and if required we will out source				•••••	MT quanti	ty of
Tower from M/s						

The out sourcing of.....MT Tower will in no way affect the terms and conditions of the order including the completion period, Payment terms & Prices etc.

Date:

Place:

(1) Seal, address & Signature of Bidder

(2) Seal, address & Signature of Manufacturer

### **ANNEXURE-32**

#### Certification by the Bidder as per order no. F.No.6/18/2019-PPD dated 23/07/2020 issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India (DoE Order)

(In case of a Joint Venture bid, the declaration/ certification shall be given by all partners of the Joint Venture)

Bidder"s Name and Address:	To:	
Name:		Chief Engineer (Planning & Projects),
Address:		Chhattisgarh State Power Transmission Co. Ltd.
		Third Floor, SLDC Building, CSEB Campus
		Dangania, Raipur (C.G.)-492013

Dear Sir,

We have read and understood the provisions of Order no. F.No.6/18/2019-PPD (Order Public Procurement no.1) dated 23/07/2020 regarding "Restriction under Rule 144(xi) of General Financial Rules" and F.No.6/18/2019-PPD (Order Public Procurement no.2) dated 23/07/2020 regarding "Exclusion from Restrictions under Rule 144(xi) of the General Financial Rules" issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India [hereinafter collectively referred as "**DoE Order**""] and any subsequent modifications/Amendments, if any.

Particularly, we, the Bidder, have read the clause regarding restrictions on procurement from a "Bidder of a country which shares a land border with India" and on sub-contracting to contractors from such countries.

We certify that we, the bidder is/are not from such a country and will not subcontract any work to a subcontractor/sub vendor from such countries and is eligible to be considered.

Or

We certify that we, the bidder and/or our subcontractor/sub vendor is/are from such a country which shares a land border with India, as brought out in the aforementioned orders. We are registered with the competent authority as defined in the Ministry of Finance, Govt. of India vide order mentioned above & a self-attested copy of registration certificate issued by the competent authority is enclosed along with the bid.

Tick ( $\sqrt{}$ ) in the box ( ) as applicable

We further declare that any misrepresentation or submission of false/ forged document/ information in this regard shall be dealt with as per the provisions of Integrity Pact and/or Bidding Documents and/or CSPTCL"s policy and procedures.

Date:

Name:

Place:

Designation

# **SECTION-V**

# Vendor List

A

SN	Name of equipment		Name of the vendor
1	160 MVA Power Transformer 220 /132	1	M/s BHEL
1	/ 33 KV	2	M/s CGL
		3	M/s TELK Kerala
		4	M/s Areva / Alstom
		5	M/s ABB
		6	M/s EMCO, Thane
		7	M/s Siemens
		8	M/s Transformer & Rectifiers
2	Tan abangar for nowar transformar	9 1	M/s Bharat Bijlee Ltd. M/s BHEL
2	Tap changer for power transformer	2	M/s TELK
		2	M/s Easun MR
		4	M/s MR
		5	M/s CTR
3	245 KV SF6 Gas Circuit Breaker	1	M/s CGL Nasik
5		2	M/s Areva / Alstom
		3	M/s Siemens
		4	M/s ABB
		5	M/s BHEL
4	220 KV Current Transformer/ Potential	1	M/s CGL
	Transformer	2	M/s BHEL
		3	M/s Siemens
		4	M/s Areva / Alstom
		5	M/s ABB
		6	M/s TELK
		7	M/s SCT, Gaziabad
		8	M/s Hivoltrans
		9	M/s Mehru Elect & Mech Pvt. Ltd., Bhiwadi
5	220 KV C.V.T.	1	M/s CGL
		2	M/s ABB
		3	M/s Areva / Alstom
		4	M/s BHEL
		5	M/s Mehru Elect & Mech Pvt. Ltd., Bhiwadi
6	220 KV Isolator	1	M/s S&S power switchgear Ltd
		2	M/s HIVELM
		3	M/s GR Power, Hyderabad
		4	M/s Siemens
		5	M/s ABB
		6	M/s Areva / Alstom
		7	M/s Danke Electricals
		8	M/s Universal Isolators
		9	M/s Wigman
		10	M/s Engineers Enterprises,Jaipur
7	198 KV Lightning Arrestor	1	M/s CGL

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		2	M/s Elpro
		3	M/s Lamco Hyderabad
		4	M/s Oblum, Hyderabad
8	220 KV Wave Trap	1	M/s BPL
		2	M/s Areva / Alstom
		3	M/s Quality Power Electricals equipments Pvt. Ltd. Sangli
9	220 KV Control and Relay panel	1	M/s Areva / Alstom
	(without relay)	2	M/s Siemens
		3	M/s Easun Reyrolle
		4	M/s GE
		5	M/s Maktel Control, Vadodara
		6	M/s ABB
		7	M/s Danish Pvt. Ltd. Jaipur
10	Carrier Cabinet for 220 KV	1	M/s ABB, Mumbai (For protection, speech & telemetering)
		2	M/s BPL (For speech & telemetering only)
11	Disc Insulator-160 KN/ 120 KN/ 90KN/	1	M/s W.S. Insulators
	70 KN	2	M/s BHEL
		3	M/s Aditya / NGK Birla
12	220 KV Post Insulator	1	M/s W.S. Insulators
		2	M/s BHEL
		3	M/s Aditya / NGK Birla
		4	M/s Modern Insulators
		5	M/s Insulators & Electricals
		6	M/s Sarvana Global Energy Ltd.
		7	M/s CJI Porcelain (Pvt.) Ltd., New Delhi
13	Sub-station Hardwares/ Clamps &	1	M/s IAC Electrical, Kolkata
	connectors	2	M/s Rashtra Udyog
		3	M/s EMI Transmission Ltd., Thane
		4	M/s International Trasmission Product
		5	M/s Klemmen Engineering
		6	M/s Electro mech & transtech
		7	M/s Burma Electro
		8	M/s Aarpee & Associates
		9	M/s AK Power Industries Pvt. Ltd.
		10	M/s Supreme & Co. Kolkata
		11	M/s Tag Corporation, Chennai
		12	M/s Modern Malleable
		13	M/s Star Iron
		14	M/s Tyco
		15	M/s DAC
		16	M/s Eritech
		17	M/s Vinay industries, Rajanandgaon
		18	M/s NIKE Energy manufacturing, Varanasi (For hardwares only)

Note:-

(i) The names of the vendors are subject to further verification of various documents viz. valid type test report, ISI license (wherever applicable), drawing and GTP etc. at the time of approval for individual project.

The inclusion of names of various manufacturers in this list will not relieve the obligation of manufacturer / contractor for furnishing the aforesaid documents.

(ii) The name of manufactures whose performance is found unsatisfactory shall be deleted from vendor list.

Sl.No.	Name of equipment		Name of the vendor
1	63, 40 MVA, 132/33 KV Power	1	M/s BHEL
	Transformer	2	M/s CGL
		3	M/s TELK Kerala
		4	M/s Areva / Alstom
		5	M/s ABB
		6	M/s EMCO, Thane
		7	M/s Andrew Yule, Chennai
		8	M/s Bharat Bijilee, Mumbai
		9	M/s Toshiba T&D System India Pvt.Ltd.,
			Hyderabad (Formerly M/s Vijai Electricals)
		10	M/s Transformer & Rectifiers, Ahmedabad
		11	M/s Siemens, Gurgaon
		12	M/s. Technical Associates Ltd., Lucknow
		13	M/s ECE Industries Ltd., Sonepat (Haryana)
			(Only for 40 MVA 132/33 KV Power
			Transformer)
2	Tap Changer for Power	1	M/s BHEL
	Transformer	2	M/s TELK
		3	M/s Easun MR
		4	M/s MR
-		5	M/s CTR
3	132 KV SF6 Circuit Breaker	1	M/s CGL
		2	M/s ABB
		3	M/s Areva / Alstom
		4	M/s Siemens
4		5	M/s BHEL
4	132 KV Current Transformer/	1	M/s CGL
	Potential Transformers	2	M/s BHEL
		3	M/s ABB
		4	M/s Areva / Alstom
		5	M/s Siemens
		6	M/s SCT Ltd. Gaziabad
		7	M/s Vidyut Control System Secundrabad
		8	M/s Universal Magnoflux, Indore
		9	M/s TELK
		10	M/s Hivoltrans Elect.
		11	M/s Lamco Hyderabad (132 kV PT only)
		12	M/s Heptacare Power Ind.Meerut
		13	M/s Mehru Elect & Mech Pvt. Ltd., Bhiwadi
5	132 KV Coupling capacitors	1	M/s CGL
		2	M/s Areva / Alstom
		3	M/s ABB

#### (B) LIST OF APPROVED VENDORS FOR 132 KV SIDE EQUIPMENTS:

.....

	KV Isolators	$ \begin{array}{r} 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ \end{array} $	M/s S & S Power Switchgear, ChennaiM/s Hivelm, ChennaiM/s GR Power, HyderabadM/s GR Power, HyderabadM/s SiemensM/s ABBM/s Areva / AlstomM/s Power Line Accessories, RaipurM/s Danke Elect. Switchgears, VadodaraM/s. Elektrolites (Power)M/s Universal IsolatorsM/s VersatecM/s G K Electricals
		$ \begin{array}{r} 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ \end{array} $	M/s Hivelm, ChennaiM/s GR Power, HyderabadM/s GR Power, HyderabadM/s SiemensM/s ABBM/s Areva / AlstomM/s Power Line Accessories, RaipurM/s Danke Elect. Switchgears, VadodaraM/s. Elektrolites (Power)M/s Universal IsolatorsM/s Versatec
7 120		$ \begin{array}{r} 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ \end{array} $	M/s GR Power, HyderabadM/s SiemensM/s ABBM/s Areva / AlstomM/s Power Line Accessories, RaipurM/s Danke Elect. Switchgears, VadodaraM/s. Elektrolites (Power)M/s Universal IsolatorsM/s Versatec
7 120		4 5 6 7 8 9 10 11 12 13	M/s SiemensM/s ABBM/s Areva / AlstomM/s Power Line Accessories, RaipurM/s Danke Elect. Switchgears, VadodaraM/s. Elektrolites (Power)M/s Universal IsolatorsM/s Versatec
7 120		5 6 7 8 9 10 11 12 13	M/s ABBM/s Areva / AlstomM/s Power Line Accessories, RaipurM/s Danke Elect. Switchgears, VadodaraM/s. Elektrolites (Power)M/s Universal IsolatorsM/s Versatec
7 120		6 7 8 9 10 11 12 13	M/s Areva / AlstomM/s Power Line Accessories, RaipurM/s Danke Elect. Switchgears, VadodaraM/s. Elektrolites (Power)M/s Universal IsolatorsM/s Versatec
7 120		7 8 9 10 11 12 13	M/s Power Line Accessories, RaipurM/s Danke Elect. Switchgears, VadodaraM/s. Elektrolites (Power)M/s Universal IsolatorsM/s Versatec
7 120		8 9 10 11 12 13	M/s Danke Elect. Switchgears, VadodaraM/s. Elektrolites (Power)M/s Universal IsolatorsM/s Versatec
7 120		9 10 11 12 13	M/s. Elektrolites (Power) M/s Universal Isolators M/s Versatec
7 120		10 11 12 13	M/s Universal Isolators M/s Versatec
7 120		11 12 13	M/s Versatec
7 120		12 13	
7 120		13	W/S O K Licetheads
7 120			M/s Wigman
7 120			M/s Engineers Enterprises, Jaipur
7 120		14	W/s Engineers Enterprises, Jaipur
	KV Lightning Arrestor	1	M/s CGL
I I		2	M/s Oblum, Hyderabad
		3	M/s Elpro
8 132	KV Wave Trap	1	M/s Areva / Alstom
		2	M/s BPL
		3	M/s Quality Power, Sangli.
9 132	KV Control & Relay Panel	1	M/s Areva / Alstom
(with	out relays)	2	M/s Siemens
		3	M/s ABB
		4	M/s GE
		5	M/s ERL
		6	M/s Danish, Jaipur
		7	M/s Amara Raja
		8	M/s Venson, Bangalore
		9	M/s Maktel Control, Vadodara
		10	M/s Enpro Industrial Automation, Chennai
		11	Ms Schneider Electric
10 Carr	er Cabinet for 132 KV	1	M/s ABB, Mumbai (For protection, speech &
			telemetering)
		2	M/s BPL(For speech & telemetering only)
		3	M/s Puncom (Only for speech)
11 Disc	Insulators-90KN/70KN	1	M/s W.S. Insulator, Chennai
		2	M/s BHEL
		3	M/s Aditya/NGK Birla Kolkata
12 132	KV Post Insulators	1	M/s WS Insulators, Chennai
		2	M/s BHEL
		3	M/s Aditya/NGK Birla,Kolkata
		4	M/s Modern Insulator
		5	M/s Insulators & Electricals, Bhopal
		6	M/s Sarvana Global Energy Ltd.
		7	M/s CJI Porcelain (Pvt.) Ltd., New Delhi
13 Sub-	station Hardwares/ Clamps	1	M/s IAC Electrical, Kolkata
	nnectors	2	M/s Rashtra Udyog
		3	M/s EMI Transmission Ltd., Thane
		4	M/s International Trasmission Product
		5	M/s Klemmen Engineering

7	M/s Burma Electro
8	M/s Aarpee & Associates
9	M/s AK Power Industries Pvt. Ltd.
10	M/s Supreme & Co. Kolkata
11	M/s Modern Malleable
12	M/s Tag Corporation, Chennai
13	M/s Star Iron
14	M/s Tyco
15	M/s DAC
16	M/s Eritech
17	M/s Vinay industries, Rajanandgaon
18	M/s NIKE Energy manufacturing, Varanasi
	(For hardwares only)

## (C) LIST OF APPROVED VENDORS FOR 33 KV SIDE EQUIPMENTS

Sl.No.	Name of equipment	<u> </u>	Name of the vendor
1	33 KV Vacuum Circuit Breaker	1	M/s CGL
		2	M/s Siemens
		3	M/s BHEL
		4	M/s Areva / Alstom
		5	Ms Schneider Electric
2	33 KV Current Transformer /	1	M/s CGL
	Potential Transformer	2	M/s Laxmi Engineering
		3	M/s SCT, Gaziabad
		4	M/s Vidyut Control
		5	M/s Universal Magno Flux, Indore
		6	M/s Heptacare Power Ind,Meerut
		7	M/s Hivoltrans Elect.
		8	M/s Mehru Elect & Mech, Bhiwadi
		9	M/s Epitrans(for CT only)
		10	M/s Kapco(for PT only)
		11	M/s GYRO
		12	M/s Ambarnath
3	33 KV Isolators	1	M/s S & S PowerSwitchgear, Chennai
		2	M/s Hivelm, Chennai
		3	M/s GR Power, Hyderabad
		4	M/s Siemens
		5	M/s ABB
		6	M/s Areva / Alstom
		7	M/s Power line Accessories, Raipur
		8	M/s Danke Elect.Switchgears, Vdr
		9	M/s. Elektrolites (Power) Pvt Ltd, Jaipur
		10	M/s GK Electricals Bhopal
		11	M/s Universal Isolators
		12	M/s Wigman
		13	M/s High tension Howrah
		14	M/s Versatec
ļ		15	M/s Engineers Enterprises , Jaipur
4	33 KV Lightning Arrestor	1	M/s CGL
		2	M/s Oblum, Hyderabad
		3	M/s Elpro
		4	M/s Elektrolite power pvt Ltd Jaipur
5	33 KV Control & Relay Panel	1	M/s Areva / Alstom

	(without relays)	2	M/s Siemens
	(	3	M/s ABB
		4	M/s GE
		5	M/s ERL
		6	M/s Danish, Jaipur
l		7	M/s Amara Raja, Tirupati
		8	M/s System Electronics Ltd.
		9	M/s Maktel Control, Vadodara
		10	M/s Venson, Bangalore
		11	M/s Enpro Industrial Automation, Chennai
		12	M/s Hertz Electronics
		13	Ms Schneider Electric
6	Disc Insulators-90KN/70KN	1	M/s W.S. Insulator, Chennai
		2	M/s BHEL
		3	M/s Aditya/NGK Birla,Kolkata
		4	M/s Bikaner Ceramics, Bikaner
7	33 KV Post Insulators	1	M/s WS Insulators, Chennai
		2	M/s BHEL
		3	M/s Aditya/NGK Birla,Kolkata
		4	M/s Modern Insulator
		5	M/s Insulators & Electricals
		6	M/s Sarvana Global Energy Ltd.
		7	M/s CJI Porcelain (Pvt.) Ltd., New Delhi
8	Sub-station Hardwares/ Clamps &	1	M/s Rashtra Udyog
	connectors	2	M/s IAC Electrical, Kolkata
		3	M/s Electromech & Transtech, Kolkata
		4	M/s Klemmen
		5	M/s International Trasmission Product
		6	M/s Burma Electro
		7	M/s Aarpee & Associates, Kolkata
		8	M/s AK Power Industries Pvt. Ltd.
		9	M/s Supreme & Co. Kolkata
		10	M/s EMI Transmission Ltd., Thane
		11	M/s Modern Malleable
		12	M/s Tag Corporation, Chennai
		13	M/s Star Iron
		14	M/s Tyco
		15	M/s DAC
		16	M/s Eritech
		17	M/s Vinay industries, Rajnandgaon
		18	M/s NIKE Energy manufacturing, Varanasi
			(For hardwares only)

## (D) LIST OF APPROVED VENDORS FOR OTHER COMMON EQUIPMENTS/ MATERIAL

SN	Name of equipment		Name of the vendor
1	Energy Meters	1	M/s Secure Meters Ltd. (SEMS)
2	Relays for 400 KV & 220 KV - Distance	1	M/s Areva / Alstom
	(Numerical), Differential & REF	2	M/s Siemens
	(numerical), Bay control Unit, Bus bar	3	M/s ABB
	Protection, Gateway, O/C & E/F, other	4	M/s GE
	protective trip and Auxiliary relay,	5	M/s SEL
	SCADA / SAS)	6	Ms Schneider Electric
3	Relays for 132 KV & 33 KV -Distance	1	M/s Areva / Alstom

$(N_{\text{Lementian}})$ $(M_{\text{Lementian}})$ $(M_{\text{Lementian}})$	······
(Numerical), differential & REF 2 M/s Siemens	
(numerical), Over Current / Earth Fault, <u>3 M/s ABB</u>	
other protective, trip and Auxiliary relays 4 M/s GE	
for 132 KV & 33 KV. 5 M/s SEL	
6 M/s Easun Reyrolle	
7 Ms Schneider Electric	
4 Ethernet Switch 1 M/s Ruggedcom	
2 M/s CISCO	
3 M/s Hirschmann	
4 M/s Masibus	
5 Annunciator Relay 1 M/s Alan	
2 M/s Bhrani	
3 M/s Minilec	
4 M/s JVS	
6 Time Synchronizing Unit 1 M/s Arbiter	
2 M/s SEL	
3 M/s Signal & System	
4 M/s MEINBERG	
7 LT Power & Control Cable (Armoured 1 M/s Universal Cables Ltd	d,Satna
and Unarmoured) 2 M/s Finolex	
3 M/s Torrent cables.	
4 M/s Fort Gloster	
5 M/s Ravin cables, Mumb	Dai
6 M/s KEI Industries	
7 M/s KEC International	
8 M/s Unisef cables Ghazi	abad
9 M/s Maharaja cables Nev	
10 M/s RK Electrical Indust	
11 M/s Balaji Cables	
12 M/s Alpha Communicati	on
13 M/s Nakoda	
15 M/s Deco Industries	
16 M/s Insucon Cables	
17 M/s Pasondia Cables	~
18 M/s Scot Innovation (Ek	·····
19 M/s Dashmesh Cables, M	Iumbai
20 M/s Omega	
21 M/s NICCO	
22 M/s Havells	
8 Fibre Optic Cables 1 M/s Treston	
2 M/s Fine Core	
3 M/s AMP	
4 M/s Birla Furukawa	
5 M/s Sterlite Technologie	s Ltd.
9 EHV Cables 1 M/s Poly cab	
2 M/s Havells	
3 M/s KEI	
10   Capacitor Bank   1   M/s Shreem Electrical Lt	.u.
2 M/s ABB	
2M/s ABB3M/s BHEL4M/s Mehar	

		5	M/s Havells
		6	M/s Universal Cables Ltd,Satna
		7	M/s Madhav Capacitors, Pune
11	Battery Set	1	M/s Exide Industries Ltd., Kolkata
11	Ballery Set		M/s AMCO Batteries Ltd., Kokata
		2	
		4	M/s AmaraRaja Batteries Ltd, Tirupati M/s HBL Nife, Hyderabad
		5	M/s BUI Pvt Ltd, Pune
		6	
10	D. (1	-	M/s Kirloskar Batteries, Bangalore
12	Battery charger	$\frac{1}{2}$	M/s Chhabi M/s Dubas
		3	M/s HBL Nife, Hyderabad
		4	M/s Amara Raja
		5	M/s AE
		6	M/s Hind Rectifier
		7	M/s Panwa Engineering
		8	M/s ARMO Electricals, Nagpur
		9	M/s AFCO Industrial
		10	M/s Redtron
13	High Mast & its Luminaries	1	M/s Bajaj
14	Light Fixtures/fan & Exhaust fan	1	M/s CGL
		2	M/s Philips
		3	M/s GE
		4	M/s Bajaj
		5	M/s Wipro
		6	M/s Havells
		7	M/s Khaitan(Fans only)
		8	M/s Polar (Fans only)
		9	M/s HPL India Ltd (for lighting fixtures &
		-	Luminaires only)
15	Furniture	1	M/s Godrej
16	Filter Machine	1	M/s Vaccum Plant, Pune
		2	M/s Fowler westrup, Bangalore (earlier
			name M/s John Fowler Bangalore)
17	DG Set	1	M/s Jackson
		2	M/s Cummins
		3	M/s Kirloskar
		4	M/s GE Power System
		5	M/s Shriram Honda
18	RTU	1	M/s ABB
		2	M/s GE
		3	M/s Honeywell
		4	M/s Chemtrol, Goa
19	Steel Structure for Gantry & equipment	1	M/s KSK
	support structure / Lighting pole/mast etc	2	M/s Vijay Transmission
		3	M/s Shri Ashutosh Engineering Industries,
			Raipur
		4	M/s Shreem Electrical Ltd. Jaisinghpur
		5	M/s Indo East Corporation Pvt. Kolkata
		6	M/s Nandan Steel & Power Ltd, Raipur
		7	M/s Ratna Engineering Works, Raipur
		8	M/s IVRCL TLT Ltd, Nagpur
		9	M/s B K Infrastructure Pvt Ltd Raipur

		10	M/s. R.R. Ispat, Raipur
		11	M/s R.S. Infraprojects Pvt. Ltd., New Delhi
20	Earth Wire (7/3.66 mm)	1	M/s Bharat Wire Ropes, Thane
		2	M/s UIC Udyog Limited, Kolkata
		3	M/s Ramswarup Ind. Corp. Nadia
		4	M/s Manoharlal Hiralal, Gaziabad
		5	M/s Ratlam Wires, Ratlam
		6	M/s Usha Martin
		7	M/s. Nirmal Wires Pvt. Ltd., Kolkata
21	ACSR Moose conductor	1	M/s Gupta Cable
		2	M/s North East conductor
		3	M/s Unity Conductors
		4	M/s Galaxy Transmission Ind. Sangali
		5	M/s Apar Industry, Silvasa/Nalagarh
		6	M/s Shashi Cables, Lucknow
		7	M/s JSK (Formerly Hiren)Ind. Silvasa
		8	M/s Smita Conductor Khanvel
		9	M/s Prem Conductors, Silvasa
		10	M/s Lumino
		11	M/s Sterlite Technologies Ltd.
		12	M/s Mahavir Transmission Ltd Dehradun
22	ACSR Zebra conductor	1	M/s Sterlite Technologies Ltd.
		2	M/s Gammon India Silvasa
		3	M/s Lumino Ind.Ltd Howrah
		4	M/s Smita Conductor Khanvel
		5	M/s Prem Conductors, Silvasa
		6	M/s Galaxy Transmission Ind. Sangali
		7	M/s Gupta Power infrastructure Ltd.
		8	M/s North East conductor
		9	M/s Apar Industries
		10	M/s Unity Conductors
		11	M/s Omega
		12	M/s Pioneer
		13	M/s Venkateshwara wires Jaipur
		14	M/s Rajputana cables and conductor Korba
		15	M/s Mahavir Transmission Ltd Dehradun

#### Note:-

- 1) The names of the vendors are subject to further verification of various documents viz. valid type test report, ISI license (wherever applicable), drawing and GTP etc. at the time of approval for individual project. The inclusion of names of various manufacturers in this list will not relieve the obligation of manufacturer / contractor for furnishing the aforesaid documents.
- 2) Any other items/component not covered in these lists Reputed make subject to prior permission from CSPTCL duly furnishing all their credentials and documents ought by office of ED /CE (Planning & Projects).
- 3) CSPTCL will take into account our past experience with various vendors/ suppliers with regards to quality of their equipment, its performance and their after sales service while making a final selection of vendors.
- 4) Equipments/material of those vendors / suppliers, who are debarred / blacklisted from future business with CSPTCL or successor power companies of erstwhile CSEB, shall not be accepted.

#### (E) LIST OF APPROVED VENDORS FOR 220 KV TRANSMISSION LINES

#### Note:- Vendor selection for OPGW & its associated accessories shall be applicable as per tender clause No.4.26.3 (10) "VENDOR LIST OF OPGW AND OPGW ASSOCIATED HARDWARE & FITTINGS" Page No.495 of Vol.-II of tender specification.

Sl. No.	Name of Line material		Name of Vendors
1	ACSR Zebra Conductor	i	M/s Sterlite Technologies Ltd., Haridwar
		ii	M/s Gammon India Ltd. Silvassa
		iii	M/s Lumino Industries, Howrah
		iv	M/s Smita Conductors, Khanvel
		v	M/s Prem Conductors Ltd. Silvasa
		vi	M/s Galaxy Transmission Pvt. Ltd., Sangli MH
		vii	M/s Venketaswara Wires, Jaipur
		viii	M/s Rajputana Cables & Conductors Pvt. Ltd.,
			Korba
		ix	M/s Mahavir Transmission Ltd., Dehradun
2	Ground Wire 7/3.66 mm	i	M/s Bharat Wire Ropes Ltd., Shahpur,. Thane
		ii	M/s UIC Udyog Limited, Dist. Nadia, W.B.
		iii	M/s Ramsarup Industrial Corporation, Kalyani,
			Nadia (WB),
		iv	M/s Mannohar Lal Hira Lal Ltd, Ghaziabad
		v	M/s Ratlam Wires Ltd., Ratlam
		vi	M/s Nirmal Wires (P) Ltd., Kolkata (W.B.)
3	Stringing hardwares &	i	M/s. EMI Transmission Ltd., Thane
	Accessories	ii	M/s Rashtra Udyog Ltd., Kolkata
		iii	M/s. IAC Electricals, Kolkata
		iv	M/s. Tag Corporation, Chennai
		v	M/s. International Transmission Products, Mumbai
		vi	M/s Eritech, Kolkata
		vii	M/s Supreme & Co. Pvt. Ltd. Kolkata
		viii	M/s Rajasthan Transmat Pvt. Ltd., Jaipur (Raj.)
		ix	M/s NIKE Energy manufacturing, Varanasi
4	Disc Insulators		
	220 KV 70 KN	i	M/s. Bharat Heavy Electricals Ltd, Jagdishpur.
		ii	M/s. WS Insulators, Chennai
		iii	M/s. Aditya Birla Insulators Nuvo Ltd, Hoogly
		iv.	M/s Bikaner Ceramics Pvt. Ltd., Bikaner
		v.	M/s Allied Ceramics (P) Ltd., Kolkata, W.B.
	220 KV 160 KN	i	M/s. Bharat Heavy Electricals Ltd, Jagdishpur.
		ii	M/s. WS Insulators, Chennai
		iii	M/s. Aditya Birla Insulators Nuvo Ltd, Hoogly
		iv	M/s Allied Ceramics (P) Ltd., Kolkata, W.B.
5	G.I. Bolts & Nuts / Washers	i	M/s Bharat Industries, Howrah
		ii	M/s GKW Howrah
		iii	M/s A.R. Fastners, Derabassi, Mohali
		iv	M/s HR Steel Industries, Salkia, Howrah
		V	M/s Nexo Industries Ltd.Ludhiyana
		vi	M/s Deepak Fasteners Ltd. Ludhiana
		vii	M/s Techman (India), Chandigarh
		viii	M/s Naveen Metal Industries, Kolkata (for Spring

			washer only)
		ix	M/s Roshan Implex, Ludhiana
		X	M/s Anand Bolts, Ludhiyana
6	Danger Plate/Phase plate/	i	M/s Hind Enamel Works, Mumbai
	Number plate/ Circuit plate	ii	M/s JK Ceramics, Pune
		iii	M/s. Premier Enamels, Aligarh
		iv	M/s Kaveri Enamels & Allied Industries,
			Bangalore
		v	M/s. Lohar Engineering Ltd., Jaipur
		vi	M/s S.F. Enterprises, Raipur
		vii	M/s Premier Enamel Works, Silvasa
7	Pipe/rod type earthing/	i	M/s Reliance Engineering Co., Thane
	Counter Poise earthing	ii	M/s. Lohar Engineering Ltd., Jaipur
		iii	M/s Madras Hard Tools Ltd., Chennai
		iv	M/s Bharat Wire Ropes Ltd., Mumbai
		v	M/s Mina Industries, Howrah.
		vi	M/s Supreme & Company Pvt. Ltd. Kolkata
		vii	M/s Essar Forgings, MIDC, Tarapura, Boisar
		viii	M/s Rituraj Engi Fab.Pvt. Ltd. JaipurPipe type
			earthing only
		ix	M/s Unique Structure & Tower Ltd., Raipur
8	'D' Shackle & Hangers	i	M/s Essar Forgings, MIDC, Tarapura, Boisar
		ii	M/s Aqsa Towers Ltd., Bhayander, Mumbai
		iii	M/s Aisha Transmission Products, Jaipur
		iv	M/s Mina Industries, Howrah.
9	Barbed Wire	i	M/s Reliance Wire Product, Shahpur, THANE
		ii	M/s Swastik Wires, Raipur
		iii	M/s UIC Udyog Ltd., Kolkata

Note:

(i) The names of the vendors are subject to further verification of various documents viz. valid type test report, ISI license (wherever applicable), drawing and GTP etc. at the time of approval for individual project.

The inclusion of names of various manufacturers in this list will not relieve the obligation of manufacturer / contractor for furnishing the aforesaid documents.

- (ii) The name of manufactures whose performance is found unsatisfactory shall be deleted from vendor list.
- (iii) Wherever any material which is indicated in this list, is required for lower voltage class, the names of vendors shall be applicable subject to condition that they fulfil all required criteria for those items as per tender specification (i.e. valid type test report, ISI license (wherever applicable), drawing and GTP etc.).

Sl. No.	Name of Line material		Name of Vendors
1	ACSR Panther Conductor	1	M/s Shashi Cables Ltd., Lucknow
		2	M/s Cabcon India Pvt. Ltd. P.S. Sankrail, Howrah
		3	M/s Lumino Industries, Howrah
		4	M/s Smita Conductors, Khanvel

#### E) LIST OF APPROVED VENDORS FOR 132 KV TRANSMISSION LINES

		5 M/s Prem Conductors Ltd. Silvasa	
		6 M/s Galaxy Transmission Pvt. Ltd., Sangli	MH
		7 M/s Gupta Power Infrastructure Ltd.	
		Bhubneshwar	
		8 M/s North Eastern Cables & Conductors P	vt. Ltd.
		Jaipur	
		9 M/s Rajasthan Pvt. Ltd., Jaipur	
		10 M/s Rajputana Cables & Cond, Korba	
		11 M/s Anamika Conductors Pvt. Lt., Jaipur	
		12 M/s JSK Industries, Mumbai	
		13         M/s Mahavir Transmission Ltd., Dehradun	
2	Ground Wire 7/3.66 mm	1 M/s Bharat Wire Ropes Ltd., Shahpur, Dis Thane	st.
		2 M/s UIC Udyog Limited, Nadia, West Ber	ngal
		3 M/s Ramsarup Industrial Corporation, Kaly Nadia (WB),	yani,
		4 M/s Mannohar Lal Hira Lal Ltd , Ghaziab	ad
		5 M/s Ratlam Wires Ltd., Ratlam	
		6 M/s Nirmal Wires (P) Ltd., Kolkata (W.B.)	)
3	Stringing hardwares & Accessories.	1 M/s. EMI Transmission Ltd., Thane	
		2 M/s Rashtra Udyog Ltd., Kolkata	
		3 M/s. IAC Electricals, Kolkata	
		4 M/s. Tag Corporation, Chennai	
		5 M/s. International Transmission Products,	
		Mumbai	
		6 M/s Eritech, Kolkatta	
		7 M/s Supreme & Co. Pvt. Ltd. Kolkatta	
		8 M/s Rajasthan Transmat Pvt. Ltd., Jaipur (J	Raj.)
		9 M/s NIKE Energy manufacturing, Varan	asi
4	Disc Insulators		
	132 KV 70 KN	1 M/s. Bharat Heavy Electricals Ltd, Jagdish	pur.
		2 M/s. WS Insulators, Chennai	
		3 M/s. Aditya Birla Insulators Nuvo Ltd, Ho	ogly
		4 M/s Bikaner Ceramics Pvt. Ltd., Bikaner	
		5 M/s Allied Ceramics (P) Ltd., Kolkata, W.	B.
	132 KV 90 KN	1 M/s. Bharat Heavy Electricals Ltd, Jagdish	pur.
		2 M/s. WS Insulators, Chennai	
		3 M/s. Aditya Birla Insulators Nuvo Ltd, Ho	ogly
		4 M/s Bikaner Ceramics Pvt. Ltd., Bikaner	0,
		5 M/s Allied Ceramics (P) Ltd., Kolkata, W.	B.
5	G.I. Bolts & Nuts / Washers	1 M/s Bharat Industries, Howrah	
-		2 M/s GKW Howrah	
		3 M/s A.R. Fastners, Derabassi, Mohali	
		4M/s HR Steel Industries, Salkia, Howrah5M/s Nexo Industries Ltd.Ludhiyana	
		6 M/s Deepak Fasteners Ltd. Ludhiana	
	<u> </u>	U MI/S Deepar Fasteners Ltu. Luumana	

		7	M/s Techman (India), Chandigarh
		8	M/s Naveen Metal Industries, Kolkata (for
			Spring washer only)
		9	M/s Roshan Implex, Ludhiana
		10	M/s Anand Bolts, Ludhiyana
6	Danger Plate/ Phase plate/ Number plate/ Circuit plate	1	M/s Hind Enamel Works, Mumbai
		2	M/s JK Ceramics, Pune
		3	M/s. Premier Enamels, Aligarh
		4	M/s Kaveri Enamels & Allied Industries,
			Bangalore
		5	M/s. Lohar Engineering Ltd., Jaipur
		6	M/s S.F. Enterprises, Raipur
		7	M/s Premier Enamel Works, Silvasa
7	Pipe/rod type earthing/ Counter Poise earthing	1	M/s Reliance Engineering Co., Thane
		2	M/s. Lohar Engineering Ltd., Jaipur
		3	M/s Madras Hard Tools Ltd., Chennai
		4	M/s Bharat Wire Ropes Ltd., Mumbai
		5	M/s Mina Industries, Howrah.
		6	M/s Supreme & Company Pvt. Ltd. Kolkata
		7	M/s Essar Forgings, MIDC, Tarapura, Boisar
		8	M/s Rituraj Engi Fab.Pvt. Ltd. JaipurPipe type earthing only
		9	M/s Unique Structure & Tower Ltd., Raipur
8	'D' Shackle & Hangers	1	M/s Essar Forgings, MIDC, Tarapura, Boisar
		2	M/s Aqsa Towers Ltd., Bhayander, Mumbai
		3	M/s Aisha Transmission Products, Jaipur
		4	M/s Mina Industries, Howrah.
9	Barbed Wire	1	M/s Reliance Wire Product, Shahpur, THANE
		2	M/s Swastik Wires, Raipur
I		3	M/s UIC Udyog Ltd., Kolkata
Note	_		· · ·

#### Note:

- The names of the vendors are subject to further verification of various documents viz. valid type test report, ISI license (wherever applicable), drawing and GTP etc. at the time of approval for individual project.
   The inclusion of names of various manufacturers in this list will not relieve the obligation of manufacturer / contractor for furnishing the aforesaid documents.
- (ii) The name of manufactures whose performance is found unsatisfactory shall be deleted from vendor list.
- (iii) Wherever any material which is indicated in this list, is required for lower voltage class, the names of vendors shall be applicable subject to condition that they fulfil all required criteria for those items as per tender specification (i.e. valid type test report, ISI license (wherever applicable), drawing and GTP etc.).